Opinion of mothers of hospitalized babies about nursing interventions: a descriptive study

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ABSTRACT

Aim: To investigate which nursing interventions were recognized by the mothers of hospitalized babies as supporting the maternal role. Method: This is a transversal study of the activities present in the Nursing Interventions Classification, performed in a public college hospital. Through interviews and the application of questionnaires, the mothers evaluated a total of 14 nursing activities related to the nursing diagnosis "Parental role conflict". Results: From the 32 women included in this research, 23 mentioned the challenges associated with performing the maternal role. In a total of 14 activities, 11 were identified as facilitators to the maternal role. Discussion: The mothers recognized the proposed nursing interventions as beneficial to them and to the performance of the maternal role. Conclusion: The proposed caring activities in the referred classification should be formally implemented in neonatal care. Their impact on mothers ought to be studied, given that investigations in this area are still scarce.

Descriptors: Mother-Child Relationships; Women's Health, Maternal Child Nursing; Patient Care Planning; Intensive Care, Neonatal
INTRODUCTION

The literature indicates that the maternal role is a complex cognitive-affectionate process, influenced by social and political contexts, and not only by instinct. The lives of women change in many ways when they conceive: there are progressive physical and emotional transformations, and then they start to concentrate especially on those changes, and also on the child to which they are about to give birth\textsuperscript{1,2}.

After birth, mother and child adjust to one another, which is a process quite individualized to each individual. Such adaptation is necessary for the development of the bond between mother and child, and in this process it is important that the mother can see, touch and get used to her actual baby, which is different from the moments idealized during pregnancy\textsuperscript{1,2}.

Mothers of premature newborns (NB), hospitalized just after delivery, can have the bonding process harmed due to the difficulty of making contact with their child. This is caused by the barriers in the form of the technological apparatus used and the frightening atmosphere of the Neonatal Intensive Care Unit (NICU)\textsuperscript{1,2}.

The experience of the hospitalization of a premature child makes parents feel a variety of feelings such as anger, anguish, guilt, sadness and fear. To minimize such suffering, it is important that parents be allowed to interact with their children and with the health team, which can make hospitalization less aggressive to the NB and their relatives. Besides that, the maternal presence is justified in countless ways, such as the improvement of emotional interaction between mother and child, the reduction of hospital infections, the reduction of the hospitalization period, assistance in terms of building the bond and strengthening lactation, and an increase in the capacity of mothers to taking care of their children after hospital discharge\textsuperscript{3-8}.

Such justifications are opposed to previous proceedings in neonatal care, in which this contact was limited by the health team as a way to protect the newborn. However, the improvement in growth, in the physical and emotional development of premature newborns, as well as the promotion of the bond between parents and children as a consequence of a greater participation of parents in the NICU, are aspects that are now evident in the literature\textsuperscript{3}.

According to some studies\textsuperscript{3,7,8} with regard to the experience of mothers and relatives in the NICU, it is possible to see suggestive signs of the Nursing Diagnosis (ND) “Parental role conflict”. This diagnosis is defined by the North American Nursing Diagnosis Association - International (NANDA-I) as “…the mother experiences confusion and conflict performing her role during a crisis”\textsuperscript{9}.

In this context, the interest in developing a study about the nursing interventions proposed in the Nursing Interventions Classification (NIC) \textsuperscript{10} for this type of diagnosis arose, in terms of the context of the neonatal unit.

It can also be seen that there is a small number of papers that have investigated the use of nursing classifications in neonatal care, especially with the intention of supporting the demands of the mother, and using a specific ND. Thus, this paper aims to investigate which interventions related to the ND “Parental role conflict” were recognized by mothers of hospitalized NB as supportive of the maternal role.

METHOD

This is a transversal and descriptive study that approached some of the nursing activities described in NIC interventions related to the diagnosis “Parental role conflict”, with the mothers of hospitalized NB.
The place of study was a neonatal unit with 30 beds, in a public college hospital, offering medium and high complexity healthcare services, located in the city of Campinas, in the Brazilian state of São Paulo.

32 women were included. The children of these women were hospitalized for at least ten days in the neonatal unit during the period of data collection: from July to August 2010. The analysis of the interventions were performed with 23 mothers with regard to whom the following defining characteristic (DC) was met: “the mother demonstrates preoccupation(s)/feelings of inadequacy to supply the physical and emotional necessities of the child during hospitalization”. This DC was considered as important evidence in the study in terms of validating the content of the above-mentioned diagnosis(11).

