BENEFITS OF THE KANGAROO METHOD FOR BREASTFEEDING

BENEFÍCIOS DO MÉTODO CANGURU PARA O ALEITAMENTO MATERNO

BENEFICIOS DEL MÉTODO CANGURO PARA LA LACTANCIA MATERNA

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How to cite this article: Silva RN, Cechetto FH, Riegel F. Benefits of the kangaroo method for breastfeeding. Rev Enferm Atenção Saúde [Internet]. 2021 [acesso em ____];10(1):e202110. doi:10.18554/reas.v10i1.4222

ABSTRACT
Objective: To check the benefits that the Kangaroo Method for breastfeeding. Method: Integrative review, through the SciELO, BDENF and LILACS databases, data were collected between August 2018 and May 2019. For the analysis of the obtained data the content analysis was used. Results: The benefits of the Kangaroo Method for breastfeeding found are related to breastfeeding as a promoting factor, greater adherence and maintenance of breastfeeding, reduction of early weaning, presentation of better sucking by baby, and presentation by mothers of higher daily volume in milk production. Conclusions: Indirect forms related to the Kangaroo method involving breastfeeding were identified: increased weight of the baby, reduced length of stay of the newborn, favoring the construction of the mother-baby bond and contribution to global development.

Descriptors: Public Policy; Nursing; Kangaroo Method; Breastfeeding.

RESUMO
Objetivo: verificar os benefícios do Método Canguru para o aleitamento materno. Método: revisão integrativa, por meio das bases de dados SciELO, BDENF e LILACS, os dados foram coletados entre os meses de agosto de 2018 e janeiro de 2019. Para a análise dos dados obtidos, foi utilizada a análise de conteúdo. Resultados: os benefícios do Método Canguru para o aleitamento materno estão relacionados com o fator de promoção, maior adesão e manutenção do aleitamento materno, redução do desmame precoce, melhor sucção, e maior produção de leite. Conclusões: formas indiretas relacionadas ao método Canguru envolvendo o aleitamento materno foram identificadas: o aumento de peso do recém-nascido, redução do tempo de internação do recém-nascido, favorecimento da construção do vínculo mãe-bebê e contribuição para o desenvolvimento global.

Descritores: Política Pública; Enfermagem; Método Canguru; Aleitamento Materno.

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RESÚMEN

Objetivo: Para comprobar los beneficios del Método Canguro para la lactancia materna. 

Metodo: la revisión integradora, a través de las bases de datos SciELO, BDENF y LILACS, se recopilaron datos entre agosto de 2018 y mayo de 2019. Para el análisis de los datos obtenidos se utilizó el análisis de contenido. Resultados: Los beneficios del método Kangaroo para la lactancia materna encontrados están relacionados con la lactancia materna como un factor promotor, una mayor adherencia y mantenimiento de la lactancia materna, reducción del destete temprano, presentación de una mejor succión por parte de NB y presentación por parte de las madres de mayor volumen diario en la producción de leche. Conclusiones: Se identificaron formas indirectas relacionadas con el método Canguro que involucra la lactancia materna: aumento del peso del bebé, reducción de la duración de la estadía del recién nacido, lo que favorece la construcción del vínculo madre-bebé y la contribución al desarrollo global. 

Descripciones: Política Pública; Enfermería; Método Canguro; Lactancia Materna.

INTRODUCTION

The Kangaroo Mother Method (KMM) was conceived and implemented in Colombia, around 1979, at the Instituto Materno-Infantil de Bogotá, by doctors Edgar Rey Sanabria and Hector Martinez. In Brazil, KMM was announced on July 5, 2000, by the Ministry of Health, through Ordinance No. 693/2000, as a Standard for the Humanized Care to Low Weight Newborns (LWN), aiming to promote humanized care.1

The main objective was based on the conception that the positioning of the newborn against the mother's chest would offer greater thermal adequacy, replacing the incubators. Favoring early hospital discharge, reducing hospital infection rates and improving the quality of health care and, consequently, reducing the cost to the health system are among the advantages of the method.1

Thus, the KMM had its practice implemented in Brazil as a National Public Policy, focused on perinatal care. In order to establish a humanized and qualified care through the development of biopsychosocial intervention that involves, in addition to care for the NB, the promotion of the participation of parents and family. The KMM is based on skin-to-skin contact, starting with the practice of touching, evolving to the kangaroo position with the mother. The patient should only wear diapers, in skin-to-skin contact, close to the parents' chest and in an upright position for a time that should not be less than 15 minutes. It must be performed through the assistance of a trained health team to ensure safety and benefits in its practice.2

However, in Brazil, KMM has a broader proposal that extends: [...] to technical care for the baby (handling, attention to individual needs, care with
light, sound, pain); welcoming the family; the promotion of the mother/baby bond and breastfeeding; and outpatient follow-up after discharge, thus configuring itself as a strategy for qualifying neonatal care.

