

# MOTHERS' LEARNING AND CARE IN THE KANGAROO METHOD

## APRENDIZADOS E CUIDADOS DE MÃES NO MÉTODO CANGURU

## APRENDIZAJE Y CUIDADO DE LAS MADRES EN EL MÉTODO CANGURO

Joise Magarão Queiroz Silva<sup>1</sup>  
Mariza Silva Almeida<sup>2</sup>  
Edméia de Almeida Cardoso Coelho<sup>3</sup>  
Karla Ferraz dos Anjos<sup>4</sup>  
Tyciana Paolilo Borges<sup>5</sup>  
Írbia Fernandes de Medeiros<sup>6</sup>

**How to cite this article:** Silva JMQ, Almeida MS, Coelho EAC, Anjos KF, Borges TP, Medeiros ÍF. Mothers' learning and care in the Kangaroo Method. Rev baiana enferm. 2020;34:e36994.

**Objective:** to analyze the meaning of the experience of mothers in the Kangaroo Method. **Method:** exploratory and descriptive study, with qualitative approach, conducted in two public institutions in the city of Salvador, Bahia, Brazil. The empirical production of the data was through participant observation, semi-structured interviews and reflection workshops, with the participation of 19 mothers of newborns. To operationalize the data, the categorical thematic content analysis was used. **Results:** the continuous experience of mothers in the Kangaroo Care ward enabled the construction of knowledge linked to the expansion and/or acquisition of experiences, especially for primiparous women, for being premature newborns, who need singular and differentiated care, added to the increased bond between mother/newborn with other family members and health professionals. **Conclusion:** the experience of mothers in the Kangaroo Care ward favored significant learning for them to care more safely for their children at home after hospital discharge.

**Descriptors:** Mothers. Infant, Newborn. Kangaroo-Mother Care Method. Nursing. Learning.

*Objetivo: analisar o significado da vivência de mães no Método Canguru. Método: estudo exploratório e descritivo, com abordagem qualitativa, realizado em duas instituições públicas no município de Salvador, Bahia, Brasil. A produção empírica dos dados deu-se por meio da observação participante, entrevista semiestruturada e oficinas de reflexão, com a participação de 19 mães de recém-nascidos. Para operacionalizar os dados, utilizou-se a análise de conteúdo temática categorial. Resultados: a vivência de mães contínua na enfermaria do Método Canguru possibilitou a construção de conhecimentos atrelada à ampliação e/ou aquisição de experiências, principalmente para as primíparas, por se tratar de recém-nascido prematuro, que necessita de cuidado singular e diferenciado, somado ao aumento do vínculo entre mãe/recém-nascido com os demais familiares e profissionais de saúde.*

<sup>1</sup> Nurse. Universidade Federal da Bahia. Professor at the União Metropolitana de Educação e Cultura. Salvador, Bahia, Brazil. josita\_114@hotmail.com. <http://orcid.org/0000-0002-5142-1150>.

<sup>2</sup> Nurse. PhD in Nursing. Professor at the Universidade Federal da Bahia. Salvador, Bahia, Brazil. <http://orcid.org/0000-0001-7816-453X>.

<sup>3</sup> Nurse. PhD in Nursing. Professor at the Universidade Federal da Bahia. Salvador, Bahia, Brazil. <http://orcid.org/0000-0001-6718-4922>.

<sup>4</sup> Nurse. PhD in Nursing. Professor at the União Metropolitana de Educação e Cultura. Salvador, Bahia, Brazil. <http://orcid.org/0000-0002-5453-8303>.

<sup>5</sup> Nurse. MSc in Nursing. Professor at the União Metropolitana de Educação e Cultura. Salvador, Bahia, Brazil. <http://orcid.org/0000-0003-1784-6937>.

<sup>6</sup> Nurse. Specialist in obstetric nursing. Independent researcher. Salvador, Bahia, Brazil. <http://orcid.org/0000-0002-9217-6577>.

*Conclusão: a vivência de mães na enfermaria do Método Canguru favoreceu aprendizado significativo para elas cuidarem com mais segurança de seus filhos no domicílio, após a alta hospitalar.*

*Descritores: Mães. Recém-Nascido. Método Canguru. Enfermagem. Aprendizagem.*

*Objetivo: analizar el significado de la experiencia de las madres en el Método Canguro. Método: estudio exploratorio y descriptivo, con enfoque cualitativo, realizado en dos instituciones públicas de la ciudad de Salvador, Bahía, Brasil. La producción empírica de los datos fue a través de la observación participante, entrevistas semiestructuradas y talleres de reflexión, con la participación de 19 madres de recién nacidos. Para recoger los datos, se utilizó el análisis del contenido temático de la categoría. Resultados: la experiencia de las madres en la enfermaria de Método Canguro permitió la construcción de conocimientos vinculados a la expansión y/o adquisición de experiencias, especialmente para mujeres primíparas, porque son recién nacidos prematuros, que necesitan atención singular y diferenciada, sumado al mayor vínculo entre madre/recién nacida con otros miembros de la familia y profesionales de la salud. Conclusión: la experiencia de las madres en la enfermaria del método canguro favoreció un aprendizaje significativo para que cuidaran con más seguridad a sus hijos en casa después del alta hospitalaria.*

*Descriptores: Madres. Recién Nacido. Método Madre-Canguro. Enfermería. Aprendizaje.*

## Introduction

For a woman, the birth of a child usually means changes in her duties as a wife and mother. However, the birth of a premature newborn (NB) is a new experience for the mother, whether being a first-time mother or with other children, and can generate a crisis for the whole family<sup>(1)</sup>.

