

Maternal Perception about the benefits of the Kangaroo Method to the Newborn before the Covid-19

Elyade Nelly Pires Rocha Camacho¹, Joelma Sena Santos^{2*}, Liliane Oliveira Simões³, Rosyany de Araujo Ribeiro³, Teresa Kariny Pontes Barroso⁴, Patrícia Alves Maia⁵, Robson Pantoja Portilho⁶, Luana Cavalcante Cardoso Caetano⁷, Luciana Conceição Ferreira da Silva Barbosa⁸, Crislany Pereira da Silva⁹, Euriane Castro Costa¹⁰, Claudenira da Silva Santos¹¹, Thifanny Gonçalves de Lira¹², Patricia de Melo Farias¹³, Tereza Natália Bezerra de Lima¹⁴, Brendha Nataly Teixeira Costa¹⁵, Clarissa Coelho Vieira Guimarães¹⁶, Luiz Alberto de Freitas Felipe¹⁶, Ingrid Inez dos Santos Amaral¹⁷

¹Obstetrical Nurse. Graduation in Nursing from Universidade da Amazônia – UNAMA. Master and Doctorate degree in Nursing in Tropical Medicine Diseases from Universidade Federal do Pará (UFPA). Orcid: <http://orcid.org/0000-0002-7592-5708>. Belém, Pará, Brasil.

²Nurse. Graduation in Nursing from Universidade da Amazônia – UNAMA. Postgraduate student in obstetric. orcid: <http://orcid.org/0000-0002-9168-8394>. Belém, Pará, Brasil.

³Nurse. Graduation in Nursing from Universidade da Amazônia – UNAMA. Orcid: <http://orcid.org/0000-0003-1149-8556>; <http://orcid.org/0000-0002-1166-5521>. Belém, Pará, Brasil.

⁴Master in Intensive Care, SOBRATI/SP University of Fortaleza. Orcid: <https://orcid.org/0000-0002-3814-9447>. Fortaleza, Ceara, Brasil.

⁵Postgraduate Nursing in Intensive Care Center, Fanor Wyden University Center. Orcid: <https://orcid.org/0000-0003-4263-8670>. Fortaleza, Ceara, Brasil.

⁶Nurse, Specializing in Sterile Material Center and Surgical Center, Unifamaz, Orcid: <https://orcid.org/0000-0002-5848-3629>. Belém, Pará, Brasil.

⁷Nurse, Resident in Women's and Children's Health, by the University of the State of Pará -UEPA. Orcid: <https://orcid.org/0000-0001-7296-3920>. Belém, Pará, Brasil.

⁸Nurse, Resident in Women's Health, by the Hospital das Clínicas. Orcid: <https://orcid.org/0000-0003-1041-981X>. Recife, Pernambuco, Brasil.

⁹Nurse, Specialist in Gynecology and Obstetrics, from Universidade Potiguar do Rio Grande do Norte-UnP do RN. Orcid: <https://orcid.org/0000-0002-5163-9520>. Natal, Rio Grande do Norte, Brasil.

¹⁰Nurse, Resident in Women's and Children's Health, by the University of the State of Pará -UEPA. Orcid: <https://orcid.org/0000-0002-8281-992X>. Belém, Pará, Brasil.

¹¹Nurse, Post-Graduation in Intensive Care Nursing and Health Management, Municipal Secretary of Health of Palmeirais-PI. Orcid: <https://orcid.org/0000-0003-4220-6691>. Teresina, Piauí, Brasil.

¹²Nurse, Bachelor of Nursing, University of Amazon-UNAMA. Orcid: <https://orcid.org/0000-0002-6990-8776>. Belém-Pará-Brasil.

¹³Nurse, Specialist in Hospital Epidemiology, Federal University of Sergipe, Orcid: <https://orcid.org/0000-0002-6017-1640>. São Cristóvão, Sergipe, Brasil.

¹⁴Post-graduate degree in Multiprofessional Residency in Collective Health from the Faculty of Medical Sciences - FCM University of Pernambuco – UPE. Orcid: <https://orcid.org/0000-0003-2735-6915>. Recife, Pernambuco, Brasil.