A minimum period of ten days of hospitalization of the baby was decided upon, taking into consideration the recovery of the mothers subsequent to delivery, so they could be a significant presence in the units, and have an appreciable amount of contact with the experience of the hospitalization of the child. For the women who were hospitalized in the adult Intensive Care Unit (ICU), the period of ten days was counted from the moment these mothers were transferred to a regular bed. Mothers with multiple gestations or who had had children hospitalized previously, were excluded from the study.

The studied variables were fourteen nursing activities listed in five nursing interventions proposed by NIC(10) to support the studied event (mothers of hospitalized newborns in the neonatal ICU that were identified with one DC in the form of the diagnosis “Parental role conflict”)(12). To adapt such activities to the specificities of neonatal care, other sources were consulted(8,13), however taking care to not alter the content of the majority of the proposed activities in the NIC.

For the identification of the study variables, the definition of each intervention was considered, with the objective of selecting those that would be applicable to this type of clientele: the woman-mother in neonatal care. The interventions and their definitions(10), as well as the respective selected activities, are as follows:

1. **Role enhancement**: Assistance to the mother in order to improve the relationship with her hospitalized child in the neonatal ICU, through the clarification and supplementation of specific behaviors in terms of the maternal role. The activities proposed by NIC for this sort of intervention and adapted for this study were: offering support to identify her role as mother towards the newborn; offering the opportunity to participate in the decisions regarding the caring for her child(10); offering opportunities to the mother to hold the baby, demonstrating the ways to touch him when inside the neonatal incubator, and encouraging her to give the baby a massage.

2. **Family integrity promotion: childbearing family**: This is an intervention defined as supportive to the growth of the mother who is bringing a new baby to the family unit. Activities: encouraging and helping the mother to express her feelings related to the responsibility of being a mother; listening, respecting her worries, feelings and doubts; making sure that the mother and her family trust in the professionals that take care of her child; encouraging the mother to identify the similarities of some characteristics of the baby and the other members of the family; permitting any other children to visit the hospitalized brother/sister; encouraging the mother to count on her friends, relatives or brothers and sisters of faith to provide emotional or other type of support.

3. **Support to the caregiver**: Providing the necessary information, protection and support to facilitate the primary care of the baby by
the mother, rather than by a professional from the nursing team. The activities are: that the mother is listened to, her questions answered, and her decisions respected and accepted; permitting the participation of the mother in the decisions about caring, whenever adequate.

4. **Parenting promotion**: Giving information and support to the mother, and coordination of all services in support of a high risk family. The activities are: explaining to the mother the characteristics of the behavior and mood of the newborn; showing behaviors that show that the baby recognizes and feels the presence of the mother; involving the mother and encouraging her during caring; offering her some hints as to how to take care of the baby and how to get him/her from inside the incubator; emphasizing her responsibility as a mother in providing for her baby’s needs, and in resolving the problems related to the child; recognizing the mother as a “specialist” in the topics related to her child\(^{(13)}\).

5. **Attachment promotion**: Facilitating the development of the relationship between mother and baby. The activities are: informing the parents about the care offered to the newborn; explaining the equipment used to monitor the baby in the NICU; offering accommodation in the hospital (mothers and babies together in the same unit).

Some data associated with the characterization of mothers and babies was also collected throughout the interviews, as well as checking the NB medical records with regard to mother’s age, marital status, religion, education, professional activity, frequency of maternal permanence in the unit, number of previous pregnancies, number of living children, age of the baby (in days), gestational age and weight at birth, main medical diagnose(s), diagnose(s) that led to hospitalization as reported in the newborn records.

The instrument used to collect data had: information regarding the mothers and newborns, as well as the nursing interventions to be evaluated by the mothers as valid or not in terms of supporting the maternal role. Each activity was given the following score, based on the opinion of the interviewee\(^{(14)}\): 1 = not helpful; 2 = not helpful, nor disturbing; 3 = helpful; 4 = very helpful. After completing the instrument, the respondent was asked if she wanted to add any caring activities not mentioned by the researcher, yet considered important by them. The questionnaire was tested with three women and, after some corrections, tested with three more to evaluate the understanding of the content and its applicability. The results of this testing process were not added to the final sample of this study.