The high number of premature and low-weight births and the need for support offered by health professionals led the Ministry of Health (MH) to support and standardize actions in neonatal units, launching, in 2000, the Norm of Humanized Care for Low Birth Weight Newborns. In addition to this standard, the Kangaroo Method (KM) is relevant, which aims to contribute to changes in the professional posture, with a view to the humanization of NB care<sup>(2)</sup>.

The Brazilian view on the Kangaroo Method, conceived in Colombia in 1979, constituted a change in the paradigm of perinatal care and association between humanization and technological advances. In its operationalization, this method begins prior to the birth of preterm and/or low birth weight NB, with the early identification of pregnant women at risk. Its action consists of keeping the low-weight NB in skin-to-skin contact, in the vertical position, next to the chest of the mother, father or other family member, in a oriented and safe manner,

accompanied by care support from a properly trained health team<sup>(3)</sup>.

Directed exclusively to pregnant women in clinical or obstetric situations at risk for the birth of premature and/or low birth weight NB, this method is recommended at the admission to the Neonatal Unit until hospital discharge. After discharge, newborns should be monitored by a multidisciplinary team in a specialized outpatient clinic or in the maternity hospital where they were hospitalized and in primary health care<sup>(2)</sup>.

Operationally, the Kangaroo Method is applied in three steps. The change from one to the other will depend on the NB's clinical picture and weight. In the first stage, the early and free access of the mother and/or father to the Neonatal Intensive Care Unit (NICU) and Conventional Neonatal Intermediate Care Unit (CoNICU) stands out, aiming to stimulate early breastfeeding and participation of the father and mother in the NB care, with the beginning of skin-to-skin contact, as soon as the clinical conditions permit. In the second stage, mother and NB remain in the rooming-in and the kangaroo position should be encouraged for as long as possible. The third stage refers to hospital discharge, with outpatient follow-up until the NB reaches the weight of 2,500 grams<sup>(4)</sup>.

Among the advantages of the Kangaroo Method, the main ones are the increased bond with the NB, shorter separation time between mother-child and avoidance of long periods without sensory stimulation. It also contributes to the stimulation of breastfeeding, which favors the frequency, precocity and duration of breastfeeding; it allows developing more security, confidence and competence of the mother and/or father in care, even after hospital discharge; better thermal control; lower number of NB in intermediate care units, due to higher bed turnover; family's better relationship with the health team; reduced healthcare-related infection; and shorter hospital stay<sup>(2)</sup>.

In addition to these advantages of the Kangaroo Method, it is important that the father and mother receive guidance from health professionals, especially the nursing team, about their participation in the childcare. This action collaborates with biopsychosocial development, providing the formation and strengthening of the affective bond among the NB, mother, father and family<sup>(4)</sup>. For mothers, this method returns self-esteem, since they feel indispensable in the care with newborns, as well as alleviating possible sorrows related to childbirth, due to the rapprochement with the child<sup>(5)</sup>.

Moreover, it is understood that the actions/activities that compose this method constitute essential strategies for institutional change in the search for health care centered on care humanization and on the principle of care integrality, aiming to favor the promotion of NB care, serving as support to the mother, father and specific families.

Mothers should be guided by a multidisciplinary team about their performance in the Kangaroo Method, as a co-participant in the care and recovery of their child<sup>(6)</sup>. Given the effective contribution that this method offers in situations of prematurity, with institutionally proven success for the development of NB, it is assumed that mothers recognize and experience gains in the scope of care and the mother-child relationship.

The search for current publications on the theme proposed in the Virtual Health Library (VHL), using the descriptors "mothers", "care", "Kangaroo Method" and "nursing", revealed a gap in the scientific production on the learning and care of mothers in the Kangaroo Method. There was a scarcity of national and international publications related to the object of study, especially between 2015 and 2018, which justifies the expansion of studies with this approach.

Thus, the study sought to answer the research question: What is the meaning of the experience in the Kangaroo Method for mothers? To answer this question, the objective was to analyze the meaning of the experience in the Kangaroo Method for mothers.

## **Method**

This is an exploratory and descriptive study with a qualitative approach developed in two public institutions with obstetric beds in the city of Salvador, Bahia, Brazil, called Institution A and Institution B.

Institution A is a large general hospital of high complexity, tertiary and of care and teaching character, certified by the Ministries of Health and Education. It is a reference in emergency services, gastrointestinal bleeding, nephrology, pediatrics, medical clinic, maxillofacial surgery, general surgery, neurosurgery, pediatric and neonatal surgery, high-risk maternity, among other medical specialties. Institution B is a teaching maternity of the public network, the oldest built in Brazil, inaugurated in October 1910, belonging to the Federal Government, reference for risk pregnancy. It was accredited as a child-friendly hospital in 1996 and has owned the kangaroo mother project since 1997. It has been the seat of the first human milk bank in the metropolitan region of Salvador since 2001.

This article is part of the master's dissertation entitled "Meaning of the Experience in the Kangaroo Method for Mothers", which demonstrates the relevance of this method in promoting the health of neonates and in the

learning of care by the mother. It is verified that, by giving voice to mothers, they can express not only their recognition to achieve the objectives of the method but also the meaning of the experience in the kangaroo ward.

The participants were 19 mothers, being 10 participants from Institution A and nine from Institution B. Among the 10 participants from Institution A, nine attended the interview and one did not, as she was discharged on the day. The same occurred at Institution B. Of the nine participating mothers, only seven attended the interview and two did not for the same reason as Institution A. Of these 19 participants, 18 had premature babies and 1 of low birth weight.

