

CONSTRUÇÃO DO APEGO ENTRE O BINÔMIO MÃE E BEBÊ PRÉ-TERMO MEDIADO PELO POSICIONAMENTO CANGURU

BUILDING THE ATTACHMENT BETWEEN MOTHER AND PRETERM BABY DYAD MEDIATED BY KANGAROO POSITION

CONSTRUCCIÓN DEL APEGO ENTRE EL BINOMIO MADRE Y BEBÉ PREMATURO POR MEDIO DE LA POSICIÓN CANGURO

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RESUMO

Objetivo: Compreender como as mães vivenciam o posicionamento canguru, na Unidade de Terapia Intensiva Neonatal e apreender a percepção sobre as relações de apego com seus bebês mediadas pelo posicionamento canguru. **Método:** Caráter qualitativo, descritivo e exploratório. Participaram 9 mães maiores de 18 anos com filhos internados em Unidade de Terapia Intensiva Neonatal com idade gestacional igual ou inferior a 30 semanas, que realizaram o posicionamento canguru, pelo menos duas vezes. Foram excluídas mães que já tiveram filhos internados em Unidade de Terapia Intensiva Neonatal, mães de gemelares, com diagnóstico psiquiátrico e usuárias de psicoativos. A coleta aconteceu, por meio do preenchimento de ficha para obtenção de dados sociodemográficos, entrevista semiestruturada antes e após a realização da posição canguru e o diário da participante. O encerramento da coleta deu-se por saturação e foram analisados, conforme Análise de Conteúdo, na modalidade temática. **Resultados:** Os dados foram agrupados por temas, emergiram as seguintes categorias: maternidade no contexto da Unidade de Terapia Intensiva Neonatal, Interação mãe-bebê, durante a gestação e após o Canguru, Expectativa e realidade materna, em relação ao Canguru. **Conclusão:** A posição canguru cumpre sua função conforme norma do Ministério da Saúde, tanto para benefícios clínicos para o bebê como para humanização e aumento do apego mãe-bebê.

Descritores: Método Canguru; Recém-Nascido Prematuro; Apego ao Objeto; Cuidado de Enfermagem.

ABSTRACT

Objective: To understand how mothers experience and perceive the attachment relationship with their babies mediated by the kangaroo position in the Neonatal Intensive Care Unit. **Method:** This is a qualitative, descriptive, and exploratory study. Nine mothers over 18 years of age with children admitted to the Neonatal Intensive Care Unit with gestational age equal to or less than 30 weeks, and who performed the kangaroo positioning at least twice participated in this study. Mothers who already had children hospitalized in the Neonatal Intensive Care Unit, had twins, had a psychiatric diagnosis and used psychoactive drugs were excluded. Data collection took place by filling out a form to obtain sociodemographic data, by performing semi-structured interviews before and after the kangaroo position, and by analyzing the participant's diaries. The criterion to end data collection was saturation and data were analyzed according to Content Analysis. **Results:** The data were grouped in themes, and divided into the following categories: Maternity in the context of the Neonatal Intensive Care Unit, Mother-baby interaction during pregnancy and after the Kangaroo, Expectation and maternal reality concerning the Kangaroo. **Conclusion:** the kangaroo position fulfilled its function according to the Ministry of Health standard, both for clinical benefits for the baby and humanization, and increased mother-baby attachment.

Descriptors: Kangaroo-Mother Care Method; Infant, Premature; Object Attachment; Nursing Care.

RESUMEN

Objetivo: Comprender cómo las madres experimentan la posición canguro en la Unidad de Cuidados Intensivos Neonatales y comprender la percepción de las relaciones de apego con sus bebés por medio de la posición canguro. **Método:** Cualitativo, descriptivo y exploratorio. Participaron nueve madres mayores de 18 años con hijos ingresados en la Unidad de Cuidados Intensivos Neonatales con edad gestacional igual o menor a 30 semanas, quienes realizaron la posición canguro al menos dos veces. Se excluyeron las madres que ya tenían hijos hospitalizados en la Unidad de Cuidados Intensivos Neonatales, madres con gemelos, con diagnóstico psiquiátrico y consumidoras de psicoactivos. La recogida se realizó mediante las respuestas de un formulario de obtención de datos sociodemográficos, entrevista semiestruturada antes y después de realizar la posición canguro y diario del participante. El cierre de la recolección de datos fue por saturación y se analizaron según Análisis de Contenido, en la modalidad temática. **Resultados:** Los datos fueron agrupados por temas, surgieron las siguientes categorías: Maternidad en el contexto de la Unidad de Cuidados Intensivos Neonatales, Interacción madre-bebé durante el embarazo y después del Canguru, Expectativa y realidad materna con relación al Canguru. **Conclusión:** La posición canguro cumple su función según el estándar del Ministerio de Salud, tanto por los beneficios clínicos para el bebé como por la humanización y el aumento del apego madre-bebé.