¹⁵Undergraduate student in nursing, State University of Pará-UEPA, Orcid: <https://orcid.org/0000-0003-3599-8336>. Castanhal, Pará, Brasil.

¹⁶Academic Master in Nursing, Federal University of Rio de Janeiro - UNIRIO, Orcid: <https://orcid.org/0000-0002-7713-7182>; <https://orcid.org/0000-0001-8556-7636>. Rio de Janeiro, Brasil.

¹⁷Undergraduate student in Nursing, Escola Superior da Amazônia - Esamaz, Orcid: <https://orcid.org/0000-0002-0846-2686>. Belém, Pará, Brasil.

*Corresponding Author

Abstract— Objective: was to know the perception of mothers about the benefits of the kangaroo method in a maternity teaching hospital. **Method:** It was a descriptive study with qualitative approach, at least 10 mothers were interviewed according to the demand of internment in the kangaroo infirmary, in a childhood maternity of reference in the State of Pará in the period of October to November of 2019. **Results:** It was evident that the mothers have knowledge about the benefits of the kangaroo method for the baby, being possible to identify in the interviews with the mothers, however, every strategy already implanted needs evaluations through researches, therefore it was possible to identify the limitations, about the difficulties experienced about the practice of the kangaroo method. **Conclusion:** Thus the method is still a strategy of dissemination of knowledge and empowerment of mothers in the care of their baby, during the process of the kangaroo position for weight gain and the following hospital discharge.

Keywords— Benefits of the kangaroo method, Mother-son, Premature newborn.

I. INTRODUCTION

The Kangaroo Methodology stands out as a new model of care that inserts the family in the treatment of the newborn, in order to humanize the care, focused on the neonatal period, receives this denomination due to the vertical position of the Newborn (NB) on the breast of parents or relatives, starting with the touch and progressively evolving to the kangaroo position (skin-to-skin contact), respecting the limits of parents and NB (Brazil, 2011).

Through this methodology, studies demonstrate the perception of mothers about the benefits of the Kangaroo Method (MC), as performed in a maternity ward in Fortaleza - EC, which describe it as a tool that can provide benefits such as: progressive weight gain, strengthening the mother-child bond. Clearing up the doubts common to the care of the premature newborn (RNPT) and increasing the participation of mothers, contributing to the success of the method (Campos, Carvalho, Rolim & Alencar, 2008).

This strategy is divided into three stages, aiming at the humanization and participation of parents in neonatal care; the first stage begins at the prenatal stage of high-risk pregnancy, followed by admission of the newborn into the neonatal ICU; in the second stage the baby remains continuously with its mother and the kangaroo position is performed most of the time and; the third stage is characterized by monitoring the child and the family in the outpatient clinic and at home until it reaches a weight of 2,500g (Heck et al., 2016).

Moreover, these stages ensure the benefits for mother and baby, and through the method start to develop the affective bonds, consonant the experience in this sensitive period, which is significant for the experience of affection, the skin to skin contact between the two, starts to be slow and then progressive and helps to control the thermal temperature, encourages breastfeeding and increases the affective bond between them (Zirpoli et al., 2019).

The choice of this subject is justified by the need to know the importance of the knowledge of mothers about the benefits that the kangaroo method provides among the mother-child bionym. This study aims to inform that the kangaroo method is a health promotion tool, where it is possible to promote the interaction of mothers in the care of newborns. Therefore the objective was to know the perception of mothers about the benefits of the kangaroo method in a mother-child teaching hospital.

II. METHOD

It is a descriptive study with a qualitative approach. The research was carried out at Fundação Santa Casa de Misericórdia do Pará (FSCMP), a reference hospital located in the metropolitan region of Belém-PA, the scenario of the study was in the kangaroo infirmary where the 2nd stage of the Kangaroo Method is carried out.

The interview with the mothers of the newborns was carried out at an appropriate time and place, where the approach of these mothers at the bedside of the infirmary kangaroo was done, a device was also used to record the testimonies and the interviews were carried out according to the demand for hospitalization, that is, it depended on new hospitalization of newborns in the infirmary and the mother having practiced the kangaroo position with her baby.