For the selection, the inclusion criteria adopted were: being at least 18 years old; being in physical and psychological conditions to be interviewed and/or participate in the workshops and having at least one week living in a Kangaroo Method ward together with their NB. Exclusion criteria were cognitive and mental deficit, as well as the stay in the kangaroo unit below one week.

The empirical data production phase occurred during the months from July to December 2013 in three moments, using, in each of them, the specific technique of participant observation, semi-structured interview and reflection workshops. The observation, made by the researcher, occurred in the morning and afternoon shifts, in both institutions, according to the availability of the researcher and the participants, being recorded in a field diary. After each visit, the registration was performed in an appropriate place, external to the unit, with technical rigor, in order to have reliable information, which portrayed the situations observed with relevance to the object of study. The observation was the first stage of collection, to enable the researcher to approach the field and women. This observation continued during the remaining stages. To conduct the study, a pilot test was first conducted, with the semi-structured questionnaire, applied to three women, with the purpose of serving to improve the semi-structured questionnaire.

The field diary contained the following information: actions of health professionals with mothers in the kangaroo ward; care provided by mothers to newborns; lectures and educational activities carried out by professionals in the unit; visits received by mothers; learning and practice of care for both professionals and mothers; and performance of other family members during the visits.

The reflection workshops were the second stage of the collection. They took place in two meetings, in the space of each kangaroo unit (A, B), through agreement with the nurse coordinating the units, who allowed executing the workshops in the same space of the Kangaroo Unit, with the free participation of the mothers, who would be more relaxed and carefree, because they remained with their children. In the workshops, the researchers had the support of a graduate student and the advisor. Each workshop lasted, on average, 2 hours.

The researcher conducted the interviews with the mothers in a reserved and recorded place, in order to ensure the accuracy of the statements, with an average duration of 15 minutes. The interview was guided by a semi-structured form to obtain the participants' identification, sociodemographic and obstetric data, followed by the interview, guided by the question: "What does it mean, for you, to be here in the Kangaroo Mother unit?"

To maintain anonymity, the interviewed mothers received a codification according to their participation in interviews and workshops, respectively: Interviews – I1, I2...; and workshops – WA (Institution A), WB (Institution B). After consent, the participants signed the Informed Consent Form (ICF), taking into account the criteria of Resolution n. 466/2012 of the National Health Council, which regulates researches involving human beings<sup>(7)</sup>. To operationalize the analysis and treat the information collected, resulting from observation, interviews and workshops, it was decided to use content analysis, a thematic category modality guided by Bardin<sup>(8)</sup>.

The analysis technique followed the three chronological centers: pre-analysis, after the organization of the material and reading with detail record; exploration of the material and successive readings of the transcribed material, to grasp themes that emerged; and treatment of results<sup>(8)</sup>. Thus, the analysis began with the reading of the transcription of each interview and the workshops associated with the records of the field diary resulting from the observations, for initial contact, with subsequent exhaustive readings for knowledge and apprehension of information.

The project was approved by the Research Ethics Committee of the Nursing School of the Federal University of Bahia, under Opinion n. 309606 and Certificate of Presentation of Ethical Appreciation (CAAE) n. 16367713.4.0000.5531. The research was initiated after presentation, reading and signing of the Informed Consent by the mothers.

## Results

The participants were 19 mothers, aged between 18 and 35 years, mean age of 20 years. In the total number of days of hospitalization in the maternity ward, the distribution was heterogeneous, between 11 and 50 days of hospitalization. In the race/color item, 12 self-reported as brown, three black, three olive-skinned and one yellow.

At the end of the categorical thematic content analysis of the data of the answers of the interviews and the reflection workshops, one category and five subcategories emerged. Category 1: Meaning, experience, learning and strengthening of mother bond and premature NB in the Kangaroo Method; Subcategory 1: Meaning of the Kangaroo Method for mothers of premature NB; Subcategory 2: Experience of mothers of premature NB in the Kangaroo Method; Subcategory 3: Learning of mothers of preterm NB with the Kangaroo Method; Subcategory 4: Strengthening the mother-child bond in the Kangaroo Method; and Subcategory 5: Kangaroo infirmary as a place for learning.

### *Category 1: Meaning, experience, learning and strengthening of mother bond and premature NB in the Kangaroo Method*

This category includes five subcategories that address the meaning of the experience of mothers in Kangaroo Method ward and the possible benefits for the preterm NB care with learning, as well as the strengthening of bonds.

#### Subcategory 1: Meaning of the Kangaroo Method for mothers of premature NB

In this subcategory, the interviewed mothers reported that the Kangaroo Method is significant for the learning and care of the NB.

*It means a lot, I have learned a lot. Many things I did not know, now I am already aware [...] (I3). A good thing, I can be with my daughter, I can bathe her, I can sleep near her (I6). It means being close to him, feeling his presence, smelling him (I13). I learn to take care of the baby [...] he is premature, you have to take special care (I4). Learn the right way to take care of my daughter, because she is premature, a new knowledge, a way to teach new thing [...] (I8). I learned everything. I did not have much experience, I was afraid to grab him so I did not [...] I have lost the fear, bathing, I have only learned to bathe in the 3<sup>rd</sup> bath (WA I5). It is a good learning, for us to know more about our child, the symptoms he feels, like colic. We learn several things, his bath [...] here is different, he is swaddled, the medications, how to act with the premature baby, how to handle [...] the premature baby, the risks [...] that I did not know, he is my first child. For me only that. (I11).*

#### Subcategory 2: Experience of mothers of premature NB in the Kangaroo Method

This subcategory evidenced that the experience of mothers in the Kangaroo Method is innovative and allowed learning the care with the premature NB, who has particularities and needs to be considered. This preparation is essential for the continuity of care at home.