After an explanation about the objectives of this research, their implications to the mother, and reading and signing the Free and Clear Consent Agreement, interviews took place in a private environment in the hospital. For those under the age of eighteen years, the Agreement was also signed by their parents or legal guardian. The interviews were performed scheduled in such a way as to not interfere in the routine of the unit. The project was approved by the Committee of Ethics in Research of the Medical Sciences College, at State University of Campinas (UNICAMP), under protocol 405/2008.

The data was inserted in an Excel® spreadsheet and analyzed in terms of descriptive statistics. To describe the profile of the sample, as well as the opinions of the mothers about the nursing activities, tables of absolute (n) and relative (%) frequency were built. The activities pointed out by 70% or more of the respondent mothers as being “helpful” or “very helpful” were considered as the most important ones in this sample.
To study the association between the maternal and neonatal variables with the presence of the ND “Parental role conflict”, a chi-square test, or Fisher's exact test, was used whenever indicated. This last test is indicated when at least 20% of the cells of the table of expected results present scores below 5, which prevents the usage of the chi-square test.

The level of significance adopted for the statistical tests was 5%, or p<0.05%. For the statistical analysis, the software Statistical Analysis System (SAS), version 9.2 was used.

RESULTS

From a total of 32 women interviewed, it was seen that the age varied from 15 to 43 years of age, with an average of 27.41 years. The period of hospitalization of the babies varied from 10 to 110 days, with a median of 24.5 days. Table 1 presents other data which characterized the sample.

Table 1 - Characterization of interviewed mothers in the neonatal unit. Campinas, Brazil, 2010 (n = 32)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital situation: accompanied</td>
<td>29 (90.63)</td>
</tr>
<tr>
<td>Premature child</td>
<td>28 (87.50)</td>
</tr>
<tr>
<td>First experience of hospitalized child</td>
<td>27 (84.38)</td>
</tr>
<tr>
<td>Confirmed having conflicts with the maternal role</td>
<td>23 (71.83)</td>
</tr>
<tr>
<td>Had two or more pregnancies</td>
<td>20 (62.50)</td>
</tr>
<tr>
<td>Completed or about to complete High School</td>
<td>19 (59.38)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>17 (53.13)</td>
</tr>
<tr>
<td>Had two or more deliveries</td>
<td>17 (53.13)</td>
</tr>
<tr>
<td>Cannot visit their children everyday</td>
<td>18 (56.25)</td>
</tr>
<tr>
<td>Child under intensive care</td>
<td>16 (50)</td>
</tr>
<tr>
<td>Live in another city</td>
<td>16 (50)</td>
</tr>
</tbody>
</table>

Source: Designed by the authors, 2013.

Table 2 presents the appraisal of the mothers with regard to the support generated by the interventions proposed for the diagnosis “Parental role conflict”.

Table 2 - Evaluation of the mothers about the nursing activities supporting the maternal role. Campinas, Brazil, 2010 (n=23)

<table>
<thead>
<tr>
<th>Nursing Activities</th>
<th>Opinions of mothers; n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking with the mother about the characteristics of baby’s mood</td>
<td>Not helpful</td>
</tr>
<tr>
<td>Offer opportunity for the mother to hold the baby and perform caring</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Promoting the participation of the mother in the decisions about the caring of the child</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Making the mother trusting in the team</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Offering information to the mother about all caring provided and all equipment used</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Guiding the mother about her responsibility to support the necessities of her baby and the resolution of the problems related to the child</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Listening to the mother respecting her preoccupations, feelings and doubts</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Offering rooming for both the mother and the baby</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Encouraging the mother to identify the supporting network</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Offering help through the team to identify the maternal role</td>
<td>1 (4.3)</td>
</tr>
</tbody>
</table>
Table 3 presents possible associations between the characteristics of the respondents and their children, and the presence of the ND mentioned above.

Among the 23 mothers who evaluated the nursing intervention activities, only two wanted to suggest additional nursing actions that they claimed would increase the maternal role. One of these women mentioned that it would be interesting if the team could provide information over the phone. The other woman mentioned that the team should not put so much pressure on mothers with regard to visiting their babies, as they feel too pressured to undertake the tasks required or them.

