

## Benefits of the kangaroo method in encouraging breastfeeding in newborn: Integrative review

### *Benefícios do método canguru no estímulo ao aleitamento materno em recém-nascidos: Revisão integrativa*

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#### RESUMO

O método canguru caracteriza-se como uma política de atenção humanizada, compõe um conjunto de práticas que facilitam o cuidado ao recém-nascido. Objetivou-se descrever os benefícios do método canguru no estímulo ao aleitamento materno em recém-nascidos. Trata-se de uma revisão integrativa da literatura, realizada a partir do levantamento bibliográfico na Biblioteca Virtual de Saúde (BVS-BIREME), pelas bases de dados: Scientific Library Online (SciELO), Base de Dados Latino-Americana e do Caribe em Ciências da Saúde (LILACS) e Base de Dados de Enfermagem (BDENF), utilizando como Descritores de Saúde (DeCS) e operadores booleanos "Método Canguru" AND "Aleitamento Materno" AND "Enfermagem". Foram incluídos artigos completos, gratuito, nos idiomas português e inglês, publicados entre 2014 a 2024, cujo resultados cumprem com o objetivo deste estudo. Foram excluídos artigos duplicados, monografias, dissertações, teses, revisão integrativa, anais de congresso e textos incompletos. A análise dos dados mostrou que a posição canguru, quando realizada corretamente, promove benefícios para o aleitamento materno e sua eficácia está relacionada com maior adesão e manutenção da amamentação, redução do desmame precoce, melhor sucção e maior produção de leite. Dessa forma, evidencia-se a importância do enfermeiro para o sucesso da prática e as vantagens que o método proporciona para o RN.

**Palavras-chave:** Enfermagem. Recém-nascido. Método Canguru.

#### ABSTRACT

The kangaroo method is characterized as a policy of humanized care, comprising a set of practices that facilitate the care of newborns. The objective was to describe the benefits of the kangaroo method in promoting breastfeeding in newborns. This is an integrative literature review, conducted through a bibliographic survey in the Virtual Health Library (BVS-BIREME), using the databases: Scientific Library Online (SciELO), Latin American and Caribbean Health Sciences Literature (LILACS), and Nursing Database (BDENF), utilizing Health Descriptors (DeCS) and boolean operators "Kangaroo Method" AND "Breastfeeding" AND "Nursing". Complete articles, freely accessible, in Portuguese and English, published between 2014 and 2024, whose results meet the objective of this study, were included. Duplicate articles, monographs, dissertations, theses, integrative reviews, conference proceedings, and incomplete texts were excluded. The data analysis showed that the kangaroo position, when performed correctly, promotes benefits for breastfeeding and its effectiveness is related to greater adherence and maintenance of breastfeeding, reduction of early weaning, better sucking, and increased milk production. Thus, the importance of the nurse for the success of the practice and the advantages the method provides for the newborn are highlighted.

**Keywords:** Nursing. Newborn. Kangaroo Method.

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## 1. INTRODUCTION

The kangaroo method (KM) was created in the mid-1979 by doctors Edgar Rey Sanabria and Hector Martins, first implemented at the Maternal-Infant Institute of Bogotá, Colombia. Subsequently, the MC was announced in Brazil by the Ministry of Health on July 5, 2000, through Ordinance No. 693/2000, with the aim of promoting humanized care for preterm and/or low birth weight newborns (Silva et al., 2021).

According to the Ministry of Health (2016), the method is characterized as a policy of humanized care that comprises a set of practices facilitating comprehensive care and breastfeeding. The practice occurs in three consecutive stages, starting with the first phase in the Neonatal Intensive Care Unit (NICU) with the initial contacts with the parents, followed by the transfer of the newborn to the Intermediate Care Unit (ICU), where skin-to-skin contact takes place, and finally, the third phase which includes post-discharge home care.

According to Amaral et al. (2015), MC contributes to the development of preterm (PT) and/or low birth weight newborns by encouraging skin-to-skin contact, placing the baby in a vertical position next to the mother for as long as it is pleasurable for both, with the aim of reducing separation time, increasing the emotional bond, and consequently, promoting exclusive breastfeeding.

