THE NEONATAL UNIT ENVIRONMENT: PROSPECTS FOR NURSING CARE IN THE KANGAROO METHOD

ABSTRACT

Objective: to identify the meanings attributed by parents of premature babies to the neonatal unit environment in the Kangaroo Method context. Method: qualitative study, descriptive and exploratory, carried out in the neonatal unit of a public teaching maternity in the city of Rio de Janeiro, Brazil, with 5 mothers and 2 fathers. As technique for data collection one used the open interview with voice recording, then, the reports were preserved in their textual form and analyzed in order to constitute analytical categories for Thematic Analysis. The study was approved by the Research Ethics Committee of the Maternity School of Universidade Federal do Rio de Janeiro (UFRJ), under the Protocol n. 04/06. Results: the analysis resulted in 9 thematic units and 2 converging categories: Observing the intensive environment of the neonatal unit; Signifying the relational environment of the neonatal unit. Conclusion: the neonatal unit environment is made not only by the structural and technological space, but especially by the relational space formed in the intersubjective interactions between parents and baby and between them and the health professionals.

Descriptors: Maternal-Child Nursing; Health Institutions Environment; Neonatal Intensive Care Units.

RESUMO

INTRODUCTION

In neonatal intensive care, the technical-scientific progress and improvement of technological resources have enabled the survival of a larger number of at-risk newborn infants, among them the premature ones. Diagnoses, sophisticated therapies, and surgical procedures have guaranteed the chance of life to babies who, a few decades ago, were regarded as not viable by science.1

So, the neonatal unit constitutes itself as a technological hospital environment where advances and professional intervention, at the most varied degrees of complexity, turn primarily to the biological dimension of the health-illness process. However, currently, evaluating the quality of neonatal care no longer has as its focal point just the survival rate and it starts incorporating the interest in the impact of the physical environment of the neonatal unit on the baby and her/his family. In the same environment, other baby’s needs gain importance, such as the inclusion of her/his family in care, the performance of care procedures aimed at the development and pursuit of quality of life.2-4

For the nuclear family, the experience of having a hospitalized child in the neonatal unit is surrounded by a complex of feelings and emotions which emerges in an extreme situation context, experienced as a time of crisis and instability. They’re faced with wires, devices, and tubes which, connected to the little baby, disfigure the desired image of a pinkish and healthy child. It’s in this environment that parents need to find ways for accepting the real baby, so different from that who inhabited their imaginations, and start interacting with her/him in a non-idealized setting.3

In this context, parents need to lean on the health care team’s support, in order to establish an interaction with the baby, construct the affective ties, and potentiate the confrontations which one will need throughout the hospitalization stay. So, affection should be a valued dimension, because the birth of a premature baby, her/his hospitalization in the intensive environment, the procedures, and her/his care demands intensely mobilize the parents’ affections.2

The mother support actions, developed by the professionals, are often able to minimize the maternal suffering towards the hospitalization of her diseased child. Such actions promote the mother’s biopsychosocial well-being and, thus, favor a better adaptation to this new reality and the attachment relationship with the baby.5

Thus, care in the neonatal unit needs to go beyond the merely technical actions and enter the subjectivity field. Then, health work depends on a combination of variables in two important dimensions, the technical and the relational domains, which are closely interconnected. The humanization of assistance needs to become concrete through the construction of strategies for an integral and good quality care, in which the technological advances are articulated with embrace and improvement of the health care environments.6-8

The humanization of assistance, so urgent and needed, should become concrete through a commitment not only to the practical dimensions of work, but also to the social and subjective dimensions of people’s lives. It’s, this way, a new paradigm, in which doing and thinking of health combine themselves and prioritize the construction of meeting and embracing relationships, with autonomy and accountability, where the subject’s wholeness is ensured.2

In this sense, the Kangaroo Method, as a neonatal care policy and health care model, gains importance by proposing actions and strategies which make integrity, humanization, citizenship, and quality of life real. One of its main proposals is promoting institutional changes in pursuit of health care and behavioral changes in the professionals with regard to the management of the low weight premature baby, as well as changes in the family participation within the health care context. For this, there’s a strong concern about the environment’s influence (structural and relational) of neonatal intensive care and its dynamics on the baby’s brain development and the affective involvement of parents.2-4

This issue concerning the health care environment and its influence on people has been documented in the current national politics through the concept of ambience. In health care, ambience refers to the way how the physical space is addressed in order to provide an embracing, resolvent, and humanized care, taking into account the social, professional, and relational aspects of the health care space. Thus, ambience is related to humanization of the meeting territories.8

The concern with neonatal unit’s ambience is relevant it’s the space where babies and their parents must be cared for under a humanized perspective, and it’s also the setting where the first step of the Kangaroo Method is developed. Then, it’s important to
open pathways for changes needed in the practice, where both dimensions of care, the technological and human, are connected, allowing one to qualify the intensive care setting as an environment of interaction, dialogue, affection, respect, and humanization.9

OBJECTIVES

- To identify the meanings attributed by parents of premature babies to the neonatal unit environment in the Kangaroo Method context and analyze them under the light of the theoretical framework of Symbolic Interactionism.