*For me it is a new experience, it is an experience, let us say, you are closer, you learn new things, a new opportunity to know what a premature baby is, because you know the normal 9-month-born baby. Everyone knows how to change the diaper of a normal baby. The premature baby is different. There is this technique, to change his diaper, clean. Those things are different from the normal baby, of the premature baby of 7, 6, 5 months [...] (WA I1).*

*An experience, because in the kangaroo, as the child was premature, it is teaching the care we must have with him (E5). It is a new experience, which I did not even*

*know, right? I did not know that we bathed the newborn swaddled with a towel [...] [laughs]. (WA 14).*

*With my son, everything is different, it is totally different because he is premature. Changing the diaper, bathing and, at the beginning, it was a little complicated, because I come from the countryside... So I missed my daughter and my husband and everything. It is a new experience, it is very awesome, I am learning a lot. (WA 13).*

The mothers, during the experience, expressed fear and guilt for the premature birth, but the kangaroo ward is a new opportunity to care for this premature being:

*When the doctor said he was going to ICU, it was a shock for me and that shock matured [mother] [...] (I12). It is a different experience. It is hard for us to get out of our house and come here, understand? It is a new environment for me, but it is a wonderful experience! Just from being here with our son, we can stand all these obstacles [...] (WA 12).*

### Subcategory 3: Learning of mothers of preterm NB with the Kangaroo Method

*The mother begins to learn to take care of her child [...] (I11). Learn and pass affection and love to babies, which is what they need, and the warmth of our bodies, for them to gain the weight and confidence [...] (I1). For me, it has been a learning lesson. I am learning to take care of him, he is not a nine-month-born baby. He is small and the care with him is totally different from a big baby [...] (WB 11). Here I am learning to take care of my babies [...] (I9). It is hard for all of us, but it is also an experience, we learn to take care of the baby. She was born so small, it is an experience that we get to learn, it is the first [...] (WB 15). The advantage is that I am leaving knowing how to take care of them, with which I have no experience, first-time mom. And they teach to bathe, to breastfeed. (WB 12). I am leaving with so much experience. (E9).*

### Subcategory 4: Strengthening the mother-child bond in the Kangaroo Method

Mothers understand the importance of the Kangaroo Method for strengthening the affective bond, greater proximity and construction of a feeling of affection and love between them and premature NB. Furthermore, they recognize the importance of this method as a space for rescuing time, because it permeates the proximity to their child and monitors his/her development.

*The coziness of being close to your child, because the premature usually has no gestational age, does not have the right weight. So, the kangaroo space, for me, is the space that most approaches mother and child, the affection [...] The mother's coziness with her child is the mother's approach to her child. (I11).*

*For my daughter, it was important [...] In the bond created, she feels she is present [...] (I2). For me, it means that you have to be more careful with the baby, because she is still a little fragile, she has to stay a little closer with me. (I7). It is good for me, because I am closer to my son, I am seeing him, he is gaining weight. On a day, he lost, but for me, it has been good. The girls help, the rest is quiet. (I10).*

### Subcategory 5: Kangaroo infirmary as a place for learning

The mothers' statements explain that the experience in the kangaroo ward, as a space for continuous learning, is also a space where they make new friends.

*From the day I got there [the infirmary] I have learned a lot. Making new friends, like I had started a new family. Everyone gets here and already makes a friend, and caring for them, who are premature, I could not even grab him. When they arrived, I was afraid to grab them, that they were going to break, that they were made of glass. Now I am not afraid anymore. (I15).*

*So here, for me, it is a good opportunity for mothers, even to know new people. We do not know [ourselves] we do not know the ability to raise a person, to deal with another human being. So I find it very interesting, a good opportunity for all mothers. (WA 11).*

*The friendships we make, most of them have already left, but I still talk to them on the phone. And the fact of being close to my daughter [...] what makes it easier is friendship. Doctors are good, too. Some nurses help. One thing depends on the other [...] (E2).*

Health professionals, especially nurses, nursing technicians and physiotherapists, are facilitators of this learning and supervision process. These statements are confirmed in the mothers' discourses:

*I have learned many things [...] I did not know. I have also learned that, when the child chokes, I did not know what to do, now I know. My care with him improved, bathing him is better than my other boy, my care with him was not so good, I could not even bathe him right. Now I know. Changing a diaper, now I know, they taught me. I have learned a lot here, many unknown things, now I know [...] (I3).*

*I think staying here is easy, because [...] everyone is great, welcomes us very well [...] here I am staying with my daughter 24 hours and all the employees welcome the person very well, they do not let you feel alone. They are always trying to do their best. (I8).*

*The care, the people are very partner, they like staying with us, teach the right care with the child. That is it! It teaches us a lot [...] (I5).*

*For me, the good thing is precisely this experience with the support of the nursing team, because if I was at home*

*with a baby so small and had some doubt I would have nobody to answer my questions [...] (116).*

## Discussion

In the experience in the Kangaroo Method, it was observed the importance of the child's clinical stability, regular weight gain, maternal security, interest and the mother's willingness to stay with the child as long as desired and possible. The kangaroo position is performed for the period that both consider safe and pleasant<sup>(2)</sup>.