In this premise, Silva et al. (2020) assert that this instrument has become indispensable for optimizing the recovery of neonates who require special care, primarily through breastfeeding, as breast milk is considered the gold standard for adequate nutrition and the development of the newborn throughout the process. The practice makes it easier for the baby to reach the breast and initiate the correct latch, as well as stimulates the production and ejection of breast milk (Vieira et al., 2021).

Alves et al. (2020) emphasize that in addition to promoting breastfeeding, the kangaroo position also guarantees numerous benefits, namely: thermoregulation, reduction of the risk of hospitalization, decrease in neonatal stress and pain, improvement in neurobehavioral and psychoaffective development, as well as higher quality in the relationship between the family and the healthcare team, since there is trust between the parents and the professional (Dantas et al., 2018).

On the other hand, despite its benefits, Lopes et al. (2019) highlight that this method may present failures in the following situations: the mother's separation from the Neonatal

Intensive Care Unit (NICU), lack of trained professionals for the correct execution of the procedure, absence of guidance and necessary support for the family to continue with the process even after hospital discharge, in addition to the prevalence of technical routine over humanized care by the professional team.

In this context, Ferreira et al. (2019) highlight the importance of the nursing professional for the proper execution of MC and the guarantee of the procedure's success, as they are the professional who will be fully involved with the family and the newborn, being responsible for clarifying doubts, teaching the technique, accompanying the neonate throughout the process, and guiding the parents to continue post-discharge (Luz et al., 2021).

In light of the above, and considering the benefits of the kangaroo method for the mother-child dyad, as well as for the promotion of breastfeeding, the present work becomes relevant, as it addresses a current issue and guides on the advantages of the kangaroo position and the nurse's role in the success of this practice. Given the above, the study aims to describe the benefits of the kangaroo method in promoting breastfeeding in newborns.

## 2. MATERIALS AND METHODS

This is an integrative literature review. According to Sousa (2017), the review is a method aimed at cataloging results obtained in research on a topic, in an orderly and comprehensive manner, providing comprehensive information on a subject.

The study was conducted in the Virtual Health Library (BVS-BIREME), using the databases: Scientific Library Online (SciELO), Latin American and Caribbean Health Sciences Literature Database (Lilacs), and Nursing Database (BDENF), utilizing Health Descriptors (DeCS) and boolean operators "Kangaroo Method AND Breastfeeding AND Nursing."

To achieve the results, the guiding question of this study was: "Given the importance of exclusive breastfeeding for the development of the newborn, what are the benefits of the kangaroo method in promoting breastfeeding?" The PVO method was used as a search strategy, where P refers to the research problem, V to the study variables, and O corresponds to the outcomes/results achieved:

**Table 1.** Characterization of the PVO search strategy.

Acronym	Definitions	Descriptions
P	Population	Newborn
V	Variable	Kangaroo method
O	Outcome	Benefits of the Kangaroo Method in Promoting Breastfeeding.

**Source:** Adapted from BIRUEL; PINTO, 2013.

The inclusion criteria adopted were: complete, free articles published in Portuguese, English, or Spanish between 2014 and 2024, whose time frame provides better elucidation on the topic over time, highlighting its advances and challenges faced. Articles that contain health descriptors used, qualitative research, prevalence studies, incidence studies, and those whose results meet the objective of this study were considered.

