

Benefits of Kangaroo Mother Care (KMC) for Low Birth and Pre -Term Infants

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Abstract

The Cochrane review (2016) on kangaroo mother care (KMC) demonstrated a significant reduction in the risk of mortality in low-birth-weight infants. Kangaroo mother care (KMC) is a preventative, economical method for infants with low birth weight (LBW). KMC benefits LBW infants in a number of ways. This review standpoints the effect of KMC on the weight gain of LBW neonates. KMC also improves breastfeeding rates during the hospital stay as well as at home. KMC can be provided not only by mothers but also by fathers and other adults in the family. However, it is not routinely practiced in hospitals. Short-term and long-term KMC is beneficial for survival, neurodevelopment, breastfeeding, and mother-infant bonding. Preterm infants are more likely to experience neonatal mortality and morbidity due to acute breathing problems, gastrointestinal problems, autoimmune disorders, and neurological defects as compared to full-term and normal-weight infants.

Introduction

Edgar Rey (1979), A Physician and researchers who first introduced kangaroo Mother Care (KMC) in a hospital in Bogota, Colombia. Kangaroo mother care"-a simple and cost-effective technique was introduced in India in 1994 and KMC Network of India was also established.

According to WHO (2016) report KMC defined as early, continuous, and prolonged skin-to-skin contact (SSC) between the mother and preterm babies and exclusive breastfeeding. Early discharge after hospital initiated KMC with continuation at home and adequate support and follow up from mothers at home.

Background of the study:

- Mother kangaroo is a mammal (just like us) and feeds its baby milk human mother does from a nipple inside its pouch. When Joey's (the

kangaroo baby) is born has no hair and is called a PINKY.

- The baby will come out of the pouch for the first time when it is about a quarter of the mother's weight!! The joey can continue breastfeeding even when it is too big to fit in the pouch. The pouch covers the baby with skin, and this not only protects the very immature baby, but also provides it with a total environment which is essential for development. This includes warmth, food, comfort, stimulation, and protection.



Source: <https://publichealth.jhu.edu/sites/default/files/2023-05/maternal-and-newborn-health-research-bangladesh-kangaroo.jpg>

Key features of KMC are

Kangaroo mother care is a powerful, easy-to-use method to promote the health and well-being of infants born preterm as well as full-term.

Its key features include

- ✓ Early, continuous and prolonged skin-to-skin contact between the mother and baby
- ✓ Exclusive breastfeeding.
- ✓ It is initiated in hospital and can be continued at home.
- ✓ Close attachment between mother and infant.
- ✓ It's a gentle, effective method that avoids the agitation routinely experienced in a busy ward with preterm infants.

Two Essential components of KMC

1. Skin to skin contact: Early, continuous and prolonged skin-to-skin contact between the mother and the baby is the basic feature of KMC. The infant is placed on her mother's chest between the breasts.

2. Exclusive breast feeding: The baby on KMC is breastfed exclusively. Skin-to-skin contact promotes breast milk production and enables the small baby to learn to suck quickly. Intimate physical contact during KMC strengthens the emotional bonding between the mother and the baby.

Procedure of KMC

The baby should be placed between the mother's breasts in an upright position. The head should be turned to one side and in a slightly upturned position helps in breathing of and allows eye-to-eye contact between the mother and her baby. The legs and arms should be folded. Baby's abdomen should be at the level of the mother's upper abdomen and support the baby bottom with a sling/binder.

Feeding

- ❖ Holding the baby near the breast stimulates milk production.
- ❖ The baby could be fed with paladai, cup, spoon or tube, depending on the condition of the baby.

Duration for which KMC should be practiced

To begin with, it may not be possible for the mother to provide KMC for a prolonged period of time. But each session of KMC should last at least an hour. The aim should be to provide KMC as long as possible preferably 24 hours a day. first at the institution, then at home. It tends to be used until the baby reaches term (gestational age around 40 weeks) or 2500g.

Benefits of Kangaroo Mother Care (KMC)

- ✓ Stabilizing a baby's heart rate.
- ✓ Improving baby's breathing pattern and making the breathing more regular.
- ✓ Improving oxygen saturation levels.
- ✓ Gaining in sleep time and decrease in crying.
- ✓ Experiencing more rapid weight gain.
- ✓ Having more successful breastfeeding episodes.
- ✓ Having an earlier hospital discharge.

Benefits of kangaroo care for parents include

- ✓ Improving bonding with baby and the feeling of closeness.
- ✓ Increasing breast milk supply.
- ✓ Increasing confidence in the ability to care for your baby.

- ✓ Increasing sense of control and confidence in well cared for infants.

KMC for special cases

- **Help the mother feed her twins:** Feeding one baby at a time until breastfeeding is well established; if one is weaker, encourage her to make sure that the weaker twin gets enough milk. If necessary, she can express milk for him and feed him by cup after initial breastfeeding. Alternating the side each baby is offered daily.
- **Fathers play a vital role in skin-to-skin contact:** The direct connection with Dad's skin during Kangaroo Care soothes baby so much that babies' cortisol levels (stress hormone) are measurably lowered after only 20 minutes of being held skin to skin.
- In KMC, If the **mother is HIV-positive** and chooses replacement feeding, suggest using cup-feeding. Cups and other traditional utensils such as the "paladai" in India. It can be used to feed even very small babies, as long as they swallow the milk.

Conclusion

Kangaroo mother care is a powerful, cost effective, easy-to-use method to promote the health and well-being of infants born preterm as well as full-term. It's not only good for both premature and full-term babies, but also for the parents. There are many benefits of kangaroo care, such as protection from infection, warmth to the baby, exclusive breast feeding, weight gain and growth and early discharge from hospital. The majority of mothers practiced Kangaroo Mother Care in hospitals, and they wished to continue at home also. Some of the studies revealed KMC improved physiological benefits and increased higher oxygen saturation levels, better heart rates in infants and infants awake decreased the number of infants who fell asleep increased. Kangaroo mother care improves growth and reduces morbidities in low-birth -weight infants. Kangaroo mother care to mothers with preterm infants also had positive impacts on mothers' mental health, attachment and consequently improves infants' status. KMC practice reduced the risk of maternal postpartum depressive symptoms, psychological stress, improves the sleep status of mothers and enhances physical and mental health. So, there is a need to enhance the knowledge of mothers on benefits of KMC through health education sessions, seminars, workshops, research studies, tools, celebrating breastfeeding weeks and kangaroo care awareness days.
