

KANGAROO

CARE

IN THE

NICU



“

The care of premature babies carried skin-to-skin with the mother. It is a powerful and easy-to-use method to promote the health and well-being of infants born preterm and full-term

”

-The World Health Organization

BACKGROUND



Kangaroo care was reintroduced in 1978 in Bogota, Columbia as a way to provide care for LBW infants in overcrowded low-resource neonatal units.



Recommended by:

- World Health Organization (WHO)
- American Academy of Pediatrics
- Academy of Breastfeeding Medicine
- Neonatal Resuscitation Program



In 2003, the WHO recognized Kangaroo care as the most effective way to maintain body temperature, stimulate the senses, and provide maternal love for the newborn infants.

INTERESTING FACTS

1	3 or more hours of kangaroo care has been shown to decrease Finnegan scores in infants with NAS. (5)
2	Infants with NAS have demonstrated decreased pain scores and improved sleep patterns when kangaroo care was initiated with their mothers. (6)
3	The number of infants of substance-abusing mothers transferred to the NICU decreased by 67% since birth kangaroo care began routinely practiced. (4)
4	Kangaroo care is not harmful to preterm infants as young as 28 weeks and can be provided for prolonged periods without compromising the infant. (1)
5	At least 90 minutes of kangaroo care per day during the first 2 weeks of life significantly decreases preterm and maternal blood cortisol levels and improves weight gain. (3)

PRE-TERM INFANT OUTCOMES

- reduced mortality rates [2, 3, 4, 7, 9, 10],
- decreased rates of infections and sepsis [2, 3, 4, 7, 9, 10],
- improved temperature management [2, 3, 6, 9],
- improved weight gain and growth [4, 6, 9, 10],
- improved motor and sensory development [1],
- more stable breathing [2],
- improved sleep [8],
- more stable heart rates [8],
- improvements in brain activity and cognitive development [1, 2, 4, 6, 8]
- long-term social and behavioral outcomes [1].



PARENTAL OUTCOMES

- increased breastfeeding rates [3, 4, 6, 7, 8, 9, 10],
- shortened length of stay [2],
- improved attachment between infant and parents [1, 3, 6, 8],
- improved stress levels for parents and infant [3, 5, 6, 10],
- parents become less likely to develop mental health issues [1, 8, 10],
- parents become more confident and competent in their role [1, 3]
- improved parental involvement in all aspects of care for the baby [3, 8].



THE CHEMISTRY

- Prolonged skin-to-skin contact increases oxytocin in the mother. It leads to overall feelings of well-being, increased breastmilk production.
- The infant's body releases oxytocin in response to the skin-to-skin contact.
- Boosts infants immune system to produce T-cells and suppress inflammatory cytokines.
- During KMC, protective microbiota are transferred from the mother's skin to the infant, thus enhancing the infant's immune function.
- Early skin-to-skin contact activates the meso-corticolimbic system which, supports the development of neural circuits involved in social cognitive processes.

FACTORS TO CONSIDER PRIOR TO KC

- **Plan:**
 - schedule time with parents
 - at least 1 hour
- **Explain what is involved:**
 - wear a gown/shirt with front opening
 - provide blanket for baby to maintain body temperature
 - recliner chair
- **Prepare baby:**
 - secure all lines and monitor leads
 - ensure there are no tangles and lines are long enough
 - provide a warm hat
 - provide privacy



**STANDING KC TRANSFER
INSTRUCTIONAL VIDEO**



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