After the first stage – in which the NB left the NICU or CoNICU, skin-to-skin contact has already begun and early breastfeeding is already stimulated, with the participation of the father and mother in the NB care –, mothers learn to identify the changes that may occur with the child, such as respiratory pauses, altered skin color, among others. Moreover, this stage aims not only to improve the health conditions of newborns, by presenting new forms of care, but also to encourage the formation of the bond between the mother and her child<sup>(4)</sup>. In this study, the Kangaroo Method was seen as innovative and significant in the learning, for mothers, of the care of premature NB, which has particularities.

Thus, the Kangaroo Method expands the experience in the post-discharge NB care. A study identifies that, at the time of birth and soon after, mothers feel insecure in the act of caring for their children and need help for this activity. They consider that, at this moment, the information and support provided will be important in the construction of this knowledge<sup>(2)</sup>. Confirmed in this study, the experience of mothers in the Kangaroo Method means learning and favors care and greater proximity to the NB and, thus, the monitoring of their development.

In the Kangaroo Method, care for the mother should be practiced more systematically and consistently for better support and confidence. The health team should be trained and motivated in order to improve their practice in this method. Ongoing education with employees and health education with parents, in addition to the

creation of support groups among kangaroo care participants, are considered decisive elements to promote acceptance and security of kangaroo mothers<sup>(9)</sup>.

For this, health professionals should help them strengthen the bond with the premature child, especially during the first contact with the child, since most of them show fear of imminent death, due to the fragile characteristics of the premature child<sup>(10)</sup>. As seen, the Kangaroo Method influences the strengthening of bonds between mother and premature NB, due to the closer approximation of the binomial.

In this sense, as observed in this study, there is need to rely on the health team, whose one of its responsibilities is to act as a facilitator of the education process. Thus, in order to provide family adaptation to the necessary care with the NB, this team facilitates learning in a favorable and welcoming environment, with exchange of knowledge and experiences. Health education for mothers can be performed by the nursing team, in particular by nurses.

It is important to emphasize that care is a moral action, which aims to relieve, satisfy, help, comfort and support. This action always has a connotation that promotes and favors the well-being of the other. In general, the care process involves transformation of both: the being cared for and caregivers<sup>(11)</sup>. Furthermore, care is realized with the bond between the caregiver and the care. It means being with the other, in relation to the social and special relations of life, and can transmit compassion, action and zeal. In this conception, care is inserted in the relations of human existence<sup>(11)</sup>.

Due to its particularities, the care of premature children requires knowledge and establishment of care directed to their needs. It covers specific care during hospitalization and after hospital discharge<sup>(12)</sup>. Knowledge of the experience of mothers in the Kangaroo Method, in the context in which they are inserted, and of the factors that influence the continuity of the method after hospital discharge, are determinant to broaden the view of the care of the mother-NB

binomial, which can bring benefits to the child and contribute to reducing hospitalizations and infant morbidity and mortality<sup>(5)</sup>.

In this context, skin-to-skin contact with the mother is of paramount importance, as it provides the child with a relationship with the world, opening up to new discoveries. This body contact encourages and promotes breastfeeding, enables better physiological adaptation and thermal stability of newborns, besides promoting the affective bond between mother and NB<sup>(13-14)</sup>. The mother's direct contact with the child favors comprehensive care, from physical, emotional and physiological needs, as it enables empathy, affection, sensitivity and security for the mother, child and health team triad. In addition, it strengthens family bonds, increases immunological resistance, with weight gain and psychomotor development of the newborn<sup>(15)</sup>. This study understands the importance of skin-to-skin contact of the mother and NB, because it favors the development and weight gain of the child.

For mothers of premature NB, breastfeeding is a complex process. It is perceived as relevant and necessary and influences growth, healthy development, formation of affective bond between mother-child and hospital recovery. Therefore, it deserves attention from the nursing team and the social support network for women, so that exclusive breastfeeding is achieved after hospital discharge<sup>(16)</sup>.

This research observed that the continuous experience in the Kangaroo Method ward, in addition to favoring the bond between mother and child, allowed exchanging knowledge between them and health professionals, as well as facilitated the construction of a lasting affective bond, important for achieving the objective of this method.

Given the possibility of promoting basic security necessary for the construction of the effective bond between mother and NB, the Kangaroo Method allows the mother to create space for the rhythmic reconstruction of this dyad, enabling the rescue of interrupted time

between the mother and the NB, with premature birth<sup>(17)</sup>.

The practice of the Kangaroo Method is one of the best ways to help the recovery of NB, by reinforcing the proximity of the child, the exchange of love and affection. This statement applies to the results of this study, in which mothers express such feelings and build security to deal with the specificities of this phase, as shared by some mothers of another study<sup>(18)</sup>.

In addition, the condition of motherhood within prematurity is complex, because it is crossed by the experience of trauma, guilt, fear of the loss of the child and perception of the child's frailty, with the possibility of connection between mother and child in the Kangaroo Method<sup>(17)</sup>.

In this context, the experience in the kangaroo unit represents the construction of knowledge linked to the experiences lived, especially the primiparous women, who, in their first experience, have to handle a premature NB, who needs singular and differentiated care. Thus, the Kangaroo Method, besides providing greater bond between mother/NB, family members and health professionals, also allows a space to create and expand social relations.