KMM is systematized in three stages, which involves the development of actions that welcome the parents, and enable their commitment to the therapeutic care of the NB through their insertion in care, providing opportunities for bond building. The first stage of the KMM starts with the recognition of premature labor and the newborn weighing less than 2,500 grams.

It is necessary to encourage the entry and permanence of parents in the NICU, in addition to guidance by the nursing staff on infection control measures, also encouraging proper touch and skin-to-skin contact, through the Kangaroo position. This proposal should be whenever possible and desired, according to the NB's clinical conditions. Thus, it is still necessary to promote the encouragement of lactation and the participation of parents and family members in care.

At second stage of the KMM, the baby is kept continuously with his mother and the kangaroo position performed for as long as possible, and the baby must, to remain in this stage, demonstrate clinical stability, be on full enteral nutrition (breast, gastric tube or cup) and get a minimum weight of 1,250g.

It is noteworthy that the mother must express her desire to participate, have available time and a social support network, so that there is a consensus between the mother, family members and health professionals. The mother must also demonstrate the ability to recognize the newborn's signs of stress and risky situations and have the knowledge and expertise to handle the baby in a kangaroo position. However, this step also needs to allow the mother's temporary distancing according to her needs. The use of intermittent oral, intramuscular or intravenous medications does not indicate the permanence in this stage.

In the third stage, in which hospital discharge and maintenance of outpatient follow-up occurs, the baby needs to be weighing at least 1500g, clinically stable and gain weight in the three days prior to discharge, receiving exclusive breastfeeding. In cases of need, the
supplement to the diet should be offered through a cup or syringe.

The family must be confident about handling the child and have a good understanding of the importance of keeping the child, also at home, in the kangaroo position for as long as possible. There is a need for commitment to outpatient follow-up, in a calendar of three appointments in the first week, two in the second week and maintenance of an appointment from the third week onwards, until the acquisition of a minimum weight of 2500g.5

Given this scenario, it is important to highlight that the KMM can be harmed due to various situations, including neonatal routines aimed at technical care that distance the mother's stay in the neonatal unit and are obstacles to breastfeeding.7 Thus, the contact between mother and child in the KMM allows mothers to continue producing milk, and awakening encouragement and hope, provided by the success of breastfeeding, and consequently, the desire to care for and breastfeed the child.8

Among the professional multidisciplinary team, the nurse belongs to the category that remains involved full-time with the family and the NB, establishing effective communication and a clear language, favoring the understanding, learning and interaction of families. Thus, the purpose and benefits of the KMM are highlighted, in order to encourage the understanding of its importance for all those involved.9

Thus, it is essential that the nursing team is properly prepared to provide this assistance, recognizing the advantages of KMM to foster their activities to encourage their practice. The aim of this study was to verify the benefits of KMM for breastfeeding.

**METHOD**

It is an Integrative Review that has as purpose to gather and synthesize findings of studies carried out, through different methodologies, aiming to contribute to the increase of knowledge related to the subject investigated.10

The integrative literature review uses a systematic and organized method proposed by Cooper, developed through five well-defined steps. In these, the objectives of the study are established, formulation of the questions that must be answered by the research, through the search for studies published in the databases, through previously determined descriptors and inclusion and exclusion criteria. From this, the sample, qualification and analysis of the selected studies is obtained, explaining and exposing the results found.11 Therefore, the guiding question of this study stands out: What are the benefits that the kangaroo method offers for breastfeeding?
In the data collection stage, the inclusion and exclusion criteria for the study were defined, as well as the search methodology in the databases. The inclusion criteria were: articles that answered the guiding question, written in Portuguese, available in full, resulting from primary research and published from 2008 to 2018. As exclusion criteria, manuals, theses, conclusion works, dissertations and review articles were discarded.

