

GROWTH AND DEVELOPMENT IN KMC-NICU GRADUATES



Rekha H Udani, Ashish Satpathy, Ruchi N Nanavati
Seth G S Medical College & KEM Hospital, Mumbai, India
D Y Patil Medical college & Hospital, Navi Mumbai, India

Background:

Global experience & randomized control trials have shown the benefits of Kangaroo Mother Care (KMC) & it can be applied everywhere including peripheral community hospitals. The evidence related to growth & development in KMC recipient is limited and so the present prospective cohort follow up study was undertaken. Aims: 1) To study the growth & development (Neuromotor, Neurosensory, Psychomotor) in KMC- Neonatal intensive care unit (NICU) graduates $\leq 1800g$. 2) To study the exclusive Breastfeeding rate at 6 months and at 1 year. Material and Methods: All stable neonates weighing $\leq 1800g$ were included & babies whose mothers unwilling to participate, multiple pregnancy, babies with chromosomal abnormalities & life threatening abnormalities were excluded. The duration of KMC provided per day was noted in KMC charts in NICU and at home. Babies were grouped in 2 different groups, group A-Continuous KMC where the duration of KMC provided was ≥ 12 hrs/day, & group B-Inadequate KMC where the duration of KMC was <12 hrs/day. During follow up anthropometric parameters of all babies were noted. Neuromotor examination by Infant Neurological International Battery (INFANIB) was done at 3, 6, 9 & 12 months & psychomotor examination by Griffiths scale was done at 6 & 12 months of corrected age & ROP screening & Hearing screening was done. Results: There were 1865 deliveries out of which 289 (7.41) babies were weighing less than $\leq 1800g$. 145 babies met with inclusion criteria and were followed up till 12 months CDOB. There were 115 preterm babies: in group A (n=69) with birth weight of $1412 \pm 247.8g$ & in group B (n=46) with $1419.1 \pm 253.4g$ and 30 babies were term SGA, with birth weight of $1608.4 \pm 148.6g$ in group A (n=20) & in group B (n=10) with $1645.4 \pm 65.3g$. Growth achieved in group A was better & comparable to intrauterine accretion rate during the 3rd trimester. Growth indices were comparable for weight & length at 3, 6, 9 & 12 months corrected date of birth (CDOB) except for head circumference between CDOB to 3 months in group A with KMC intervention ($p \leq 0.02$). Abnormal INFANIB at 3 months in AGA was 62.5% and 25% in SSGA when those babies were examined at 6 months, DQ in AGA babies were 85 and of SSGA babies were 36.5. No difference was found between the 2 groups in proportion of infants with cerebral palsy, psychomotor delay, visual and auditory impairment at 6 months & 1 yr of CDOB.

OP10

Rekha H. Udani. M.D. (Pediatrics)

M.B.B.S -1970, M.D(Pediatrics)1974, from University of Delhi, India

Professional Experience: -

Worked as a faculty member as Assistant Professor, Associate Professor, Professor & Head Department of Pediatrics & Neonatology, Professor Emeritus in Dept. of Neonatology, KEM Hospital, & Seth G.S. Medical College, Mumbai , Prof.& Head Neonatology at Dr D Y Patil Medical college & Hospital. 1977 till date.

Kangaroo Mother Care Director-Coordinator, KMC Project by Saving Newborn Lives, Saving Children, Bill Gates & Melinda Foundation (US), from September 2004 till 2007.

KMC initiated in 2000 in KEM Hospital; KMC Practice at Bogota with Nathali Charpak in 2003.

Position held/ organization of workshops and seminars:

- i) President & Vice President of Mumbai Branch of NNF, MBPC.
- ii) Steering Committee member in International Networking in Kangaroo Mother Care(INK) from 2010
- iii) Presented 250-300 research papers in International & national Conferences-1978-2011, Conducted 150-200 workshops on Breastfeeding & Kangaroo Mother Care-1989-2011 including KMC W/S in Nepal in April 2007, Guest lectures & Orations - Various places in India & abroad – UK, Hong Kong and Colombia, Bangkok,.

Publications- Research papers in approx. 180 -200 various National & International Journals. Editor-books for New Born Care & Kangaroo Mother Care & Breastfeeding for Consulting Pediatricians, Post graduate students (MD, D.Ch) Nursing Personnel and Community Health Workers & Mothers.

Outstanding Achievements:

- i) Recipient of Heinz fellowship for training in Neonatology at UK. ii) National & International Project – ICMR, Magpie, Kangaroo Mother Care iii) Making a centre of Excellence in Kangaroo Mother Care at KEMH iv) Recipient of Life time Achievement Award on 1st August 2007 by Mumbai Breastfeeding Promotion Committee v) Video CD on Kangaroo Mother Care for health Personnel & Mothers giving Kangaroo Mother Care vi) Recipient of “Vocational Excellence Award 2008” in Kangaroo Mother Care by Rotary club Pune Uptown.