This method also functions as a learning method for the continuity of care at home. For this, the embracement of the mother and father, during the hospital stay of premature or low birth weight newborn, is necessary and important and should be extended to other family members, who, in this particular and different situation, need support and guidance. In this aspect, the main objective of embracement is to make the emotional experiences that occur during this period well understood and elaborated<sup>(2)</sup>. For this, the embracement must occur in an integral way, including the adequacy of care to the needs of each family for the specific care with the NB. The performance of the health team is fundamental for the establishment of an empathic relationship that transmits security and exchanges experiences and feelings, whenever possible.



The adequate care offered by the health team in the kangaroo ward allows the mother to adapt gradually to the routines of the unit and to care for her child with more security. Moreover, it allows the mother to gradually be closer, besides allowing frequent touches and progressive care until the moment she can embrace him/her next to her body, in the kangaroo position<sup>(2)</sup>, corroborated in the statements of this study.

The Kangaroo Method is a neonatal care model that offers benefits to the premature and low birth weight newborn and his/her family, with emphasis on the effective participation of the mother and father from the beginning, positively favoring learning to care for the child in the home environment<sup>(19)</sup>. This learning was also evidenced in this study, and occurred based on the guidance of health professionals, as well as the exchange of shared experiences among the other mothers who experienced a similar situation in the kangaroo ward.

Furthermore, the Kangaroo Method contributes to humanization in the health service, by uniting parents with their child, especially the mother. The contact of the NB with the parents helps to overcome the crisis generated by premature birth and the long period of hospitalization, by promoting a singular and rewarding experience for the family involved<sup>(19)</sup>. Moreover, a study shows that this procedure provides the mother's satisfaction with the method, favors the mother's care with the low birth weight baby, reduces the burden of morbidity and mortality, increases weight gain, favors the adoption of exclusive breastfeeding and reduces the hospitalization time<sup>(20)</sup>.

The mother's preparation for the care of premature newborns at home should occur throughout the child's hospitalization, when seeking to develop skills and build specific knowledge<sup>(21)</sup>. The development of care skills is guided by professionals and provides confidence and security for the childcare even before the discharge<sup>(21)</sup>. Moreover, when offering this care, contextual factors and sociocultural norms need to be taken into account, as they influence the mother's care adoption<sup>(9)</sup>.

For this, there is need for qualified health professionals that compose the multidisciplinary team and work with the mothers of premature and/or low birth weight children. These professionals should assist them from the first contact with their children, encouraging them to express their feelings, in order to relieve anxieties and anguish related to the practice of breastfeeding<sup>(22)</sup>.

In the study, during the collection of information in the kangaroo ward, it was possible to observe, in the daily routine, that mothers progressively acquired autonomy to care for their children, since changing their diapers, bathing, administering the diet by the probe, offering milk in the cup, adequate positioning for breastfeeding, in addition to anti-reflux care, which include the child's adequate position to breastfeed and burp, position for changing diapers and sleeping.

This autonomy of mothers for the NB care during their stay in the kangaroo unit is relevant, as they will take care of their children at home, often without the help of a health professional. Thus, they need to feel secure to identify the warning signs and the need to return to the hospital unit, for monitoring and evaluation, apart from having preventive care, performing hygienic care and breastfeeding free of demand. For this, they need to have a family support network that assists them in this process.

The support network that the mother has for the care process at home includes the support offered by the family or other people who are willing to help her, the organization of services that provide assistance to the individual, social, educational, spiritual and health support<sup>(23)</sup>. It is important that this home support network happen from the moment of the hospitalization of the child and his/her mother in the kangaroo accommodation, because, in addition to embracing her in and guiding her to home care, it provides support to this mother and the NB during hospitalization.

The preparation of the family for the discharge of Neonatal Units can be considered a challenge for the nursing team. However, it should not

constitute an isolated moment in the hospital discharge of the NB. On the contrary, discharge should be considered a continuous process to be initiated from the institution's entry and supported by actions that require a permanent evaluation of the demands of the NB and the family<sup>(24)</sup>.

In this study, there was an incipience of participation of the father or other family member in the kangaroo ward, because only mothers were usually found in the care with their children. As the presence of the father or grandmother was limited to the visiting hours, the kangaroo position was always performed by the mother, except in institution A, where there was the permanence of the mother's sister for a period slightly longer than 24 h in the kangaroo unit, due to the mother's absence due to health problem (conjunctivitis).

In view of this contextualization, in relation to the Kangaroo Method, there is need to create strategies to facilitate the understanding of parents and other family members, during hospitalization of the NB, about the importance of breastfeeding, milking, the active participation of parents, from the Neonatal Intensive Care Unit and kangaroo ward, the involvement of all in the NB care<sup>(6)</sup>. This will certainly contribute to the mothers' learning and influence the quality of NB care.

This study had as limitations the place, which was two public health institutions, with different profiles, one with varied medical specialties and obstetrics, and the other, a maternity, as well as the fact that it is a delicate and complex moment for the mother – birth, hospitalization, concern and (un)predictability of hospital discharge. This, in turn, may have influenced the experience and meanings grasped by mothers of premature NB regarding the Kangaroo Method.

## Conclusion

The neonatal care and assistance associated with the Kangaroo Method reinforce its value for survival and reduction of morbidity of neonates. Besides this, the individual issues that facilitate

or meet the singular needs of each mother are significant for this survival and constitute primordial elements for their self-determination and autonomy, besides being important for achieving citizenship.

The use of reflection workshop, interviews and participant observation to produce the data were adequate and allowed acquiring knowledge about the meaning of the experience of mothers hospitalized in a kangaroo ward. It was possible to observe that the continuous experience in the kangaroo care ward allowed constructing knowledge linked to the expansion or acquisition of experiences, especially for primiparous women, for being premature NB, who need singular and differentiated care, added to the increased bond between mother/NB and other family members and health professionals, also providing a space for creation and expansion of social relations.