Descriptor: Método Madre-Canguru; Recién Nacido Prematuro; Apego a Objetos; Cuidado de Enfermería.

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INTRODUCTION

The relationship between the mother and her baby goes far beyond a momentary interaction, and the quality of this interaction can directly influence how this individual establishes his or her relationships with the world. This relationship can be understood as attachment, and constitutes a search and preservation of closeness between individuals, as primary and innate as the need to obtain food or comfort. The established connection of the baby with the so-called attachment figure makes him/her, in a risky situation, feel safe to explore the environment that surrounds him/her⁽¹⁾.

From the relationships with the attachment figure in terms of availability and responsiveness, the child will develop the so-called operating model of self, which will guide how, in the future, the individual will perceive the world, in their ways of behaving and personal relationships. An individual provided with safety, comfort and autonomy will probably perceive himself as someone esteemed and worthy of good feelings⁽²⁾.

The preterm birth and the consequent need for hospitalization of the baby, in the first hours of life, can negatively influence the establishment of these first attachment relationships. The environment of the Neonatal Intensive Care Unit (NICU), although necessary, at this time of the newborn's life, entails a series of stressful stimuli for the baby: bright light, temperature variability, high frequency of invasive and painful procedures, besides constant interruption of the sleep cycle. Such stimuli also affect the mother, who may feel unsafe in face of what she does not know: both the environment and the clinical situation of her baby⁽³⁾.

With her baby hospitalized, the mother may feel unable to offer primary care, which is essential for the baby's development and for establishing the attachment relationship. Moreover, there are psychic components of the mother who, in front of a baby different from the one imagined, during the whole gestational period, feels strangeness. In this context, the mother can be affected by feelings of inferiority, have her self-esteem lowered and the maternal capacity questioned, due to the fact that she did not generate a healthy baby⁽⁴⁻⁵⁾.

In order to support the process of maternal adaptation to child care in the NICU, some

strategies have been adopted. Among them, there is the Kangaroo Method (KM), which is defined as a type of assistance that advocates early skin-to-skin contact between mothers and low-weight newborns, progressively, and for the time considered pleasurable for the dyad. In Brazil, the KM also involves other strategies, such as handling the newborn, attention to individual needs, welcoming and participation of parents in the care of their babies, promotion of attachment, as well as outpatient follow-up after hospital discharge⁽⁶⁾.

In this sense, a qualitative study conducted in neonatal units in Switzerland, England and Finland points out the importance of physical contact such as touching, holding and remaining in skin-to-skin contact, between parents and babies, so that an emotional approach is possible. The concept of approximation on an emotional level would be linked to the consistency of feelings of love, care, affection and/or connection between parents and babies⁽⁴⁾. In another study, kangaroo care positively affected maternal attachment, especially for babies born at term, and it was recommended that the kangaroo would be included in routine care at the NICU, and the importance of providing the environment and support required by mothers to favor physical and emotional interaction with their babies⁽⁷⁾. With regard to premature babies, kangaroo care had positive influences to stabilize physiological symptoms, increase mother-baby interaction and reduce the mother's stress level⁽⁸⁾. Added to this, there was a predominance of positive feelings in mothers who performed the kangaroo position with their babies, in the NICU environment, besides the increased feeling of trust, in handling the newborn, encouraging breastfeeding and favoring the attachment between mother and baby⁽⁹⁻¹⁰⁾.

In view of the limits imposed by premature birth and the need for the baby to be admitted to the NICU for the attachment process between mother and child, it is believed that the kangaroo positioning can be a tool to be used by nursing, in order to assist in the process of maternal adaptation to the new reality, favoring maternal trust, creating attachment bonds and contributing to a healthy psychological and cognitive development for the baby.

It is believed that conducting research on situations that may favor the formation of attachment and the promotion of maternal and child mental health, which will contribute to producing knowledge in this area and may be

useful to support the practice of nursing professionals in the care of newborns and their families, thus qualifying assistance and producing a positive impact on health indicators.

Accordingly, this investigation has the objective of understanding how mothers experience the kangaroo position in the Neonatal Intensive Care Unit and figuring out the perception of attachment relationships with their babies mediated by the kangaroo position.