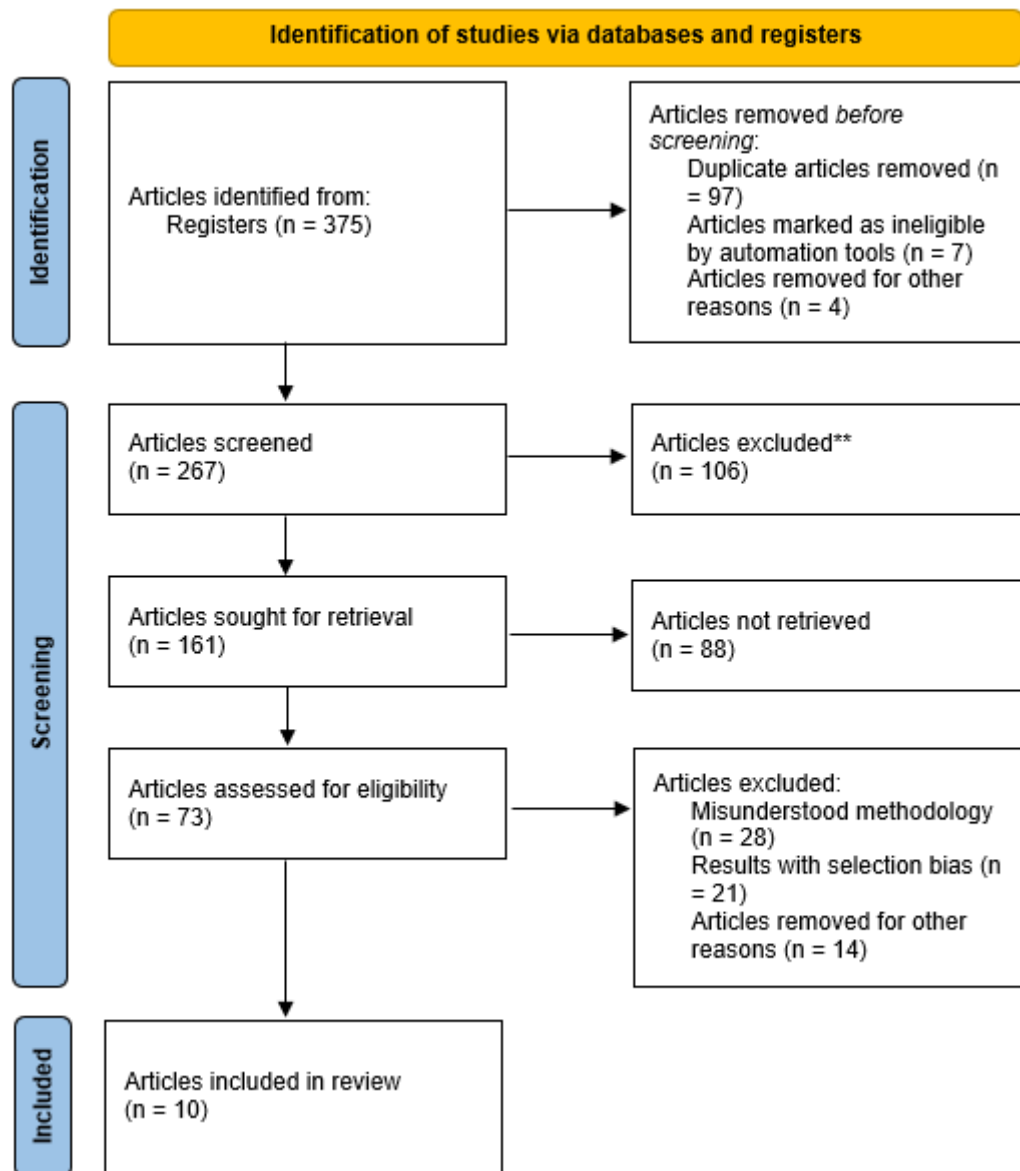
Incomplete articles, theses, literature reviews, texts published in other languages, conference proceedings, monographs, dissertations, abstracts, and those whose results do not meet the objective of this study were excluded. The PRISMA flowchart was adopted for the methodological process of sample selection.

The collection and analysis of the obtained data were carried out from August 2023 to January 2024. From the refinement, the sample was established through the careful selection and eligibility of studies that met the inclusion criteria. A validated instrument was adopted for this research to organize the sample according to title, year, author, database, methodology, and results.

### 3. RESULTS

375 articles were identified in records in the databases. Of these, 97 duplicate articles were removed, along with 7 articles excluded by automated tools and 4 articles removed for other reasons. In the screening phase, 267 articles were screened, of which 106 were excluded. In the eligibility phase, 161 articles were selected for detailed analysis and full-text retrieval, of which 88 were not retrieved for various reasons. Moving forward, of the 73 articles evaluated for eligibility, some were excluded due to misunderstood methodology (n=28), selection bias in the results (n=21), and other reasons (n=14). Finally, in the final inclusion phase, 10 articles were included in the review. As described in figure 1, below:

**Figure 1** – PRISMA Flowchart of the methodological process of sample collection.



Fonte: Autores, 2024.

