

KANGAROO MOTHER CARE AND BREASTFEEDING

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Rationale- Nearly 4 million newborns die each year; 75% of these deaths occur in South Asia and sub Saharan Africa. Approximately 2.5 million newborn deaths could be prevented annually by improving access to low-tech interventions.

Indian Scenario - Approximately 27 million babies are born every year in India and 9 million (30%) are low birth weight (LBW) and are responsible for 75% neonatal mortality.

Kangaroo Mother Care (KMC) – is an effective means of meeting babies' need for warmth, nutrition, protection from infection, safety and love.

Researches conducted from 2002 to 2008 at Mumbai revealed:

1) Randomized Control Trial – Kangaroo Mother Care v/s Conventional Method Care (2002-2004) Exclusive breastfeeding rate in KMC 98% v/s CMC 76%, Hypothermia, Hypoglycemia, Apnea, Sepsis significantly reduced, Wt gain/day, significantly increased in KMC, Babies reached full feeds & breastfeeding earlier and significant decrease in use of MCT oil & cow's milk in KMC babies

2) Kangaroo Mother Care (KMC): A cohort study on impact of duration of KMC on mortality, morbidity, duration of hospital stay and breastfeeding (2004-2005)

Follow up rate was 95.5%; 95% gave exclusive breastfeeding and 5 % gave mixed breastfeeding. Major and minor illnesses were seen most often in the ≥ 20 hr group. Two babies died in ≤ 20 hrs KMC before reaching CDOB, Statistically significant ($p=0.001$) decrease in the duration of hospital stay 6.2 days in babies receiving KMC in 2005, as compared with that of 1999, when KMC was not practiced.

3) KMC, Breastfeeding & Growth and Development - NICU graduates (2005-2007)

Exclusive Breastfeeding at CDOB 100%, at 3 months 94%, at 6 months 88% and 9-12 months 100% BF+CF, regained BW earlier & Intrauterine accretion rate of $>15\text{g/kg/day}$ noted in both, but more no. of times in longer duration KMC 227v/s169. Head growth at 3 months was significantly higher in longer KMC. Growth parameters, Neuro motor, psychomotor development & Neuro Sensory outcome were comparable.

4) Effect of SSC & Breast milk on Pain related behavior in Preterm during Heel-lancing (2005-

2007) - Prospective RCT

60 Stable Preterm with postnatal age <4 weeks- Significant decrease in the duration of Cry and Grimace in Skin-to-Skin Contact and EBM groups as compared to controls.($p < 0.05$); SSC – more effective than EBM.

Conclusions- BF rate at CDOB 95-100% & Exclusive BF of 6 months 88% & BF along with CF at 1 yr 100% & reduction in requirement of MCT oil & cow's milk. KMC babies regained birth wt. earlier & attained IU accretion of $>15\text{g/kg/day}$, morbidity, hospital stay & mortality reduced, with improved Growth & Development.