The research was carried out by searching the following databases: Scientific Electronic Library Online (SciELO), Latin American and Caribbean Literature on Health Sciences (LILACS), and Nursing Database (BDENF) available on the Virtual Health Library (VHL) platform. The search descriptors were: Public Policy, Nursing, Kangaroo Method, Breastfeeding, using the Boolean operator “AND”. Data collection took place from March to May 2019.

There were 887 articles found, being 154 articles in LILACS, 228 articles in Scielo and 505 articles in BDENF. When proceeding with the selection based on the application of the inclusion criteria, 148 articles were pre-selected and 855 were excluded for not answering the guiding question or for duplicity. After reading the titles and abstracts, 52 articles were selected, and of these, only 18 articles were related to the objective of this study.

RESULTS AND DISCUSSION

The findings of this integrative review showed the benefits of KMM for BF and were organized into categories of analysis that involve the following topics: a) directly related to breastfeeding. KMM was shown to be a promotion factor, greater adherence and maintenance of breastfeeding, reduction in early weaning, presentation of better sucking by newborns, and mothers with greater daily volume in milk production; b) in indirect ways related to the KMM involving the BF, the increase in weight of the NB was identified, reduction of the NB's length of stay, favoring the building of the mother-infant bond and contribution to the baby's overall development.

KMM proved to be a very important strategy for the promotion, adherence and maintenance of breastfeeding, identified in all evaluated studies (A1 to A18), and an exclusive supporter of breastfeeding, pointed out by seven studies (A1, A2, A4, A5, A10, A13 and A16).

It was shown that KMM favors greater frequency, periodicity and duration of breastfeeding on demand, as it is a source of nutrition and protection for the baby in the first six months of life. KMM
The Kangaroo Method is appointed as a facilitator of breastfeeding, as it provides skin-to-skin contact and the mother's permanence with her premature child, with parents and family members expressing satisfaction and interest in the KMM in view of the baby's recovery.\textsuperscript{14}

The long hospitalization period of low birth weight NBs, the prolonged use of gastric tubes and the deprivation of sensory stimuli in the oral region delay the transition from gavage to oral diet and oral motor maturation, also delaying hospital discharge. Thus, the early contact and the implementation of the probe-breast technique favored in the kangaroo method, presented a reduction in the transition time of the feeding steps only by probe or its complement.\textsuperscript{15}

KMM has numerous benefits for the postpartum woman and for the baby, allowing a unique experience, in which the mother is close to her child, similar to the intrauterine moment. This contact facilitates breastfeeding, evidenced by the mothers’ reports, as it makes it easier for the baby to reach the breast due to the position provided by the method, proximity that makes it effective. Thus, this experience provides mothers with the feeling of integral insertion in their baby's recovery, consequently increasing the bond.\textsuperscript{1}

The KMM as a strategy to avoid early weaning was pointed out by three studies (A3, A5 and A15), as they point to factors that promote the interruption of breastfeeding, such as: discouragement, mistaken commercial campaigns and changes in the role of women in society, allowing beliefs and myths to influence behavior in relation to breastfeeding. In addition, the social groups in which the woman is inserted, especially the family group, has a great influence on the practice of breastfeeding, with the family as the main transmitter of beliefs and values.\textsuperscript{16}

The mother's return to work, the mother's lack of interest in breastfeeding, myths and preconceptions about breastfeeding, breast problems and lack of guidance in prenatal care are identified as risk factors for early weaning. From the family nucleus, grandmothers have greater influence on the mother regarding breastfeeding. Weaning occurs due to the conception that their milk is insufficient, breast problems, lack of time and support to breastfeed, in addition to the feeling of overload and frustration.\textsuperscript{17} The benefit of KMM for increased milk production by the mother and in the development of correct and effective suction by the NB was evident in two studies (A15, A17).
Factors such as the unfounded belief that “breast milk is weak”, as well as the idea of little milk production negatively influence the maintenance of BF. These myths are dispelled when the mother receives attention in the KMM practice and is involved in the care of her child from birth. When she is properly guided by the health team about the composition of breast milk, breastfeeding results become positive.