In learning, the importance of preparing mothers for the NB care is explicit, representing an aspect that requires approach since the first stage of the Kangaroo Method, which occurs in the neonatal ICU, because this mother will often not rely on the help of professionals at home, requiring continuous learning to acquire experience and autonomy to perform this care.

This study observed that mothers acquired specific knowledge for the NB care gradually. Further strengthened in the second stage of the Kangaroo Method, which occurs in the kangaroo ward, they progressively acquired autonomy to take care of their children, by learning to perform activities that involved from changing diapers to bathing, administering the diet by probe and body, proper positioning for breastfeeding, anti-reflux care, which include the appropriate position of the child to breastfeed and burp, as well as the position for changing diapers and sleeping. The father's non-participation, or of other family member, tends to weaken family affective ties, limit or hinder their participation in the mother's support at home, hindering the support of the method and weakening learning.

Finally, as seen, in the Kangaroo Method, the multidisciplinary team, particularly nursing, in

the orientation, preparation and embracement of the NB's mother and family, is important, in addition to the participation of the family support network. The health team, by providing a welcoming environment, favors meeting the unique needs of those involved. Thus, it is essential to establish efforts, in order to consider the specificities of each mother, NB and family, and recognize them as partners in care, according to the objectives of the Kangaroo Method.

### Collaborations:

1 – conception, design, analysis and interpretation of data: Joise Magarão Queiroz Silva and Mariza Silva Almeida;

2 – writing of the article and relevant critical review of the intellectual content: Joise Magarão Queiroz Silva, Mariza Silva Almeida, Edméia de Almeida Cardoso Coelho, Karla Ferraz dos Anjos, Tyciana Paolilo Borges and Írbia Fernandes de Medeiros;

3 – final approval of the version to be published: Joise Magarão Queiroz Silva, Mariza Silva Almeida and Karla Ferraz dos Anjos.

### References

- Vargas Porras C, Villamiar Carvajal B, Ardila Suárez EF. Expectativas de crianca en madres de recién nacidos a término y pretérmino. *Rev cuba enferm* [Internet]. 2016 jul-set [cited 2019 Oct 10];32(3). Available from: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-960370>
- Brasil. Ministério da Saúde. Atenção Humanizada ao Recém-Nascido de Baixo Peso: Método Mãe Canguru. Manual técnico [Internet]. Brasília (DF); 2017 [cited 2019 Jun 12]. Available from: [http://www.corensc.gov.br/wp-content/uploads/2017/09/atencao\\_humanizada\\_recem\\_nascido\\_canguru.pdf](http://www.corensc.gov.br/wp-content/uploads/2017/09/atencao_humanizada_recem_nascido_canguru.pdf)
- Spehar MC, Seidl EMF. Percepções maternas no método canguru: contato pele a pele, amamentação e autoeficácia. *Psicol Estud*. 2013 Dec;18(4):647-56. DOI: <https://doi.org/10.1590/S1413-73722013000400007>
- Mendes GVS, Rocha SS, Sales JCS, Araújo OD, Araújo LO. Método Canguru na Unidade de Cuidado Intermediário Neonatal Convencional. *Rev Enferm UFPI*. 2015 Oct-Dec;4(4):68-74. DOI: <https://doi.org/10.26694/reufpi.v4i4.4958>
- Reichert APS, Soares AR, Bezerra ICS, Dias TKC, Guedes ATA, Viera DS. Vivência materna com o Método Canguru no domicílio. *Reme - Rev Min Enferm*. 2020;24:e-1295. DOI: <http://www.dx.doi.org/10.5935/1415-2762.2020002>
- Dantas JM, Leite HC, Querido DL, Esteves APVS, Almeida VS, Haase MMMC, et al. Percepção das mães sobre a aplicabilidade do método canguru. *Rev enferm UFPE on line*. 2018 Nov;12(11):2944-51. DOI: [10.5205/1981-8963-v12i11a235196p2944-2951-2018](https://doi.org/10.5205/1981-8963-v12i11a235196p2944-2951-2018)
- Brasil. Ministério da Saúde. Resolução n. 466, de 12 de dezembro de 2012. Aprova as diretrizes e normas regulamentadoras de pesquisa envolvendo seres humanos [Internet]. Brasília (DF); 2012 [cited 2014 May 23]. Available from: [https://conselho.saude.gov.br/ultimas\\_noticias/2013/06\\_jun\\_14\\_publicada\\_resolucao.html](https://conselho.saude.gov.br/ultimas_noticias/2013/06_jun_14_publicada_resolucao.html)
- Bardin L. Análise de conteúdo. Edição rev actual. Tradução Luís Antero Reto e Augusto Pinheiro. Lisboa: Edições 70; 2011.
- Chan GJ, Labar AS, Wall S, Atun R. Kangaroo mother care: a systematic review of barriers and enablers. *Bull World Health Organ*. 2016;94(2):130-41. DOI: [10.2471/BLT.15.157818](https://doi.org/10.2471/BLT.15.157818)
- Costa R, Heck GMM, Lucca HC, Santos SV. Da incubadora para o colinho: o discurso materno sobre a vivência no método canguru. *Rev Enferm Atenção Saúde* [Internet]. 2014 Jul-Dec [cited 2019 May 25];3(2):41-53 Available from: <http://seer.uftm.edu.br/revistaeletronica/index.php/enfer/article/view/1019>
- Cestari VRF, Moreira TMM, Pessoa VLMP, Florêncio RS, Silva MRF, Torres RAM. The essence of care in health vulnerability: a Heideggerian construction. *Rev Bras Enferm* [Internet]. 2017 Oct [cited 2020 Apr 10];70(5):1112-6. Available from: <https://pubmed.ncbi.nlm.nih.gov/28977242/>
- Aires LCP, Santos EKAS, Costa R, Borck M, Custódio ZAO. Seguimento do bebê na atenção básica: interface com a terceira etapa do método canguru. *Rev Gaúcha Enferm* [Internet]. 2015 [cited 2018 Apr 12];36(spe):224-32. Available from: <http://www.scielo.br/pdf/rgenf/v36nspe/0102-6933-rgenf-36-spe-0224.pdf>
- Maldonado MT. Psicologia da gravidez. 16a ed. São Paulo: Saraiva; 2002.

