

Role of Kangaroo Mother Care (KMC) in management of Premature

Vijay Dahiya

PGIMS, India

Abstract

Introduction: Approximately 15 million babies are born prematurely each year globally. Out of these 1 million dies each year. Preterm births around the globe are responsible for 35% of world's neonatal deaths.

India has the highest number of premature births & maximum number of neonatal deaths occur due to prematurity. Incidence of Low Birth Weight in India is about 27% of total live births.

Babies that are born before 37 weeks of pregnancy are labeled as premature. Over 80% of such premature are born between 32 to 37 weeks of gestation. Most newborn deaths during this period occur due to lack of simple, essential case such as warmth and feeding support.

The burden of preterm birth is enormous in developing countries & provision of some low tech, cost effective interventions can help to reduce newborn deaths from prematurity.

Kangaroo Mother Care (KMC) is a low cost, evidence based standardized care for premature newborn having high impacts. It can reduce approximately 50% of all preterm newborn deaths.

KMC is thermal care through skin to skin contact provided to preterm babies preferably by mother or else by other family members.

When provided by mother it also support the exclusive breast feeding better neurodevelopment & encourages bonding between mother & infant.

KMC is originally adopted from Kangaroo an animal found in Australia that delivers a premature baby & keep it in her pouch where the baby gets warmth & exclusive breast feeding till it is mature to survive outside.

It is now evidence based that KMC is found to reduce mortality in premature infants besides reducing severe infections, esp. nosocomial infections, hypothermia & prolonged hospital stay.

In many studies KMC has been found more effective than incubator care for stable preterm babies in providing thermal care, reducing nosocomial infections, improving exclusive breast feeding & adequate weight gain beside enhancing mother & baby bonding & involving family in baby care at a much lower cost as compared to incubator care.

It also shorten the hospital stay early & proper adoption of home care once the baby is discharged from hospital.

As all the basic requirement like infrastructure, human resource, IEC- Facilities were available at Mukand Lal Distt. Civil Hospital, Yamuna Nagar, so an 8 bedded KMC Unit was established in a dedicated space in vicinity of Special Newborn Care Unit (NCU) on 09th February, 2018. There are 4 dedicated KMC Workers who has been recruited for this work only. They are working along with other SNCU staff like 3 Medical Officers, 10 Staff Nurses, 1 Counselor, 1 Data Entry Operator and 4 Ward Servants under the supervision of SNCU Incharge Pediatrician. A planned and protocol based strategy was adopted regarding initiation of Kangaroo Mother Care based upon birth weight of preterm newborns. Babies born with birth weight more than 1800 gm but less than 2500 gm were put on KMC immediately after birth. Once such babies stabilized & parents acclimatized / trained in KMC, such babies were shifted to Post Natal ward and KMC continued. Birth weight between 1200 gm to 1800 gm may have significant problems in the neonatal ward. These babies need SNCU or Intensive Care. Such babies can be put on intermittent KMC, when the babies are hemodynamically stable. New born with birth weight less than 1200 gm may have serious prematurity related complications. KMC in such cases can only be started after few days or weeks once these babies are hemodynamically stable.

So based upon these protocols a total number of 376 preterm new born were admitted in KMC ward. Out of these 143 babies were in birth weight range of 1800 gm to 2500 gm (Cat-A), 218 were in the range of 1200 gm to 1800 gm (Cat-B) and 15 babies were from less than 1200 gm (Cat-C).

Out of 143 babies (Cat-A) 139 babies were put on KMC immediately after birth and 3 Babies were put on KMC on 3rd Day of Birth and 1 baby was started on intermittent KMC on 5th day of birth and was put on regular KMC on 6 day of birth as the baby was kept in SNCU as a case of suspect sepsis.

Out of 218 babies (Cat-B) 158 were put on intermittent KMC immediately after birth or 48 were put on intermittent KMC on 2nd day of birth 12 babies could be put on intermittent KMC some days ranging from 2 to 6 days. All the babies except 4 were put on regular KMC within a range days of 7 to 14 days.

Out of 15 babies (Cat-C) intermittent KMC could be started with in 2nd week in 10 babies and within 3 to 4 weeks in rest of the 5 babies.

Majority of the Cat-A babies (128 out of 143) were shifted to postnatal ward in First week of birth and subsequently discharged with in 2nd to 3rd week of birth from the post natal ward. one baby who developed early signs of septicemia was kept in SNCU and subsequently discharged.

Out of 218 (Cat-B) more than 200 patients (203) were subsequently put on regular KMC in 2nd or 3rd week after birth. Most of the patients 196 were discharged in duration from 3 to 4 weeks after birth. While 22 babies were kept in KMC / post natal ward beyond 4 weeks of birth. All the babies except 4 were subsequently discharge from hospital while 4 has to be referred to the Tertiary Care Centre.

Out of 15 (Cat-C) babies KMC could be intermittent KMC initiated in 4 babies with in 3rd to 4th week in 7 babies after one month and 4 babies KMC could not be initiated as they were refer to higher centre.

All the patients who were given KMC care are on regular Community Based and Facility Based Followups and gaining weight appropriately. So it was concluded that KMC is a cost effective and highly efficient methodology for treatment of Preterm New Born Babies.



Biography:

Dr. Vijay Dahiya joined Haryana Civil Medical Services as Medical Officer in 1993 & he passed his MD Pediatrics from PGIMS Rohtak in 2004 as in Service Candidate. He is having total Post PG experience of 15 Years in Pediatrics.



[23rd Global Summit on Pediatrics, Neonatology & Primary Care, Istanbul, Turkey– June 12-13, 2020](#)

Abstract Citation:

Vijay Dahiya, Role of Kangaroo Mother Care (KMC) in management of Premature, Pediatrics Meet 2020, 23rd Global Summit on Pediatrics, Neonatology & Primary Care; Istanbul, Turkey - June 12-13, 2020
<https://pediatricsummit.conferenceseries.com/middleeast//2020>