METHODS

This is a descriptive and exploratory study, with a qualitative approach, as a way to investigate the mother and baby relationship, during the kangaroo mother relationship, and also the subjectivities produced in this relationship and the subjects' perceptions about it.

In this study, the framework adopted was the Attachment Theory ⁽¹¹⁾, as it recognizes its contributions to understanding the relationship between babies and parents. According to this theory, attachment is a basic mechanism of human beings and biologically programmed. The relationship between parents and baby starts with the baby's signs that indicate the need for proximity to the parents, such as the need for comfort and food. Over time, the affective relationship that will support the child's cognitive and emotional capacities is developed. Thus, the attachment theory assumes that the first relationships, established in childhood, will influence the child's development, throughout his/her life.

The study was conducted in a maternity hospital in Belo Horizonte that exclusively serves the Brazilian Unified Health System (SUS). The hospital assists part of the population of the city of Belo Horizonte and is a reference in maternal and child care for cities in the countryside of the state of Minas Gerais. It performs about 900 deliveries per month and has 87 obstetric beds, 41 beds in the Neonatal ICU (UTI, as per its Portuguese acronym), 45 beds in the Neonatal ICU (UCI, as per its Portuguese acronym) and 12 from other clinics⁽¹²⁾. The institution complies with the recommendations of the Ministry of Health regarding assistance to premature and low weight newborns – Kangaroo Method, which consists of a model of perinatal care aimed at qualifying and humanizing care for newborns and families, thus promoting its participation in neonatal care. Among the interventions recommended by the method, one can mention the kangaroo position,

which consists of keeping the baby in skin-to-skin contact, only using diapers, close to the parents' chest for as long as is pleasurable and sufficient for both parents and baby. The kangaroo position must be guided and assisted by a qualified health care team ⁽⁶⁾.

In the NICUs of the institution where the study was held, parents have free access to the NICU environment, with their presence, as well as the performance of the kangaroo positioning, encouraged by the health care team, focusing on its benefits for parents and babies.

The study was attended by 9 mothers with babies admitted to the NICU. The inclusion criteria were: mothers whose babies were born with gestational age equal to or less than 30 weeks, aged equal to or above 18 years old and who had performed the kangaroo positioning, during the baby's hospitalization in the NICU for at least twice at the time of the final interview. Conversely, Mothers who already had other children who needed assistance in the NICU, mothers with twins, mothers diagnosed with psychiatric illness and mothers who used alcohol and illicit drugs were excluded.

In order to identify the participants who met the criteria for inclusion in the study, an active search was performed in the medical records of babies admitted to the NICU, as well as the reference team's approach responsible for following-up the baby in the unit, in a such a way as to identify whether he/she was able to perform the kangaroo positioning. It should be underlined that there was no change in the care routine for data collection purposes, with the kangaroo positioning being performed at the time indicated by the team and according to the mother's decision.

As a data collection instrument, semi-structured interviews ⁽¹³⁾ and the participant's diary were used. The interview sought to understand the expectations for the experience of kangaroo care and the early manifestations of attachment and, subsequently, to identify the implications of this experience regarding the construction of attachment mediated by the kangaroo positioning. The interviews were conducted in two moments: before the first kangaroo positioning (initial interview); and after the mother had performed the kangaroo positioning at least twice (final interview), containing the following guiding questions (Box 1):
Box 1 - Guiding questions for interview.

Initial interview
How did you relate to your baby during pregnancy? How did you feel when you first came into contact with your baby? What do you expect from kangaroo positioning?
Final interview
How do you describe the kangaroo positioning experience? How do you perceive your relationship with your baby after the experience? Has there been any change? What is it like to be a mother in a NICU environment?

Source: Designed by the authors.

In the initial interview, in addition to the guiding questions, sociodemographic information was also obtained from the mother (name, age, marital status, parity, education, occupation) and from the child (name, gestational age, birth weight and Apgar score). The interviews were carried out according to the availability of the participants and in a private place. They were conducted by the researcher herself, with mastery of the interview technique. During the data collection period, the researcher who also worked in the psychology service did not assist mothers who met the participation criteria in this study, in order to avoid any type of interference in the production of data. The interviews were recorded and later transcribed in full by the researcher. The average interval between the initial and final interviews was 28 days.

Another data collection instrument used was the participant’s diary. This instrument consisted of a lined notebook accompanied by a pen, handed to the mother after the initial interview. She was guided by the researcher to register her perceptions, feelings and what she considered most important about the kangaroo positioning experience and the relationship established with the newborn, during the hospitalization period. The records could be made, through writing, drawings, figures or any other form of expression that the mother wanted. At the end of the data collection, the diary remained with the mother, and a copy was made by the researcher after the final interview. Among the 9 participants, 4 of them did not provide the diary for the researcher to make a copy.