THEORETICAL FRAMEWORK

In this study, the theoretical framework of Symbolic Interactionism was adopted in order to allow a deepening in the interpretation of meanings, since it addresses the symbolic nature of social life and group human action. The interactionist conception emerged with George Herbert Mead, professor at the Chicago School within the period from 1893 to 1931 and, subsequently, it continued being developed by his disciple, Herbert Blumer.10

This framework proposes that social meanings are produced through the interactive activities of agents, which, in turn, determine their behavior based on their interpretations of the world surrounding them. Thus, the emphasis of meaning relies on the conscious interpretation, when the person takes something into account, thinks through and thinks of it, attributing a value and purpose to it.10

The concept of social interaction is a key to this approach, because it involves individuals who communicate, interpret, and define their actions. In the interaction, there isn’t just a person’s response to the action of another one; it’s through the meaning attributed to that action towards the interpretive process that the person will respond. So, interpretation is the mediating element between stimulus and human response, and meanings are the action guidelines.11,12

Symbols, in turn, may be physical objects, human actions, or words used to represent something. According to Mead, the world and the reality are symbolic the meaning is socially given through interaction, i.e. there aren’t meanings intrinsic to an object. This way, symbols are constructed and transformed through the perception and social interaction and, thus, they’re dynamic. This is due to the fact that objects (symbols) are deeply involved in human behavior.11,12

So, the theoretical framework of Symbolic Interactionism presented itself as an appropriate pathway for this study, since it allowed one to focus on the meanings attributed by parents of premature babies to the neonatal unit environment, in the interaction and action context.

METHOD

This is a study with a qualitative approach due to the interest related to subjectivity and the experiential world of people, which aren’t susceptible to measurement. This experiential world refers to a life context in which human beings establish relations among themselves and with their environment, in a dynamic way, extracting experiences and providing them with meanings throughout the daily life.

Regarding its nature, this research constitutes itself as descriptive and exploratory, since, besides describing the phenomenon, it investigates its complexity and other factors with which it’s related, in order to unveil the multiple facets of its manifestation.

The study setting was the neonatal unit of a public teaching maternity in the city of Rio de Janeiro, Brazil. The subjects were 5 mothers and 2 fathers who experienced the hospitalization of a newborn infant in the neonatal unit, participated in the Kangaroo Method, and signed the Free and Informed Consent Term.

As technique for data collection one used the open interview with voice recording. A brief characterization of respondents was conducted and the approach started with the following research question: “How do you, as a parent, perceive the neonatal unit environment?”. Additional questions were asked, to extend and deepen the narrative. The average length of interviews was 40 minutes.

The capture of subjects ceased having the data saturation criterion as a basis. The data obtained in the interviews were preserved in their textual form and analyzed in order to constitute analytical categories. The approach through categories is one of most frequently used Content Analysis techniques, and it’s based on decoding the text into several elements which are, later on, grouped by similarities or related data, and, then, merge and constitute the categories. Thematic analysis is one of the techniques allowing the categorization through the quantification of themes. These are words or sentences which form coding units, i.e. meaning or, also, sense, for the analytical object concerned.
They may contain, in themselves, varied and complex dimensions. Therefore, through intensive reading and a previous analysis of transcriptions, one was able to identify the existence of nine thematic units: Observe the technological environment of the neonatal unit; Change one’s mind with regard to the neonatal unit; Think whether the neonatal unit is quiet or busy; Observe the affective climate between nurses and the health team; Observe responsibility, commitment, and emotional involvement of nurses and the health team with the babies and their mothers; Establish ties with the team; Feel confidence; Feel grateful for the team’s care and treatment; Feel impressed with the complications of babies undergoing more severe conditions.

In the next step of the analytical process, the nine thematic units were explored and grouped through converging points, giving rise to the two study categories: Observing the intensive environment of the neonatal unit; and Signifying the relational environment of the neonatal unit.

This study met the ethical and legal requirements of research with human beings, as specified by the Resolution 196/96, from the National Health Council. It was evaluated and approved by the Research Ethics Committee of the Maternity School of Universidade Federal do Rio de Janeiro (UFRJ), under the Protocol 04/06.

