

OUTCOME OF KMC IN TEACHING HOSPITAL IN RURAL INDIA

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Background:

LBW care by conventional means is both expensive and associated with a high risk of poor outcome. KMC may be the answer to humanize high technology and provide comprehensive low cost care for the LBWs.

Objective & design :

In this hospital based prospective study, we evaluated impact of KMC on LBW care and compared with CMC. Study duration June 2007 to May 2009.

Setting :

Teaching Hospital in Rural India.

Subjects & interventions :

Intramural neonates (<2000gms) were evaluated for enrollment in KMC after stabilization & followed till CDOB. Using follow-up as a surrogate marker for morbidity/mortality the acceptability and efficacy of KMC was assessed. A total of 287 neonates selected for study were enrolled on KMC, of which those who demonstrated discomfort were given CMC, formed control group.

Outcome measures: Primary:

To determine the morbidity pattern, survival/mortality during the neonatal period. Secondary: To determine growth and development at 4months from CDOB.

Results :

Out of 287 neonates taken for study, 146 (50.87%) were male and 141 (49.13%) were female. In this study of 287 babies; group ≤ 1000 gms 3 of 3(100%) got KMC, of 76 babies (1001--1500gms): 68(89.48%) babies got KMC and 8(10.5%) babies got CMC, of 208 babies (1501-2000gms): 112 (53.84%) babies got KMC and 96 (46.15%) babies got CMC. Overall 183(63.76%) of 287 babies got KMC vs. 104(36.23%) babies on CMC. In KMC-preterm 140, full term 43 while in CMC- preterm 72, full term 32. Mean \pm S.D. wt. gain/day in KMC was 17.64 ± 2.31 gms and in CMC was 10.81 ± 1.02 gms i.e. significant ($p<0.01$). More KMC babies were exclusive breast fed earlier compared to CMC. Mean duration of hospital stay after enrolment among study group was 45.05 ± 3.56 days and among control group was 29.02 ± 2.46 days because of a KMC ward where they were continued on KMC and followed up for adequate weight gain before discharge. Early discharge is not possible in a rural area like ours where people are of poor socioeconomic status, living in remote areas with constraints

on both means of travel and communication for close follow-up. Clinical problems : Hypothermia KMC (26.22%) CMC (39.42%) ($p<0.05$); Hypoglycaemia KMC (24.59%) CMC (30.76%) ($p<0.05$); Sepsis KMC (13.66%) CMC (15.38%) ($p<0.01$); Hypoxia KMC (12.56%) CMC (26.92%) ($p<0.05$); Apnea KMC (6.01%) CMC (8.65%) ($p<0.05$). Anemia (% of blood transfusion) in KMC (25.13%) & CMC (26.92%). 199 out of 287(69%) came for follow up. Of 199 on follow-up 145(72.86%) were KMC and 54(27.13%) were CMC. Among ≤ 1000 gms, 2 KMC babies (M1, F1); among 1001-1500gms, 51 KMC (M26, F25) & 6 CMC (M2, F4); among 1501-2000gms, 92 KMC (M46, F46) & 48 CMC (M27, F21). INFANIB scale assessment was normal range at CDOB. Follow-up shows more acceptance, efficacy and safety of KMC over CMC.

Conclusions :

KMC is the humane & physiological answer for comprehensive low cost care for LBWIs, a feasible intervention, acceptable and appealing, to most of our mothers both in hospital and at home, enhancing both survival and quality of life.

Recommendations :

Necessity of KMC ward incorporating ten steps & High risk neonate follow-up clinic.

Keywords :

Breastfeeding, Conventional Method of Care, Kangaroo Mother Care ward, LBW follow-up, Weight gain