As the interviews were conducted, a pre-analysis of the data was performed to identify elements that would make it possible to consider that the data saturation had happened, such as: attachment behaviors and maternal experience in relation to the kangaroo method. Thus, the

collection was interrupted when the data obtained in the interviews already offered elements to answer the objectives of the study and contribute to the production of knowledge about the topic under investigation ⁽¹³⁻¹⁴⁾.

The data collected through the interview and the diaries were transcribed, in full, by the researcher and systematized, in order to constitute a single record of the data collected from each participant, containing initial and final interviews and diary records. It should be underlined that the participants used writing as a language to express themselves, with some drawings being made, with a view to decorating and personalizing the diary, not allowing them to be recognized as a way of communicating something. After transcription, data were analyzed, according to the content analysis technique in the thematic modality ⁽¹³⁾. The core themes that allowed to understand how the attachment relationships between mother and child were mediated by the kangaroo positioning were identified, and the grouping of the themes by similarity allowed the constitution of the empirical categories.

In the categorization process, the data were used in their entirety. Subsequently, a description of the result obtained in the categorization was performed; however, in order not to be extensive, some reports were selected to compose the text. Finally, inferences were made about the results, as well as the interpretation of the outcomes obtained based on the existing literature on the topic ⁽¹³⁾.

The research project was approved by the Research Ethics Committee of the Sofia Feldman Hospital, through the opinion nº 3.359.263, and the data collection only started after obtaining the signature of the Free and Informed Consent Form (FICF). All mothers who were invited by the researcher agreed to participate in the study. In order to ensure the anonymity of the participants, the letter “M” was adopted followed by the number corresponding to the order of the interview (M1, M, 2, M3, ...). A code was also added to identify the source of the data. Thus, EI was used for initial interview; EF for final interview and DC for field diary.

RESULTS AND DISCUSSION

Taking the attachment theory as a reference, it was sought to identify the elements that could contribute to the attachment relationships between mothers and children in the

context of kangaroo care. Such elements were related to the environment, aspects of the baby and maternal feelings and expectations. Thus, three empirical categories were structured: 1) Maternity in the context of the Neonatal Intensive Care Unit; 2) Mother-baby interaction during pregnancy and after the Kangaroo positioning; 3) Maternal expectation and reality in relation to the Kangaroo. Below, the empirical categories will be presented followed by the dialogue established with the available literature on the topic under study.

Maternity in the context of the NICU

In this category, the participants expressed that the experience of both prematurity and the need for hospitalization of the baby in the NICU is something new, as they did not expect to circulate in the space of an intensive care unit. The unpredictability was expressed by the mothers in relation to the clinical picture of the child, which can get worse at any moment, generating uncertainty and fear.

“For me, at first, I was really upset. I had never been in an ICU in my life, neither for adults nor children” (M1, EF).

“In the beginning, it was very hard, because I’d never have imagined that I’d go through this, see her inside, full of devices, we don’t understand much of the devices ...” (M2, EF).

“It is very hard because we don’t know if he will get better, if he will get worse. We get a little unsafe, like this. Concerning the ICU, right?” (M4, EF).

Added to this, the surveyed mothers also reported a difficulty, in some moments, of feeling like mothers of their own babies, due to the impossibility of carrying out the care.

“It’s very good. But I think that, mom, mom, I think it’s only when I have it in practice, that is, everyday, I have to do everything. Until then, everything is quiet, apparently everything is quiet. I keep watching, to understand some things, how to change diapers, these little things like that. But if I had it at home, it would be much better” (M3, EF).

“Oh, it’s different, right? Because you go there and just look, you can’t take it all the time, you can’t come in all the time. When you can enter, there is a procedure and we are left wondering if it is in our child, wanting to know which one it is. It’s different, it’s hard sometimes” (M5, EF).

Over time, mothers demonstrate an understanding of the NICU and the care provided there and the discovery of possibilities to practice motherhood. This process favors learning and seems to contribute to the mother in the sense of feeling safer to perform the care and try other forms of approximation.

“[...] But now I’m much more relaxed, I understand that there, that, at the moment, she needs such procedures. Then, I feel super relaxed” (M1, EF).

“[...] now that I’ve lost my fear, I can already put my hand, put my hand in the incubator, these things” (M3, EI).

“[...] but I already learned a lot, the diet, now I already hold the diet, I know how to fix it for the tube to get better, these little things” (M6, EF).