The survey was conducted from October to November 2019. The participants of the study consisted of a non-probabilistic and randomized sample of at least 10 mothers who were older and younger of the babies who were in continuous permanence in Kangaroo Infirmary, the names of the participants were identified by pseudonym of the research and alpha-numeric as demonstrated below term Mother1, Mother2, Mother3 and so on. In the inclusion criteria it was used: mother under age with 12 to 17 years old in this case the mothers under age signed the Term of Free Informed Consent (TALE) and the legal responsible

of the minor signed the Term of Free and Informed Consent (TCLE) consenting the participation of their daughter in the research, and the mothers who are already over 18 years old signed the TCLE, who were in continuous permanence in the Kangaroo Infirmary and performing the MC.

Were excluded mothers with psychiatric history or important complications in postpartum, being the mother of a newborn with congenital malformations, being the mother of a newborn in the ICU with a history of severe pathologies, or the absence of the genitor in the follow-up of the newborn using the kangaroo method and the absence of the person responsible for the minor at the time of the study. For the analysis of textual content data, incessant and with scientific rigor using the Bardin method, which consisted of three phases; Pre-analysis, Exploration of material, treatment of results, inference and interpretation (Bardin, 2016).

The ethical procedure of this research was submitted to and approved by the FSCMP Ethics and Research Committee, under the report number 3,612,649 and CAAE 19492719.5,0000,5171. All the ethical guidelines in accordance with resolution 466/12 for conducting research with human beings were respected and ensured. The participants of this study have been registered their consent through the TCLE, the TALE and the Term of Authorization for the Use of Image and Sound for research purposes.

III. RESULTS

The evidence found in this research through the perception of the mothers before the coronavirus pandemic (covid-19), reveal that the kangaroo method is still a practice that guarantees several benefits for the newborns, however, every strategy already implanted needs evaluations through researches, therefore it was possible to identify the limitations according to the maternal reports during the interviews, about the difficulties experienced about the practice of the kangaroo method.

During the survey when asked about "what benefits has the practice of the Kangaroo Method brought to your baby?" they answered that the kangaroo position brings benefits to the baby, such as weight gain, and ensuring a good development, making it reach the appropriate weight to receive hospital discharge and also the bond between mother-child, creating affectionate bonds as in the speech of mothers 6, 12 and 19.

"The kangaroo is very important in helping to gain weight (...) in the baby's development (...)" [mother 6].

"I think (...) my contact with him gets bigger, right? the link between the two of us also so he can be warmed up and gain more weight" [Mother 12].

"And I think it's the main weight gain, because lately she does the Kangaroo Method is she gained a lot of weight in two days, things that was the weight she gained in a week in the ICU, with two days she gained like 180g in two days what was in the ICU she gained like this 80g in one week it took a lot" [Mother 19].

Other important aspects observed were that the practice of the kangaroo method improved the temperature of the newborn inpatient, this made the mothers confident in handling their child and making possible the stability of the respiratory rate due to the body to body contact in the vertical position with the mother. As the following lines show:

"Look when I started doing the kangaroo (...) her temperature changed that she was too cold and she got much smarter than she was" [mother 7].

"Look, I think it warms me up, it helps his temperature, (...)" [mother 20].

"(...), the baby is born prematurely and we don't have a way to hold it and in this body to body we feel more comfortable with the child, we feel good until we breathe, they stay quiet and we breathe for them" [mother 10].

Regarding mothers' perception of "practicing kangaroo position and how many times during the day/week?", mothers' statements are directed at the number of times they stay in the kangaroo position during the time of hospitalization for weight gain and others have reported that they perform the kangaroo position, but not quite often, as evidenced in the following statements:

"Twice every day especially when the child arrives they come with very low weight there so he can pick up weight faster (...)" [mother 10].

"We do it twice a day in the morning and afternoon or do it all morning or do it all afternoon every day (...)" [Mother 6]

"Once in a day, you can't do it every day, I do it when I want" [mother 14]

"Look, today hasn't been any yet, but once again (...), I don't do it every day" [mother 31].