### RESULTS

In a brief characterization of the participants in this research, one notices that age ranged from 20 to 42 years and the educational level was complete high school (4) or a lower level (3). Regarding the occupation/profession, the participants declared themselves as clerks (3), housemaids (2), refrigeration technician (1), and unemployed (1). Out of all subjects, only two mothers had other children, the remaining subjects were experiencing the arrival of their first baby. When asked about planning of the last pregnancy, just one subject stated it was planned.

- Observing the intensive environment of the neonatal unit

  Baby’s hospitalization in the neonatal unit was experienced in a unique way by each family. When faced with a technological space and with a baby surrounded by wires and tubes, parents experienced different emotions and feelings. Insofar as they tried to adapt to the new situation, they started formulating ideas about this environment in which their baby was cared for. They apprehended day by day the peculiarities of the physical structure of the neonatal unit and the sensations evoked by them.

  For me, particularly, it wasn’t something traumatic, in the sense of “ah, my child is in the ICU”, I had already made my mind that this would happen. First, because the environment isn’t bad, the room looks good, you see that the devices are working well, indeed. (Carlos)

  That fantasy I had that ICU was just a last resort, for the worst cases, because of the buzzing noise from the little machine. But no, afterwards I became confident and, soon, they moved to the intermediate unit and this took away that fantasy I had, i.e. “being there, one’s gonna die”. I thought so, but, no, they gave life to my daughters there. (Rosa)

  In the testimonies, one may notice that parents observed and provided the neonatal unit environment with a meaning, highlighting its physical and structural aspects. In common sense, this technological space (physical structure and instrumentation) is almost always associated to the idea of death, terminal illness. However, the experience can trigger the emergence of new meanings for this environment, for instance, in Rosa’s speech, a place of “life”.

  In other passages, parents described other aspects observed and their sensations.

  It’s quiet and busy at the same time, because there isn’t just one baby there, there’re many babies, each of them with a different kind of problem. (Mauricio)

  What impressed me most was seeing the other babies. My babies seemed to be fine, it made me feel calm. When I looked at some babies, I felt a little depressed for the others than for mine. So, there were all those devices connected to them and, then, sometimes, many physicians came upon an only baby. (Carlos)

  In both reports, there’s a common element, affective ambiguity, which was felt sometimes by parents when they were in the neonatal unit. “Quiet and busy”, “calm and depressed” are the parents’ references to sensations that the intensive dynamics evokes.

  One may notice that, in the neonatal unit, parents affectively observed and experienced other situations besides those posed to the baby of their own. Living with the suffering of other parents and their babies also constitutes a stressor in this intensive environment.

  I was always a little worried, because I saw the other babies with a lot of problems. Then, I said: “Oh my God!”, I felt woeful, almost burst into tears when I saw parents crying. I was terrified, worried. “Oh my God! It makes me feel nervous, indeed! It’s
very stressful, you know! Stay here just watching other people suffering, helplessly!”. I prayed for just everyone who was there, in the ICU, so that everyone could leave soon. (Jade)

- Signifying the relational environment of the neonatal unit

When talking about their pathway along with their children in the neonatal unit, parents indicated the interactions they established with the team, especially with nursing, in the Kangaroo Method context. Within this neonatal unit environment, which, at a first glance, seems to be so purely technological, mothers highlighted the relations of attention and care that the nursing team established with them and their babies. The mothers participating in this research, as “radars” of the affective climate where their children were in, realized the emotional involvement of the “female nurses” when caring for the babies. Rosa’s report quite strongly emphasizes the value which the mother may attribute to these affective relations in care.

So, I was seeing my daughters in the ICU, my blood pressure reached 19. But, then, I became confident, I knew they’d leave there, they were being very well treated by the female nurses there. I saw all their attention, the affection. The most interesting thing, there, is that they establish a bond with children and talk to them. Many times I was there and paid attention, they talk to children. And it seems like mother and child. The affection they had to my daughters, too, talking, that really excited me, made me feel even more confident. (Rosa)

One apprehends from Rosa’s testimony that nursing care, especially with regard to a humanized attitude on the part of professionals, was the factor triggering her confidence. She also highlighted her position as an observer in the neonatal unit, finding out that the female nurses established a bond with the small clients and talked to them. This whole attitude of appreciating the baby as a subject, someone who deserves affection and dialogue, made Rose feel excited and more hopeful. In this sense, the interaction potentiated Rosa’s coping, as she felt confident to go through the relational environment of the neonatal unit.

Maria’s testimony also denotes the importance that the relationship between the mother/baby and the health team has for the quality of care.