“It’s unconditional love! At first, it’s just a type of care, but after you see him smile at you, cry when you leave, when he’s hungry, or feel his breath on you, all problems are gone! The true to life prevails” (M4, DC).

Mother-baby interaction during pregnancy and after the Kangaroo positioning

It was possible to extract from the interviewees’ reports that the interaction with their babies during pregnancy happened through speech and caresses held on the belly. The intrauterine fetal movements functioned as a response to the communication started by them, and served as a stimulus for maintaining the interaction.

“I talked every day, I touched my belly a lot because she was well ... she moved a lot. It was a nice relationship” (M1, EI).

“After 25 weeks, he started to kick, so every time he was stressed, nervous, he kicked, and then I tried to calm him down by cuddling. It worked too much, he got very relaxed, very calm” (M4, EI).

Some mothers explained that the **time** they had to keep in touch with the baby during pregnancy was short, due to premature birth.

“Look, it was so fast, but so fast, in such a way that, when I saw it, it was already in my arms” (M7, EI).

“Oh, I wasn’t in the habit of talking to her at all. For me, it was all very new, so I thought it was a little weird, I was never much to talk to. When I started creating that thing, that thing of wanting to talk and everything, then it was too late, she was born” (M3, EI).

The ambivalence of feelings experienced by one of the mothers is clear, given the discovery of

pregnancy and the process of acceptance of unwanted pregnancy.

“I kept singing to him; and, until the first three months, I had time to reject it, I regretted getting pregnant. And then I cried, because I regretted saying that I regretted it, because he was not to blame for anything” (M6, EI).

Performing the kangaroo made it possible to continue a relationship that started during pregnancy and was interrupted by premature birth. In addition, it favored the approximation between mother and child, and all mothers attending the study felt reciprocity on the part of the baby, which was expressed through his/her ability to recognize the presence of the mother:

“I understand that the kangaroo method is to have the opportunity to be close to your child and pass on to him a safety that he had in the belly, and the mother to feel through this contact a timely time with her child” (M6, DC).

“Oh, it changed, he got closer, he got more weight” (M8, EF).

“She pays more attention, after I got her, she pays more attention. It seems that she felt my presence better” (M7, EF).

“It looks like he recognizes me better. I think that, when I arrive, he sees me and manages to recognize me a lot more” (M5, EF).

Performing the kangaroo was, for most mothers, the moment that they could be physically close to their babies, being considered the first meeting with them. It was also the opportunity for mothers to transmit safety and optimism to their babies.

“When I picked up my daughter the first time, when she looked at me, my world stopped there at that moment. It was the best thing I did was accepting to do the KM, becoming a “kangaroo” and taking my “kitten” and holding it on my arms and showing her that I was there and she needed to stay alive because she had a great love waiting for her outside that incubator” (M2, DC).

The contact between mother and baby provided by the Kangaroo contributed for mothers to approach and interact with their babies. This proximity favors mothers’ learning about the baby’s behavior and development and also contributes to making them feel strengthened in their maternal role.

“[...] afterwards I did kangaroo several times and I still do it, I perceived that the kangaroo helps my baby to be calmer he recognizes me a lot

more as well and has helped him gain weight faster” (M5, DC).

“I think when I arrive, like this, that he’s nervous, I put his hand on him and he calms down, he gets calmer” (M9, EF).

“For me, now I’m even more attached to him, and I feel more comfortable taking care of him, just like, I lost my fear” (M6, EF).

Maternal expectation and reality in relation to the Kangaroo Method

The data highlight weight gain as the main clinical benefit attributed by mothers in relation to the Kangaroo. The baby’s clinical evolution and discharge expectation are the first motivators for the accomplishment of the Kangaroo Method.

“Oh, I don’t know, I can’t explain. What do I expect? Oh, let him gain weight, let him get out of there. That’s what I hope for” (M8, EI).

“I hope she gains weight fast, then she goes home fast to be with me” (M7, EI).

“Oh, I hope he may be able to get fat enough for us to leave quickly!” (M9, E1).

There were also reports that showed the maternal expectation of proximity to the baby, who was restricted, due to admission to the NICU. This proximity is also the opportunity to resume the contact that had started during pregnancy.

“[...] I hope we may have contact, because there is almost no contact, he is in there and I here, we have almost no contact between mother and child” (M5, EI).

“I hope he may feel me again, because the premature baby, I think sometimes feels a little alone, without us. Because we can’t be around the incubator for 24 hours, so I think he’ll feel sheltered again. ‘I think that’s it’” (M4, EI).