As regards "what are the difficulties of this method?", at first some verbalized difficulties related to the environment because it was a closed place and as a consequence they lost track of time as regards the timetable.

In addition, most of these mothers came from the Intermediate Care Unit (NICU) or the Neonatal Intensive Care Unit (NICU), because they only kept their babies hospitalized, receiving the care of the multi professional team and the presence of the mother was part-time, so they could go out to solve their personal problems, others sought to rest and stay with the other children who were in the care of their relatives, they felt at ease because they knew that their children were being well cared for.

In the kangaroo infirmary the mother has to stay continuously with her baby providing the care, through this they felt that they were stuck in the infirmary without being able to go to their homes and there is a break in their daily activities, as shown in the following speech:

"The first of all so I think I felt was staying here, not being able to go home is very uncomfortable, even though I'm with her and everything, but very bad to be away from home" [Mother 19].

Another difficulty is the fear of manipulating her concept, difficulties in putting it in her lap, thus, a challenge for her to be able to handle her underweight son, because it is known that this contact is a part of the process to realize the Kangaroo Method.

"(...)The difficulty we have when the child is born like this is the catch that differs from a 3kg child to a 1k 200g child (...)" [Mother 10].

It is important to point out the difficulty as to the necessary mooring for the kangaroo bag, because they could not do it alone, needing the help of the professionals and also on the clothes model, because they did not feel comfortable wearing that garment.

"So, it's very uncomfortable to look like this here, even if you're trying to make it look nice here, it doesn't look good" [mother 19].

It can be seen in some reports about the difficulty in the beginning when they arrived at the kangaroo infirmary, before going through this process they always had the help of someone in the family, for example their mothers and now they no longer had this help at that moment, being only a mother-child and when they faced the reality of living something new that is the practice of the kangaroo position, this affected their emotional state, filling them with doubts, uncertainties, insecurities about how they

would take care of their babies, all reflected in the production of breast milk. As stated in the following speech:

"It's tying the knot, everything's new, you have to keep an eye on it all the time, you can't sleep properly" [mother 2].

"The difficulty is when I'm going to tie up, sometimes I can't tie up by myself (...)" [mother 9].

"And I always had my mother very close to me to help me in everything, and here is me and him, so for me it was much more difficult, it's horrible on both days of Saturday and Sunday I cried the psychologist had to call my mother, my mother had to spend Saturday here, my milk went away" [mother 16].

It is worth mentioning that all these difficulties mentioned by these mothers in this research end up generating limitations to develop the care of the baby, as in the realization of the kangaroo position, because to occur this link / bond between mother-child both need to be well physically and psychologically, especially in relation to the balanced emotional state.

IV. DISCUSSION

The experience of the MC brings numerous benefits, perceived and reported by the mothers themselves, such as the construction of the bond, the approach with the baby favors growth and development, allows quiet sleep, in addition to the security that the Method provides for mothers in the care of the baby and the pleasure in the consolidation of the maternal role (Menezes, 2017).

Regarding the benefits of skin-to-skin contact, such as increased rates of exclusive maternal breastfeeding, stability of vital signs, weight gain, lower rates of readmission to the Intermediate Care Unit (NICU) and lower chance of death during hospitalization in very low birth weight newborns (Alves, 2019).

On the other hand, for Pinheiro and collaborators (2019), they highlight that in fact the Kangaroo Method influences the physiological aspects of newborns such as body temperature, respiratory rate due to skin to skin contact. In Pereira's (2016) study, the perception of mothers among several benefits of the Kangaroo Method highlights the overcoming of fear related to handling the premature and providing the feeling of safety when touching it, which was also observed in this study.

Other benefits studied and verified are: the increase of the mother-child bond, favor the stimulation of breastfeeding, increases the competence and confidence of parents in the handling of their baby, guarantees thermal control and reduces the length of hospital stay (Dantas et al., 2018)10.