Here, in the ICU, I’m seeing every day how people work, with accountability. I’ve seen very difficult situations, such as that of the little boy that day, when I was extremely nervous, because he got a little purple. I saw how quick people worked. I feel that people are a little bit like father and mother there. So, it’s a very easy environment, despite the difficulties, the things we see. It’s easy because of that, there’s a great affection on the part of people working with children. The way we’re treated as a mother, it’s also very good, because it offers an opportunity. People come to me and say: “Do you want to hold your baby in your arms?”. In the first times, it’s more complicated, they explain everything to you, it’s very good! I and she needed the ICU, here, she needed these people, and God knew it, God planned all this. (Maria)

Maria, in her testimony, raised many elements of this relational environment which deserve attention. She stressed, in the daily work of the team, the accountability and quickness for addressing the children’s complications or demands. Just like the other mothers, she also realized that the professionals affectively interact with babies when caring for them. In the face of this, she concluded that, despite the difficulties posed by hospitalization, the neonatal unit is a “very easy environment”, due to the humanized care for the baby and the mother. Although the environment raises ambiguities, “difficult and easy”’, the most noticeable thing was interaction as a facilitating element.

In this context, through the subjectivity that the mother captures in the affective climate of the work with babies, she re-signifies the neonatal unit environment. This is an important step in parents’ coping, just like in the case of Jade:

In my mind, I thought it was a depressing place, but, then, I saw that it isn’t, indeed, because all nurses are always happy, there’s no wake. I also became calmer by knowing that they’re always nearby, watching, enjoying, trying to take away your negative thought, it’s very good. (Jade)

Jade’s representation of the ICU was a “depressing place” with a “wake” atmosphere, but she found other meanings through the emotional climate of the nursing team. She observed the joy and confidence they tried to convey being constantly there. She changed her mind with regard to the intensive environment because of the perception of a significant relational space, generated by the nurses’ willingness, which made her feel calmer.

**DISCUSSION**

In the first parents’ visits to the neonatal unit, they experience some haze, perplexity, and fear, even those who were previously
informed about the possibility of hospitalization or those who had the possibility of knowing the sector before. Baby’s hospitalization may evoke mixed feelings in parents and lead to a temporary “emotional turmoil” condition. Anxiety, helplessness, fear of the unknown, and an unreality sensation are frequently observed among parents who experience the hospitalization of their newborn infant in the neonatal unit.14,15

In their inner world, there’re always mixed feelings which may generate a temporary “emotional turmoil” condition. As factors contributing to the unreality sensation experienced by parents one finds the amount of equipment, the noise from alarms, the use of unfamiliar words on the part of professionals, and the sequence of cradles and incubators with children whose appearance greatly differs from that of known babies, who were born at term and healthy. The lack of body contact and the difficulty of caring for the child are also crucial for the powerlessness sensation. The intensive dynamics itself, whose rhythm contrasts to the quietness within the incubator, may contribute to a feeling of discomfort and maladjustment.15

Definitely, each person’s perception with regard to an environment is quite individual. However, the results point to the importance, as well as the most varied meanings that this equipment of the neonatal unit may have for parents. The physical structure of the neonatal unit has deep impacts on babies, relatives, and professionals. This should be regarded as a crucial point in the sector’s organization, as well as in the development of building or restoration projects, which must reflect the universal concern of bringing families into the center of care and providing an increased quality of care.16

The unit’s environment organization isn’t just a task facilitating the assistance provided by the health care team, but it may also provide parents with a better embrace, and perception of the quality of care. Generally, the neonatal intensive care environments reflect the advances in technology and medical treatments, however, the intensive environment conception, with regard to its design and organization, should also contribute to a care approach aimed at the baby’s neurobehavioral development and family-driven.17

Interventions in the physical environment which seek to reduce neonatal physiological stress, such as reducing light and noise, have a direct impact on the development and length of hospital stay. However, it’s worth highlighting that premature babies are also indirectly affected by the parents’ stress affecting the parental role, even after hospital discharge. Environmental influences of the neonatal unit, therefore, have an impact on parents’ mental health.18

Parents highlighted the intensive dynamics of the neonatal unit and the suffering of other babies as stressors. Generally, the approach of parents by professionals is focused on the baby’s clinical progress, so, there’s little space for them to express perceptions, feelings, or emotions related to the environment surrounding their baby. Parents need to feel embraced whenever meeting their child. Thus, it’s important to create multiprofessional strategies, such as parent groups, where they can express and share experiences.

