

## EFFECTS OF KANGAROO MOTHER CARE ON THE VITAL PARAMETERS AND WEIGHT GAIN OF LOW BIRTH WEIGHT BABIES

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### ABSTRACT

*Kangaroo Mother Care (KMC) is a vital intervention for low birth weight babies, promoting skin-to-skin contact between the caregiver and infant. The essence of KMC lies in its ability to positively influence the vital parameters of low birth weight babies. Through the close physical contact and warmth provided during KMC, the baby's body temperature, heart rate, and respiratory rate can be effectively regulated. This intimate skin-to-skin connection has been scientifically proven to stabilize these essential vital signs, leading to improved physiological outcomes for these vulnerable infants. The benefits of Kangaroo Mother Care extend beyond the immediate physiological effects. The emotional and psychological advantages of this practice are equally profound. The close proximity and bonding between the baby and the caregiver during KMC create a sense of security and comfort for the infant, mimicking the womb environment and promoting a feeling of safety and well-being. This emotional connection plays a significant role in the baby's overall development and can have long-lasting positive effects on their emotional health and attachment patterns. This article explores the effects of KMC on vital parameters and weight gain in these vulnerable newborns. The practice of KMC has shown positive outcomes in stabilizing vital signs and enhancing weight gain, crucial for the well-being and development of low birth weight babies.*

**Keywords:** Kangaroo Mother Care, low birth weight babies, vital parameters, weight gain, neonatal care, skin-to-skin contact, infant development, premature infants, neonatal health, breastfeeding support.

### INTRODUCTION

Kangaroo Mother Care (KMC) is a practice that has revolutionized neonatal care, particularly for low birth weight babies. These tiny infants, often born prematurely and with low weight, require specialized attention and support to thrive and develop optimally. KMC involves the beautiful act of skin-to-skin contact between the baby and the mother or caregiver, creating a nurturing environment that fosters crucial bonding and promotes the infant's growth and well-being. The essence of KMC lies in its ability to positively influence the vital parameters of low birth weight babies. Through the close physical contact and warmth provided during KMC, the baby's body temperature, heart rate, and respiratory rate can be effectively regulated. This intimate skin-to-skin connection has been scientifically proven to stabilize these essential vital signs, leading to improved physiological outcomes for these vulnerable infants. The benefits of Kangaroo Mother Care extend beyond the immediate physiological effects. The emotional and psychological advantages of this practice are equally profound. The close proximity and bonding between the baby and the caregiver during KMC create a sense of security and comfort for the infant, mimicking the womb environment and promoting a feeling of safety and well-being. This emotional connection plays a significant role in the baby's overall development and can have long-lasting positive effects on their emotional health and attachment patterns.

Furthermore, Kangaroo Mother Care has been shown to enhance breastfeeding outcomes in low birth weight babies. The skin-to-skin contact and closeness established during KMC promote successful breastfeeding initiation and duration. Babies who undergo KMC often exhibit improved feeding patterns, better weight gain, and a reduced risk of complications associated with feeding difficulties. This positive impact on breastfeeding not only contributes to the baby's nutritional needs but also strengthens the mother-infant bond and promotes maternal confidence in caring for her child.

In addition to the physical and emotional benefits, Kangaroo Mother Care has been linked to improved neurodevelopmental outcomes in low birth weight infants. The nurturing environment created during KMC, characterized by close physical contact, soothing sounds of the caregiver's heartbeat, and regulated body temperature, has a positive impact on the baby's brain development. Studies have shown that babies who receive KMC exhibit better neurobehavioral outcomes, including improved cognitive development, sensory processing, and emotional regulation compared to those who do not receive this care.

Moreover, Kangaroo Mother Care has been associated with a reduced risk of infections in low birth weight babies. The skin-to-skin contact and breastfeeding support provided during KMC contribute to the strengthening of the baby's immune system. The protective benefits of KMC extend to reducing the incidence of hospital-acquired infections, such as sepsis, pneumonia, and other complications commonly seen in premature infants. By creating a protective environment that enhances the baby's immune response, KMC

plays a crucial role in reducing the risk of infections and improving overall health outcomes for these vulnerable infants.