On the other hand, the uncertainty and the feeling of fear of these mothers surfaced in relation to the contact with their babies, considering them fragile, due to prematurity and clinical conditions. Kangaroo care appears, in this context, as a possibility for increasing the safety of these mothers in relation to their own children.

“Well! Before the kangaroo, I was afraid, unsafe. I didn’t know how to deal with everything that was happening, because I hadn’t felt my son as I imagined he would be at birth” (M6, DC).

“Oh! Lose your fear, right? Losing fear I think it will help too much. Losing fear, having more safety, catching her” (M3, EI).

“It took me a little less than a week to get my hands inside the incubator because I was afraid of passing him some kind of infection or

something. After another week to make the kangaroo, I thought he was so fragile" (M4, DC).

For mothers, the first time they performed the Kangaroo was not easy and demanded some effort from the mother and the baby to adjust to each other. The mothers were afraid to hold the babies and they, in turn, responded with defensive and stressful behavior, crying and shaking on the mother's lap. The gap between expectation and reality was reduced, as the Kangaroo was repeated.

"The first time, I had a little difficulty, because I was afraid. It looked like it was putting a cat on top of me, trying to climb. Nevertheless, the second time, it was quiet; the third time, it was quiet, so now I want to catch it every day" (M3, EF).

"He surprised me and was so nervous that he REMOVED the entire CPAP; He wept A LOT until he found a pleasant position; He breathed only with oxygen near his nose, so he had some spikes and falls; I was so tense, thinking that he would reject me, then I had back pain" (M4, DC).

Mothers recognized the clinical benefits that motivated them to perform the Kangaroo, such as weight gain and encouragement to breastfeed.

"But it was very tasty, and it's been very good for her, for me ... My milk has increased, after the Kangaroo, she's gaining weight well ..." (M1, EF).

"After I started doing Kangaroo, I saw many changes in my baby: weight gain; she recognizes my voice; she smells the milk and wants to suck" (M2, DC).

With regard to emotional benefits, the reports demonstrated the strengthening of the attachment process between mothers and their babies, in addition to increased safety, both in their own maternal condition and in their ability to care for their children, even in an intensive care unit.

"It was very good for me, since I was unsafe, I had even mentioned it; so, for me, it was great, I always want to catch her. It helped a lot against uncertainty" (M3, EF).

"After about 20 minutes on my lap, he got calmed down, our bodies were only one again, we exchanged heat and all the fear of the 'unknown' had passed away. It was just me and my baby" (M4, DC).

The study findings are in line with the pertinent literature, insofar as maternal feelings of uncertainty, fear and helplessness are

reiterated in face of the reality of the baby's hospitalization in the NICU and its prematurity⁽¹⁵⁾. In the case of the present study, the prematurity in question is extreme, which can increase the risks to which the babies are submitted and contributes to increasing the maternal feelings already mentioned.

Mothers' resilience was emphasized in terms of their children's recovery. Women start to be more attentive to the information transmitted to them by the team and to the procedures performed routinely. This finding is reinforced by a study that indicates that daily experience with the preterm baby in the NICU contributes for the mother to develop self-confidence and the restructuring of the maternal role, in addition to being important for preparing mothers for home care⁽¹⁶⁾. It is noteworthy that the knowledge acquired by mothers in the hospital environment provides recognition, understanding and response to the baby's behavioral signs, perceptions that help them to perform care procedures, both during hospitalization and after hospital discharge⁽¹⁷⁾. This finding is relevant with regard to attachment theory, since factors related to the child's physical and temperamental conditions and those related to the environment were identified as factors that can interfere with the activation of the attachment behavior system⁽¹⁸⁾.

The inevitability of experiencing negative feelings becomes clear in the face of the challenge of having an extreme premature baby admitted to a NICU. It is recommended that professionals in charge of assistance, especially those in nursing who remain, continuously, with the mother-baby binomial, have an understanding of the psychological process in question, enabling them to develop actions aimed at minimizing the negative impact characteristic of the situation.

The dynamics of attachment formation between mother and baby, even during pregnancy, was mainly driven by speech and maintained, as the mother feels her child's reciprocity, through fetal movements. The importance of this interaction is reinforced by the understanding that the maternal-fetal connection is a significant precedent for postnatal connection between mother and baby⁽¹⁹⁾. The maintenance of the opportunity provided by the kangaroo positioning proved to be an opportunity to continue this first contact, interrupted by premature birth, in addition to being beneficial for the baby, since exposure to maternal sounds between the 26th and 33rd weeks favors the

greater physiological and clinical stability of preterm babies⁽²⁰⁾. In light of the foregoing, it can be considered that the nursing team has a significant role in the sense of favoring attachment between mother and baby, by creating opportunities for the mother to be with him/her as early as possible.