Through bibliographic analysis, data were gathered on the benefits of the kangaroo method to stimulate breastfeeding and the role of the nurse in the use of this practice. The sample was organized according to title, author, year, database, methodology, and results. As demonstrated in Table 2 below:

**Table 2 - Description of the articles according to author, year, database, methodology, and results.**

Nº	Title	Author/ Year	Database	Methodology	Results
A1	Kangaroo Method: perceptions of the nursing team in a high-risk maternity ward.	Lima Filho, et al., 2024	LILACS.	Descriptive exploratory study.	The findings show that the nursing team plays a fundamental role in the applicability of the kangaroo method, through care in rooming-in, as well as acting to reduce morbidity and mortality rates, providing bonding, and consequently stimulating breastfeeding from the first hours of life, contributing to the strengthening of the baby's immune system and adequate weight gain.
A2	Knowledge and adherence of the nursing team to the kangaroo position in a neonatal unit.	Silva, et al., 2022	LILACS.	Quantitative research.	It was observed that the nurse plays an important role in promoting and implementing the kangaroo position, highlighting: placing the newborn in the kangaroo position, overcoming barriers, fostering bonding, and guiding parents, aiming for skin-to-skin contact and breastfeeding.
A3	Care and development of the premature newborn in the neonatal intensive care unit.	Martins, et al., 2021	LILACS.	Descriptive study.	The study showed that the kangaroo method is an indispensable practice to stimulate the initiation of breastfeeding in low birth weight newborns, as the position promotes bonding and facilitates the baby's contact with the mother from the first hours of life, stimulating the descent of colostrum, which is essential for strengthening the newborn's immune system and preventing breast complications in the mother.
A4	Skin-to-skin contact between mother and term newborn in normal delivery: cross-sectional study.	Kuamoto, et al., 2021	BDEF.	Cross-sectional study.	The study indicated that skin-to-skin contact, when performed immediately after birth, promotes better physiological stability and, most importantly, a longer duration of breastfeeding, as the newborn establishes a continuous bond with the mother.
A5	I'm going home. And now? The difficult art of the kangaroo method at home.	Canedol, et al., 2021	SCIELO.	Qualitative research.	The study showed that the continuity of the kangaroo position at home helps in the bonding, which was impaired during hospitalization between the parents and the preterm baby, making it important for professionals to guide on the correct implementation of the method and its benefits for the continuation of satisfactory breastfeeding, promoting benefits for both the mother and the baby.
A6	Método canguru: conhecimentos e práticas da equipe multiprofissional.	Matozo, et al., 2021	SCIELO.	Descriptive study.	The study indicates that when the guidelines on the kangaroo method are conveyed assertively by the multidisciplinary team, the rates of premature babies who manage to start breastfeeding while still in the hospital are



					higher, highlighting the importance of professional preparation to encourage the practice and teach parents in a clear and humanized manner, aiming for the continuity of the kangaroo method at home.
<b>A7</b>	Atuação do enfermeiro na promoção, incentivo e manejo do aleitamento materno.	Lopp, et al., 2023	SCIELO.	Descriptive study.	The findings show that the kangaroo method is beneficial for breastfeeding and its effectiveness is related to greater adherence and maintenance of breastfeeding, reduction of early weaning, better sucking, and increased milk production.
<b>A8</b>	Método canguru na perspectiva dos profissionais de saúde de uma unidade de neonatologia.	Souza, et al., 2019	BDENF.	Qualitative research.	It is emphasized that the nursing team is essential to encourage and teach the kangaroo position to the mother, considering that this method promotes greater milk production, facilitating breastfeeding and the baby's latch.
<b>A9</b>	Método canguru: percepções da equipe de enfermagem em terapia intensiva neonatal.	Mantelli., et al., 2017	SCIELO.	Descriptive exploratory study.	It is observed that one of the factors contributing to the method's success is the sensitization of the nursing team, as this results in more humanized care since the nurse is the professional who spends the most time in contact with the patient and the family, which is important to foster connection, which in some way promotes the family's closeness to the newborn, creating a bond.
<b>A10</b>	Prática social da enfermagem na promoção do cuidado materno ao prematuro na unidade neonatal.	Araújo, et al., 2017	LILACS.	Descriptive study.	The study indicated that by promoting the kangaroo position, professionals enhance the well-being and better development of the newborn, strengthening the bond between the baby and the family and promoting breastfeeding, which generates short- and long-term benefits for the mother-child dyad.