14. Santos LM, Silva JCR, Carvalho ESS, Carneiro AJS, Santana RCB, Fonseca MCC. Vivenciando o contato pele a pele com o recém-nascido no pós-parto como um ato mecânico. *Rev Bras Enferm* [Internet]. 2014 mar-abr [cited 2015 May 17];67(2):202-7. Available from: <https://www.scielo.br/pdf/reben/v67n2/0034-7167-reben-67-02-0202.pdf>
15. Santana JCB, Assis APO, Silva CCD, Quites HFO. Método mãe canguru e suas implicações na assistência: percepção da equipe de enfermagem. *Rev Enferm* [Internet]. 2013 jan-abr [cited 2014 Oct 10];16(1):34-48. Available from: <http://periodicos.pucminas.br/index.php/enfermagemrevista/article/view/13017#:~:text=O%20MMC%20favorece%20o%20processo,de%20forma%20mais%20natural%20pos%C3%ADvel>.
16. Bezerra MJ, Carvalho ACO, Sampaio KJAJ, Damasceno SS, Oliveira DR, Figueiredo MFER. Percepção de mães de recém-nascidos prematuros hospitalizados acerca da amamentação. *Rev baiana enferm*. 2017;31(2):e17246. DOI: 10.18471/rbe.v31i2.17246
17. Souza LP, Souza EV, Gomes GCS, Souto DF, Pereira LB, Pinheiro MAM, et al. Método mãe-canguru: percepção da equipe de enfermagem na promoção à saúde do neonato. *Rev Bras Promoção Saúde* [Internet]. 2014 jul-set [cited 2015 Jun 15];27(3):374-80. Available from: <https://periodicos.unifor.br/RBPS/article/view/2731>
18. Moreira JO, Romagnoli RC, Dias DAS, Moreira CB. Programa Mãe-Canguru e a Relação Mãe-Bebê na Rede Pública de Betim: Pesquisa Qualitativa. *Rev Psicol Estudo* [Internet]. 2009 jul-set [cited 2014 Jun 14];14(3):475-83. Available from: <https://www.scielo.br/pdf/pe/v14n3/v14n3a08>
19. Sales IMM, Santos JDM, Rocha SS, Araújo Filho ACA, Carvalho NAR. Sentimentos de mães na unidade canguru e as estratégias de suporte dos profissionais de enfermagem. *Rev Cuid* [online] 2018 dez;9(3):2413-22. DOI: <http://dx.doi.org/10.15649/cuidarte.v9i3.545>
20. Conde-Agudelo A, Díaz-Rossello JL. Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. *Cochrane Database Syst Rev*. 2016 Aug;2016(8):CD002771. DOI: 10.1002/14651858.CD002771.pub4
21. Chiodi LC, Aredes NDA, Scochi CGS, Fonseca LMM. Educação em saúde e a família do bebê prematuro: uma revisão integrativa. *Acta paul enferm*. 2012;25(6):969-74. DOI: <https://doi.org/10.1590/S0103-21002012000600022>
22. Osorio SP, Ochoa Marín SC, Semenic S. Preparing for post-discharge care of premature infants: Experiences of parents. *Invest Educ Enferm* [Internet]. 2017 [cited 2020 May 8];35(1):100-8. Available from: [http://www.scielo.org.co/scielo.php?script=sci\\_arttext&pid=S0120-53072017000100100](http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-53072017000100100)
23. Silva JR, Thomé CR, Abreu RM. Método Mãe Canguru nos Hospitais / Maternidades Públicas de Salvador e Atuação dos Profissionais da Saúde na segunda etapa do Método. *Rev CEFAC* [Internet]. 2011 maio-jun [cited 2020 May 10];13(3):522-33. Available from: [https://www.scielo.br/scielo.php?pid=S1516-18462011000300016&script=sci\\_arttext&tlng=pt](https://www.scielo.br/scielo.php?pid=S1516-18462011000300016&script=sci_arttext&tlng=pt)
24. Moraes AC, Quirino MD, Almeida MS. O cuidado da criança prematura no domicílio. *Acta paul enferm*. 2009;22(1):24-30. DOI: <https://doi.org/10.1590/S0103-21002009000100004>

Received: May 26, 2020

Approved: August 3, 2020

Published: October 8, 2020



The *Revista Baiana de Enfermagem* use the Creative Commons license – Attribution -NonComercial 4.0 International. <https://creativecommons.org/licenses/by-nc/4.0/>

This article is an Open Access distributed under the terms of the Creative Commons (CC BY-NC). This license lets others remix, adapt and create upon your work to non-commercial use, and although new works must give its due credit and can not be for comercial purposes, the users do not have to license such derivative works under the same terms.