The meaning of life terminality associated to the neonatal unit changed insofar as parents realized their child’s progress and the professional and emotional availability of the health care team. Availability is a factor for success in the process of therapeutic communication with relatives in the neonatal unit. For introducing her/himself as a helping element to the client, the practitioner needs to be aware, reflectively listening and stimulating the expression of perceptions and feelings.19

In this sense, an important care action recommended by the Kangaroo Method, which qualifies the environment and the neonatal care is body contact between parents and baby. The parents’ bodies should be regarded as the first and best environments for comfort, warmth, and affection for low weight and/or premature babies, and this is a new paradigm. Encourage presence, as well as the skin-to-skin contact, contributes so that parents feel like active participants in the care for their baby, instead of mere visitors in the unknown environment of the neonatal unit.20

The speeches showed that the dimension of the neonatal unit environment goes beyond the baby’s cradle or incubator. This environment was also experienced in its relational aspect, i.e. the interactions established between parents, babies, and professionals. In this sense, it’s important to take the environment into account as an influential component in the communication process, with the possibility of inhibiting of stimulating the interaction between people.21

The environmental influence of the neonatal unit in communication is also related to the support that the environment provides
for meeting the baby and family needs, as well as the professionals needs when providing clients with a good quality care. When the environment optimizes the care outcomes, it may be regarded as a “collaborative environment”.21

Nurses and their teams, due to closeness and continued care, may be crucial sources of support for parents soon after the birth of a premature baby. The aid relationship and the humanized attitude of the nursing team were regarded as elements of support by parents. In their testimonies, the professional attitudes of presence, communication, and accountability in care were the most important ones. Such attitudes, in the interpersonal relationships of care within the hospital technological environment, can activate the true dimension of existential characteristics of each participant and assist in a person’ needed coping towards hospitalization.9,22

Parents also recognized that, by care for the small babies, the professionals affections were also intensively mobilized, especially that of the nursing team, due to closeness and the frequency of neonatal care actions. In the hospital domain, the professionals need to develop emotional skills, in order to be solitary, sympathetic, and able to embrace differences and be aware of situations experienced in daily life. This humanized attitude is able to make the care environment more enjoyable and less stressful, by providing more confidence and affection.23

CONCLUSION

In the neonatal intensive care environment, due to its peculiarities of and the dynamics of urgency and immediacy, often the team is more focused on dominating and manipulating the technologies. However, the great need involves understanding the true dimension technology has in the care process, i.e. it constitutes a means to help in the care for the child and her/his family, the subjects of care.

Thus, when the focus of care exclusively relies on machinery, on the procedure and pathology, the environment and actions become depersonalized, not embracing, since the human dimensions don’t gain due importance. However, when care is focused on the relationships, the life histories, the personal positions, the socio-cultural context, and the experiences shared by the baby and her/his parents, they’re valued in the treatment context.

In the Kangaroo Method context, the interaction between professionals, babies, and their families is extremely important, because it’s through this that health practices are constructed. The interaction for care should appreciate the active participation of these individuals in the health-illness process, where communication reflects the appreciation of maternal/paternal care in the neonatal environment.

The meetings between parents and baby in the neonatal unit environment are also permeated by the meetings with people from this intensive care area, especially the health care professionals. The meanings set up in this environment and in the relationships are also connected to success in the psycho-affective involvement of the family unit in the Kangaroo Method context.

This means that the professional’s attitude, the communication, the intervention undertaken in the environment and the affective space delimiting its approach are interconnected elements which interfere with the parents’ process of attributing meaning with regard to the neonatal unit environment, the child’s survival, and the emotional investment. This relational dimension was given by nursing professionals through interactions for care, good health practices, and the appreciation of the other’s presence as a whole.

In this study, the neonatal unit was highlighted by the subjects not only in the objective space of the physical and technological structure, but especially in the relational space, formed in the intersubjective interactions between parents and baby, and between these and the health care professionals. Such interactions in the development of the Kangaroo Method are able to mobilize affections and behaviors of embrace, with respect, dialogue, and mutual understanding.

One may observe that these two angles (technological and relational), found in the neonatal unit, are closely related and are mutually influenced. This means that lighting, sound, temperature, embracement, and the relationships of care, among so many other aspects together, resonate with barriers or pathways for getting parents and children closer.

In this relational environment, parents highlighted that the main factor for feeling themselves confident and embraced was the support received from professionals and the affective climate of the care actions performed by the nursing team. In the parents’ speech, the importance of nurse’s role in the inclusion and participation in the neonatal environment stood out.

The success of the Kangaroo Method also depends on an environment in which the
interactions of care are ruled by the appreciation of the subjectivity of each family unit, because the difficult route of experiencing premature birth and baby’s hospitalization may be minimized by establishing a relational environment which allows one to re-signify this experience.