**DISCUSSION**

There are divergences in the literature with regard to possible associations between maternal and neonatal characteristics, and the performance of maternal role. While low age of the mother, socioeconomic conditions and the education of the mother, as well as the health condition of the babies, affect some women negatively, for others, these facts are motivating factors so they can be mothers in a more intense way, trying to give their best to their

<table>
<thead>
<tr>
<th>Maternal and neonatal characteristics</th>
<th>Parental role conflict</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (n (%))</td>
<td>No (n (%))</td>
</tr>
<tr>
<td>Marital situation**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accompanied</td>
<td>19 (65.52)</td>
<td>10 (34.48)</td>
</tr>
<tr>
<td>Not accompanied</td>
<td>3 (100)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Education**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>8 (88.89)</td>
<td>1 (11.11)</td>
</tr>
<tr>
<td>High School</td>
<td>12 (63.16)</td>
<td>7 (36.84)</td>
</tr>
<tr>
<td>College</td>
<td>2 (50)</td>
<td>2 (50)</td>
</tr>
<tr>
<td>Number of pregnancies**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>9 (75)</td>
<td>3 (25)</td>
</tr>
<tr>
<td>More</td>
<td>13 (65)</td>
<td>7 (35)</td>
</tr>
<tr>
<td>Complexity in caring*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensive</td>
<td>10 (62.5)</td>
<td>6 (37.5)</td>
</tr>
<tr>
<td>Semi-intensive</td>
<td>12 (75)</td>
<td>4 (25)</td>
</tr>
<tr>
<td>Gestational age**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premature</td>
<td>18 (64.29)</td>
<td>10 (35.71)</td>
</tr>
<tr>
<td>Late</td>
<td>4 (100)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

Source: Designed by the authors, 2013.
* Chi-square ** Fisher’s exact test*
children\textsuperscript{(15,16)}. Hence, it is possible to consider this situation as an individual and unpredictable experience, despite the fact there are elements that can facilitate or harm the experience of each woman, given the hospitalization of their children as a stressing occasion.

More than half of the respondents declared that they felt uncomfortable or unprepared when it came to satisfying the needs of the child. In the literature\textsuperscript{(8)}, there are reports with regard to how much mothers feel unsafe, unsuccessful, with low self-esteem, and unable to overcome obstacles when it comes to taking care of their hospitalized newborn children.

The mothers who had their children hospitalized just after delivery, go through a painful process when they see that the baby they idealized during pregnancy is not their actual baby. On many occasions, this disillusion generates feelings of guilt and impotency.

The idea that the “good mother” is the one who is patient, who knows and satisfies all the needs of the child, as well as placing the child above everything, is an image that fills the minds of women and of society as a whole\textsuperscript{(2)}. The fact that these mothers do not fulfill all the caring needs of their hospitalized children, and on many occasions do not know what to do, is a scenario completely different from the one imagined during pregnancy. This makes them feel anxious, and they end up not seeing themselves as “good mothers”\textsuperscript{(8)}. This generates feelings of inadequacy in terms of the performance of the maternal role.

The recognition of the maternal role by women is done through holding and hugging, breastfeeding, changing diapers and fondling the baby\textsuperscript{(8,17,18)}. Breastfeeding, which is directly affected by such circumstances, is an important strategy to bring mother and child closer in the neonatal unit, as the role of the mother offering her milk is irreplaceable\textsuperscript{(11,19)}.

Corroborating with the maternal needs described in the literature, the mothers in this study highlighted the nursing activities that described specific caring techniques in terms of their needs, and recognized them as being supportive to the maternal role. These related to opportunities to hold the baby and perform caring; participation in the decisions related to their child; acquiring information about caring and the equipment used; supporting the mother so that she understands and can meet the needs and respond to the behavior of their child, as well as understanding her own role. Especially the offering of accommodation for both the mother and the child is one more opportunity for these women, supported by the nursing team, to feel safer in their maternal role\textsuperscript{(13)}. As was the case in another study\textsuperscript{(18)}, they also considered it important to be heard, having their feelings and doubts respected by the nursing team.

Besides the interviewed mothers considering the activities here listed as being helpful, the literature\textsuperscript{(8,16)} shows how much nursing is still limited in supporting the needs of these women, focusing on taking care of the NB and on the medical diagnoses.