It is important to highlight in the act of orientation that milk production is stimulated by breastfeeding, that is, the more the baby sucks, the more milk will be produced; it is also important to highlight that there is no need to introduce other foods as supplements before six months, and that the use of bottles and/or pacifiers interferes with milk production and breastfeeding.16

The method as a care approach provides the mother/family contact for long periods with the health team. Thus, it is possible to affirm that this is also one of the benefits of the method for the promotion of BF and its maintenance after discharge. KMM avoids early weaning, as nursing has more time to adequately guide and assist the family.

This integrative review also showed indirect forms of benefits related to the Kangaroo Method involving Breastfeeding. One of the benefits of CM pointed out by four studies (A1, A2, A7, A8) is related to the weight gain of the NB. Regarding daily weight gain, KMM reduces the time for weight gain when compared to the conventional method, as it facilitates breastfeeding, contributing positively to weight gain.18

KMM through skin-to-skin contact promotes thermoregulation, stability of vital signs and breastfeeding, producing homeostasis in the NB, a condition of major importance for weight gain.19 The reduction in the NB's length of stay was described by three studies (A1, A3, A17). In view of the benefits presented by KMM, there is a reduction in the length of stay in the Neonatal ICU, allowing for quicker hospital discharge, as the NB becomes more quickly able to go home with his family.20

Studies have shown the contributions of KMM in establishing the baby-family bond, encouraging the participation of parents in the care of their child, so that they can understand the entire process of prematurity. Thus, it seeks to prepare for the performance of home care, which will contribute to hospital discharge with greater speed and safety.21

The favoring of the mother-infant bond building by KMM was scored in six studies (A6, A7, A14, A16, A17, A18). The period that mother and baby remain together after birth triggers a sequence of sensory, hormonal, physiological, immunological and behavioral events that favor the bond building between the
mother-infant binomial. In the studies, the mothers reported that through KMM it is possible to maintain the kangaroo position that goes beyond the act of touching and skin-to-skin contact, allowing them to experience feelings of emotion and joy, as they felt closer to their children, holding them in her arms, transmitting affection and warmth, strengthening the attachment, and a way to feel united, as one again.\(^{22}\)

Given the above, KMM promotes maternal exercise, so that the puerperal woman undergoes sensory experiences directly with the child, enhancing her role as a caregiver, impacting the negative feelings perceived in the first days of hospitalization, overcoming them in order to establish the attachment and the bond with her child.\(^{21,24}\)

The contribution of KMM to the global development of the NB was pointed out by three studies (A10, A14, A18). KMM is also important for the growth of underweight newborns, as it helps in weight gain, in reducing unconjugated blood bilirubin levels, preventing neonatal jaundice, increasing adequate blood glucose levels, as well as promoting neurological, intellectual, psychological and biological development, contributing to the development of coordination, swallowing and suction, and speech.\(^{13}\)

**FINAL CONSIDERATIONS**

The benefits of KMM evidenced in this study positively impact the quality of breastfeeding. KMM encourages BF promotion, as it puts the mother in direct contact with the baby when the NB is stable and able to do so, increasing the adherence of mothers and the follow-up of the BF practice after the hospital discharge, reducing the incidence of early weaning, since during the KMM practice, mothers are guided by nursing professionals about exclusive breastfeeding.

NBs have shown a better process of sucking and swallowing when inserted in KMM, resulting in better breastfeeding practices, and the mothers, in view of the success of the newborn's attachment to the breast, maintain a greater daily volume of milk production. Regarding the indirect forms related to KMM involving BF, the following were identified: the increase in the weight of the NB generated by the success of breastfeeding, the reduction in the NB's length of stay is also related to stability and weight gain. Other benefits involve the favoring of the mother-infant bond building by stimulating skin-to-skin contact and the contribution to the child's physical, psychological and social development.

KMM has numerous benefits for the newborn, for the mother and for the whole family, but the most evident beneficial
factor is related to the promotion of breastfeeding. Thus, it is extremely important that nursing professionals are adequately prepared to assist mother and baby during hospitalization and in promoting KMM, taking advantage of this space to raise awareness and encourage breastfeeding.

STUDY LIMITATIONS

This study has as limitations the inclusion of articles exclusively in the Portuguese language, which leads us to partial results in the integrative review. Further studies are needed on the subject with publications in other languages. In this way, a more reliable result of the evaluation of KMM and its relationship with breastfeeding is possible, emphasizing the influence of cultural aspects on the results obtained with this method.

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RECEIVED: 31/12/2019
APPROVED: 17/12/2020
PUBLISHED: 06/2021