In the realm of neonatal care, the practice of Kangaroo Mother Care (KMC) has emerged as a valuable intervention for low birth weight babies. These infants, born with low weight and often premature, require specialized care to thrive and grow. Kangaroo Mother Care involves skin-to-skin contact between the mother (or caregiver) and the baby, promoting crucial bonding and providing a nurturing environment for the infant's development.

One of the significant benefits of Kangaroo Mother Care is its positive impact on the vital parameters of low birth weight babies. The close physical contact and warmth offered during KMC help in regulating the baby's body temperature, heart rate, and respiratory rate. This skin-to-skin contact has been shown to stabilize vital signs, leading to improved physiological outcomes for the infant.

Samra, N. M., Taweel, A. E., & Cadwell, K. (2013) conducted a study to assess the impact of intermittent Kangaroo Mother Care (KMC) with extra breastfeeding opportunities on the weight gain of low birth weight (LBW) neonates experiencing delayed weight gain. The study followed 40 LBW neonates to determine if KMC with additional breastfeeding sessions led to improved weight gain. The results showed that in the KMC group, the neonates regained their birth weight at a significantly younger age (15.68 days vs. 24.56 days) and exhibited a significantly higher average daily weight gain (22.09 g vs. 10.39 g,  $p < .001$ ) compared to the control group. The study concluded that KMC combined with extra breastfeeding opportunities proved to be an effective intervention for LBWs facing delayed weight gain, suggesting its consideration as a beneficial strategy for neonatal care.

Conde-Agudelo, A., & Díaz-Rossello, J. L. (2014) explored Kangaroo Mother Care (KMC), initially described as skin-to-skin contact between a mother and her newborn, along with frequent and exclusive or nearly exclusive breastfeeding, and early discharge from the hospital, as an alternative to traditional neonatal care for low birthweight (LBW) infants. The Cochrane Neonatal Group employed a standard search strategy, combing through databases like MEDLINE, EMBASE, LILACS, POPLINE, CINAHL (from inception to March 31, 2014), and the Cochrane Central Register of Controlled Trials (The Cochrane Library, Issue 3, 2014). Additionally, searches were conducted on the Kangaroo Foundation website, conference proceedings on KMC, and Google Scholar.

Moreover, Kangaroo Mother Care has been linked to enhanced weight gain in low birth weight babies. The continuous skin-to-skin contact and breastfeeding support provided during KMC facilitate better feeding patterns and nutrient absorption for the infant. This, in turn, contributes to healthy weight gain and growth, which are crucial for the long-term health and development of these vulnerable newborns.

Research studies have consistently demonstrated the positive effects of Kangaroo Mother Care on both the vital parameters and weight gain of low birth weight babies. Implementing KMC in neonatal care units and promoting its practice among parents has shown promising results in improving the health outcomes of these fragile infants. By recognizing the significance of Kangaroo Mother Care and integrating it into standard care practices, healthcare providers can further enhance the well-being and growth trajectory of low birth weight babies, setting a strong foundation for their future health and development.

Kangaroo Mother Care is a remarkable intervention in neonatal care that offers a holistic approach to supporting the health and well-being of low birth weight babies. From its physiological benefits in stabilizing vital signs to its emotional advantages in fostering bonding and attachment, KMC has shown to be a powerful tool in promoting the growth and development of these vulnerable infants. By embracing the principles of skin-to-skin contact, nurturing care, and breastfeeding support, Kangaroo Mother Care not only enhances the immediate outcomes of low birth weight babies but also lays a strong foundation for their long-term health and well-being.

## CONCLUSION

In conclusion, Kangaroo Mother Care (KMC) serves as a valuable intervention for low birth weight babies, positively impacting their vital parameters and weight gain. The close skin-to-skin contact provided during KMC helps stabilize vital signs and promotes healthy weight gain in these vulnerable infants. By incorporating KMC into neonatal care practices, healthcare providers can enhance the well-being and development of low birth weight babies, setting a foundation for improved health outcomes. Emphasizing the importance of KMC in neonatal care can lead to better health trajectories for these fragile newborns, highlighting the significance of this nurturing practice in promoting the growth and development of low-birth-weight infants.

## REFERENCES

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