Even 20 years after the enactment of the law in Brazil that gives mothers the right to stay with their children in the NICU, there is still some rejection by the nursing team of the participation of the mothers in the care of their newborns. Such professionals seems fearful that the maternal presence at the NICU would interfere with the dynamics of the work processes, and in the proceedings performed in the unit\textsuperscript{(17,18)}. This resistance is also extended to other relatives. In such a context, there is not enough opportunity to allow mothers to feel able to express their feelings. This was also pointed out as a caring action that was considered important by the mothers.

This type of relationship between the nursing team and mothers is very harmful, as the
mothers do not feel welcome in the unit, and they do not have the chance to participate in the caring of their children as much as they would want. This can generate a feeling of insecurity and inadequacy on the part of these women, as their biopsychosocial and spiritual desires are not being fulfilled by the team\(^8,13,17-19\). In addition, it compromises the trustful relationship that should exist between the mother and the team. Such trust was also pointed out by them as an important aspect of care in terms of assisting the development of the maternal role, as well as one that is described in the literature\(^7,13,15\).

The neonatal nursing team needs to incorporate the understanding that care must be directed, not only to the baby, but also to his/her family once they are inseparable, and it is to this family that the baby will return after hospital discharge. In this context, the presence of brothers and sisters is also an important aspect of care, as the women in this sample showed. Besides that, such inclusion ensures that mothers and families are welcomed and valued, building a relationship based on trust between the relatives and the team\(^13,16\).

The activities that were identified by fewer than 70% of the women were the ones related to being stimulated to express feelings, to identify characteristics of the family on the baby, and to be recognized as someone who knows significantly more about your own child. These elements can be related to cultural matters, and therefore, are less important for this group of women\(^13\).

The suggestions of the two mothers about the nursing care that could support the maternal role denoted that feelings of discomfort can be amplified by the demands of the nursing team. Some authors\(^8,19\) describe the feeling of guilt of the mothers in terms of the fact they would not be able to justly balance the time between the recently delivered hospitalized child and the rest of the family. At the same time, while they feel sad that they cannot spend more time with their hospitalized child, they do not want to feel as if they were abandoning their other relatives, especially any other children. The welcome provided and the support in the form of more information over the telephone, for these women, could also help to fulfill the need to be with the hospitalized child, even if only partially.

It was seen that the activities studied here were recognized by the mothers as assistive to the maternal role in the neonatal unit, and they are easily implemented. Despite the nurse and her team having a meaningful role in the assistance to the mother and relatives, there are few studies relating to the use of NIC in this context.

**CONCLUSION**

In this study, from the 14 nursing activities extracted from NIC and presented to the mothers, 11 were identified as supporting the maternal role. They are:

- Talking with the mother about the characteristics of their baby’s mood;
- Offering opportunities for the mother to hold and caring for her baby;
- Promoting the participation of the mother in decisions about the care of her baby;
- Encouraging the mother to trust the team;
- Offering information to the mother about all the caring performed and the equipment used;
- Guiding the mother in terms of her responsibility in supporting the needs of her baby and the resolving of problems related to the baby;
- Listening to the mother, respecting her preoccupations, feelings and doubts;
- Offering accommodation with the baby;
- Encouraging the mother to identify a support network;
• Offering help through the team to identify the mother’s maternal role;
• Permitting brothers and sisters to visit the hospitalized baby.

The suggested roles with regard to the mother refer to a less intense demand by the nursing team and a higher level of information provided by telephone, probably to support those mothers who find it difficult to be present at the unit.

It is possible to consider the possibility that mothers of hospitalized babies usually do not have an adequate amount of nursing support throughout the process of supporting the maternal role, and in the face of the feelings that come from having to divide themselves between the care of the baby and of the rest of the family.

Hence, it is important that the care provided to the NB is extended to their mothers. Consequently, it is important to investigate and identify the maternal ND. As a result of this, these mothers can assume the care of their child after hospital discharge, in a safe and satisfactory manner. In order to achieve such results, it is essential that the nursing team learns to support the mothers in the neonatal unit and know how to use listening as their main instrument to capture the feelings and the needs of each of these women. This is the only possible way to create a link based on trust, and help them to mature in terms of their maternal role.

This study denotes the importance of the proposed activities at the NIC. It indicates that they can be implemented in neonatal units, without increasing the demand for other technologies other than the understanding of the nursing staff and the human and professional ability to provide better care for these women.

REFERENCES


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