Still on the kangaroo positioning, it is clear that, at first, the mothers attending the study were motivated to perform it due to the clinical benefits of the method with regard to the baby's growth and development. Nevertheless, when experiencing the method, they perceived the results consistent with the approximation and strengthening of the feeling of maternal attachment, care and safety. The newborn lacks maternal touch and other stimuli, since it is exposed to situations that cause stress in the NICU environment and that compromise its physical, psychological and cognitive development⁽⁷⁾. In relation to mothers, the results showed that, at times, they needed to readjust their expectations about how the experience of the first contact with the child would be, an adjustment that is fundamental in the grieving process experienced by the mother when faced with a baby different from the previously idealized during pregnancy. In this context, touch and skin-to-skin contact can promote the constitution of the child as a person and contribute to the attachment between him/her and his/her parents⁽²¹⁾.

It was perceived that the mothers already demonstrate previous knowledge about the benefits of the Kangaroo Method for the baby. This finding may be related to the free presence of mothers in the NICU, the interactions they establish with the health care team and the development of guidance groups by the multidisciplinary team, in addition to the constant exchange of experiences with other mothers in the same situation. Added to this, offering information to mothers about care routines can reduce the emotional effects resulting from the baby's admission to the NICU⁽²²⁾. Thus, the data reinforce the benefits of kangaroo positioning for maternal mental health, as it reduces the stress characteristic of the experience of hospitalization and extreme prematurity, in addition to strengthening feelings of confidence and safety in mothers. The investment in educational practices by the nursing team, focusing on favoring maternal learning, can contribute to the increase of maternal safety for baby care and, consequently, the reduction of maternal stress

resulting from premature birth and the need for hospitalization.

The limitations observed in the study relate to the fact that a set of actions are taken to favor the approximation between mother and child in the study environment, such as: free access to the NICU, conditions of stay in the institution and follow-up by multidisciplinary team, throughout the baby's stay in the NICU. Therefore, the results obtained in this investigation may not derive, exclusively, from the kangaroo position.

FINAL CONSIDERATIONS

It was possible to highlight early feelings, which were predominantly negative in the face of the hospitalization and prematurity of their children, and the inevitability of the feelings in question, leaving the health care team to understand the experience and minimize the damage, as far as possible. It was perceived a psychological-maternal strengthening, motivated by the constant presence in the intensive care unit and by the performance of the Kangaroo Positioning, besides the significant strengthening of the attachment relationships between mothers and their babies and the clinical benefits already proven by the method.

The study reaffirms findings in the pertinent literature about the contributions of the Kangaroo Position, thus strengthening the adoption of this practice in the context of care of premature newborns. Therefore, the kangaroo position fulfills its function, as recommended in the Ministry of Health standard, both with regard to clinical benefits for the baby and with regard to the humanization of care and increased attachment between mother and baby. Accordingly, it is recommended that nursing professionals favor the performance of the Kangaroo Positioning as soon as possible as an important resource to minimize the damage caused by the early separation of the mother and child binomial.

REFERENCES

- 1- Bowlby J. Apego e perda: Separação. São Paulo: Martins Fontes; 1984.
- 2- Mendes LST, Rocha NS. Teoria do apego: Conceitos básicos e implicações para a psicoterapia de orientação analítica. Rev Bras Psicoter. 2016 [citado em 18 ago. 2020]; 18(3):1-15. Acesso em: http://rbp.celg.org.br/detalhe_artigo.asp?id=209
- 3- Baseggio DB, Dias MPS, Brusque SR, Donelli TMS, Mendes P. Vivências de mães e bebês