**Source:** Aguiar; Fernandes, 2024.

From the analysis of the obtained data, the benefits of the kangaroo method for promoting breastfeeding, as well as the nurse's role in the success of this practice, were evidenced. From this, through the analysis of the obtained results, it was possible to elucidate that the kangaroo position, when performed correctly, promotes benefits for breastfeeding and its effectiveness is related to greater adherence and maintenance of breastfeeding, reduction of early weaning, better sucking, and increased milk production.

Moreover, studies indicate that the nurse is essential for the initiation and maintenance of the method both in-hospital and at home, through teaching the correct position, encouragement, and assertive guidance that generate an understanding of the importance of the practice and confidence in parents and family members to carry it out.

#### 4. DISCUSSION

From the analysis of the obtained results, it was observed that the kangaroo method is indispensable for the stimulation and maintenance of breastfeeding, being important for the creation of bonds, increase in milk production, improvement in sucking, and consequently, reduction in early weaning rates.

Martins et al. (2021) highlighted in their study that the kangaroo method is an indispensable practice to stimulate the initiation of breastfeeding in low birth weight newborns, as the position favors the baby's contact with the mother. Corroborating the author, Costa et al. (2014) mention in their research that premature babies who are not stimulated through physical contact with the mother are more likely to develop problems, especially regarding the immune system due to the absence of breast milk.

In this context, Basso et al. (2021) also highlight the importance of skin-to-skin contact in the mother-infant dyad from the first hours of life, emphasizing that this practice promotes better physiological stability and, most importantly, a longer duration of breastfeeding, as the newborn establishes a continuous bond with the mother. Thus, the relevance of the kangaroo position is highlighted, as well as the need for it to be initiated as early as possible in the hospital and continued at home.

In addition to the benefits for breastfeeding, Menezes et al. (2014) list that the kangaroo method also contributes to the physical and emotional development of the baby; reduces pain and stress; helps regulate body temperature, heart rate, and oxygenation, in addition to promoting adequate sensory stimulation. Still on this premise, the author emphasizes that, for the success of the practice, it is necessary for the multidisciplinary team to be trained to correctly provide guidance, understanding the pillars that support the method.

On this premise, Leite et al. (2016) state in their research that the execution of the kangaroo position should be carried out based on comprehensive and qualified care for the newborn, respecting individualities, promoting skin-to-skin contact, promoting breastfeeding, and, most importantly, involving parents in all aspects of newborn care, as the method also promotes benefits for the mother during the postpartum period.

Focusing on the advantages of MC for the postpartum woman, Souza et al. (2019) highlight that the position promotes greater milk production, facilitates breastfeeding, and improves the baby's latch. Consequently, Sanches et al. (2015) emphasize that for women, the act of breastfeeding is essential for the prevention of breast complications such as breast



engorgement, mastitis, as well as preventing cancer and aiding in faster uterine recovery, justifying the need to encourage kangaroo care practice.

From this, Lima Filho et al. (2024) and Silva et al. (2022) point out in their studies that the nursing team is an active player in promoting MC, as they are alongside the patient and the family throughout the entire hospitalization period. Furthermore, Nunes et al. (2023) emphasize that the nurse plays an important role in promoting the encouragement and implementation of the kangaroo position, through assertive guidance, listening, conversing with parents, building trust, as well as correctly teaching the position, aiming for skin-to-skin contact and breastfeeding.

## 5. FINAL CONSIDERATIONS

From the analysis of the obtained data, it was possible to demonstrate that MC, when performed correctly, promotes benefits both for the newborn and the mother, as skin-to-skin contact from the first hours of life aids breastfeeding, stimulating milk production and the baby's sucking, thus preventing early weaning. For the woman, the act of breastfeeding is crucial to prevent breast diseases such as breast engorgement, mastitis, and cancer. Moreover, it helps in the faster recovery of the uterus. The nurse, being the most present professional throughout the patient's hospitalization, plays a fundamental role in guiding the parents and encouraging them to practice kangaroo care both in the hospital and at home after discharge.

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