Based on Pereira's (2016) studies, he also states that the Kangaroo Method, as a philosophy of integral and humanized care for newborns at risk, broadens the focus beyond skin-to-skin contact, and integrates a set of practices (techniques, relationships and environment) aimed at minimizing the stress of the newborn, providing comfort for a smoother and more respectful transition, and especially bringing together and involving the family.

Since the Kangaroo Method is a great proposal of humanized attention to the newborn low weight, bringing with it many advantages and benefits, among them the improvement in exclusive breastfeeding; adequate weight gain (Santos; Filho, 2016). These benefits are found in this study.

According to Mendes et al., (2015) the mother and baby should remain in joint accommodation, performing the kangaroo position for as long as possible. The use of the MC in the infirmary takes place in the second stage of the process, a moment that intensifies the maternal presence through the care of the newborn (Klossowski et al., 2016).

The studies of Testoni, Aires & Luana, (2018), show that the proximity with the preterm baby favors the exchange of affection and the establishment of the bond between mother and her child, feeling your child, in your lap, for mothers is the realization of motherhood.

Thus, the Ministry of Health recommends that it should be durable and frequent, because the time in the kangaroo position should be defined by the desire of the parents and the baby and the pleasure it will provide to both, but each time the baby goes to the position, it emphasizes that it should remain for at least one hour, so that it can receive its benefits (Brazil, 2016).

Following the related bias about maternal limitations, other studies assert that one of the difficulties reported by mothers was to never have the experience of being a premature mother, the place also represents a challenge for each one of them for being with a newborn in the Kangaroo, this can mean the occurrence of fears, desires, emotions, peculiar meanings of this experience and also the presence of hope and expectations regarding the return home, with their healthy son (Freires; Augusto, 2018), as it was evident during the realization of this research.

Another study with the same results as above is from the reference hospital of the Center-West of Minas Gerais, highlighting the insecurity that they develop in this first contact, mainly due to the little knowledge of family members about this possibility of care, corroborate for the insecurity of parents in performing the Kangaroo Method, (Gesteira et al., 2016).

Therefore, it is fundamental the assistance of the professional to pass on the appropriate guidance to the mothers who are in a kangaroo infirmary, because they experience difficulties in promoting skin to skin contact with their premature baby, they feel insecure to perform one of the stages of the Method due to the clinical picture of the newborn and because it is an environment that takes them to new challenges (Freitas; Augusto, 2018).

Other authors assert about this perception of maternal feelings in relation to participation in the kangaroo method because they are far from contact with the family, they feel uneasy because it is not their family environment and this can cause confusion and fear and can interfere with the stage of this tool and the possible involvement of mothers in newborn care (CAMPOS, et al., 2008).

V. CONCLUSION

Through this research it was possible to verify that the mothers have knowledge about the benefits of the kangaroo method, being reported in the interviews, being possible to identify in the conversations with the mothers the benefits of the method practice, in which the majority highlights as benefits the weight gain, stability of the body temperature, the increase of the respiratory rate and strengthening of the mother-child binomial, thus this vertical position left the newborns calm, comfortable and warm.

Maternal difficulties were also identified in the practice of the MC. For this reason, proposals are proposed that make it possible to elaborate strategies such as: workshops of group activities to allow the exchange of experiences between mothers, the nursing professionals to create conversation wheels to develop attentive listening, about the maternal feelings the worries that arise from being in a place far from your family environment of the people of your daily life, depending on the answers to your doubts, limitations, this professional will be able to propose instruments such as playful activities capable of solving the difficulties.

Implement a supervision program to evaluate possible difficulties acquired during the implementation of the Method so that they do not influence its effectiveness, and

when identified can be overcome with any of the strategies already mentioned. Haja, considering that the MC is a humanized neonatal assistance becoming as a health promotion tool, because it is of great relevance for the reduction of premature newborn mortality.

However, amidst the many events that have taken place in the world in recent months, a doubt arises as to how mothers are using this tool during the covid-19 period? Since before the pandemic there were already some challenges, as was evidenced in the reports of the mothers, in addition to all this scientific knowledge there is the possibility to emerge the tendencies to teach being a new look to care-educate through the educational technologies.

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