- prematuros durante a internação neonatal. *Temas Psicol.* 2017;25(1):153-67. DOI: [10.9788/TP2017.1-10](https://doi.org/10.9788/TP2017.1-10)
- 4- Flacking R, Thomson G, Axelin A. Pathways to emotional closeness in neonatal units: A cross-national qualitative study. *BMC Pregnancy Childbirth.* 2016;16(1):170. DOI: [10.1186/s12884-016-0955-3](https://doi.org/10.1186/s12884-016-0955-3)
- 5- Brazelton TB, Cramer BG. *As primeiras relações.* Porto Alegre: Artes Médicas; 1992.
- 6- Ministério da Saúde (BR). *Atenção humanizada ao recém-nascido de baixo peso: Método Canguru.* Brasília: Ministério da Saúde; 2017.
- 7- Kurt FY, Kucukoglu S, Ozdemir AA, Ozcan Z. The effect of kangaroo care on maternal attachment in preterm infants. *Niger J Clin Pract.* 2020;23(1):26-32. DOI: [10.4103/njcp.njcp_143_1](https://doi.org/10.4103/njcp.njcp_143_1)
- 8- Cho ES, Kim SJ, Kwon MS, Cho H, Kim EH, Jun EM, et al. The effects of kangaroo care in the neonatal intensive care unit on the physiological functions of preterm infants, Maternal–Infant Attachment, and Maternal Stress. *J Pediatr Nurs.* 2016;31(4):430-8. DOI: [10.4103/njcp.njcp_143_18](https://doi.org/10.4103/njcp.njcp_143_18)
- 9- Araujo AMG, Melo LS, Souza MEDCA, Freitas MMSM, Lima MGL, Lessa RO. A experiência do método canguru vivenciada pelas mães em uma maternidade pública de Maceió/AL. *Rev Iberoam Educ Invest Enferm.* 2016 [citado em 18 ago 2020]; 6(3):19-29. Acesso em: <https://www.enfermeria21.com/revistas/aladefe/articulo/210/>
- 10- Heck G, Lucca H, Costa R, Junges C, Santos S, Borck M. Compreensão do sentimento materno na vivência no Método Canguru. *Rev Enferm UFSM* 2016;6(1):71-83. DOI: [10.5902/2179769218083](https://doi.org/10.5902/2179769218083)
- 11- Bowlby J. *Uma base segura: Aplicações clínicas da teoria do apego.* Porto Alegre: Artes Médicas; 1989.
- 12- Hospital Sofia Feldman. *Neonatologia.* Belo Horizonte: HSF; 2020 [citado em 18 ago 2020]. Acesso: <https://www.sofiafeldman.org.br/por-que-o-sofia/neonatologia>
- 13- Minayo MCS. *O desafio do conhecimento: Pesquisa qualitativa em saúde.* 13a ed. São Paulo: Hucitec; 2013.
- 14- Huberman AM, Miles M, Saldana J. *Qualitative data analysis: A methods sourcebook.* The United States of America: SAGE publications; 2020.
- 15- Frigo J, Zocche D, Palavro G, Turatti L, Neves E, Schaefer T. Percepções de pais de recém-nascidos prematuros em unidade de terapia intensiva neonatal. *Rev Enferm UFSM* 2015;5(1):58-68. DOI: [10.5902/2179769212900](https://doi.org/10.5902/2179769212900)
- 16- Veronez M, Borghesan NAB, Corrêa DAM, Higarashi IH. Vivência de mães de bebês prematuros do nascimento a alta: Notas de diários de campo. *Rev Gaúcha Enferm.* 2017;38(2):e60911. DOI: [10.1590/19831447.2017.02.60911](https://doi.org/10.1590/19831447.2017.02.60911)
- 17- Dittz ES, Alves CRL, Duarte ED, Magalhães LC. Contribution of the Newborn Behavioral Observations (NBO) for the maternal care of preterm neonates. *J Hum Growth Dev.* 2017;27(3):262-71. DOI: [10.7322/jhgd.125522](https://doi.org/10.7322/jhgd.125522)
- 18- Bowlby J. *Apego e perda: Apego: A natureza do vínculo.* São Paulo: Martins Fontes; 1990.
- 19- Roncallo CP, Miguel MS, Freijo EA. Vínculo maternofetal: Implicaciones em el desarrollo psicológico y propuesta de intervención en atención temprana. *Escritos Psicología* 2015;8(2):14-23. DOI: [10.5231/psy.writ.2015.0706](https://doi.org/10.5231/psy.writ.2015.0706)
- 20- Portugal CMGSL, Sá LO, Areias MHFGP. Os efeitos cardiorrespiratórios dos sons maternos no recém-nascido das 26 às 33 semanas de idade gestacional. *Rev Enf Ref.* 2017;4(12):55-64. DOI: [10.12707/RIV16075](https://doi.org/10.12707/RIV16075)
- 21- Carvalho LS, Pereira CMC. As reações psicológicas dos pais frente à hospitalização do bebê prematuro na UTI neonatal. *Rev SBPH* 2017 [citado em 19 dez 2020]; 20(2):101-22. Acesso em: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1516-08582017000200007&lng=pt
- 22- Fraga E, Dittz ES, Machado LG. A construção da co-ocupação materna na Unidade de Terapia Intensiva Neonatal. *Cad Bras Ter Ocup.* 2019;27(1):92-104. DOI: [10.4322/2526-8910.ctoao1125](https://doi.org/10.4322/2526-8910.ctoao1125)

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