

Kangaroo Mother Care: Dhaka Shishu (Children's) Hospital Experience

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Arctic Ocean



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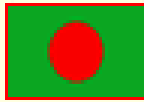
EUROPE

TROPIC OF CANCER

AFRICA

TROPIC OF CAPRICORN

INDIA



DHAKA

BURMA

Bay of Bengal
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1500 km

66°30' N

23°5' N

23°5' S

AUSTRALIA

Pacific Ocean

OCEANIA

Bangladesh Background

- Area: **147,570 km²**
- Population: **160 million**
- GNI per capita US Dollar (2012): **840**
- Birth rate (2012): **22.53/1000 population**
- Life expectancy at birth (2012): **70.3 years**

Health Situation

- **Maternal mortality rate (2012): 170/1000 LB**
- **Under 5 mortality rate (2012): 41/1000 LB**
- **Infant mortality rate (2012): 33/1000 LB**
- **Neonatal mortality rate (2012): 24/1000 LB**
- **Preterm birth rate: 21%**
- **Exclusive breast feeding <6m (2008-12): 64.1%**

Preterm babies in Bangladesh

- **45% of all newborn deaths are directly related to prematurity and its complication.**
- **Despite the proven effectiveness of KMC, Bangladesh has little experience of KMC in public health systems.**
- **In 2013, national consensus has been built for rapid scale-up of KMC in Bangladesh.**

Study in Dhaka Shishu (Children's) Hospital



Objective

- **Substantiate the efficiency of KMC in our setting**
- **Help the government in scaling-up this simple method in public health facilities with the necessary skills for KMC practice.**

Method

- **Period: July 2013 to December 2013 in collaboration with WHO.**
- **The KMC service was embedded in our newborn ward**
- **Nurses and doctors received orientation and basic training**

Inclusion criteria

- **Hemodynamically stable**
- **Preterm babies >1200gm**
- **Cases - 60 neonates**
- **Controls - 40 neonates**
 - **who refused to give consent for KMC and/or admitted during evening/night shift and continued Cot/incubator care.**



Table- I: Baseline characteristics (n=100)

Sex (M:F)	1.2:1	1.15:1
Mean admission wt (gm)	1481.5 ±1.03	1419.5 ±2.96
Mean gestational age on admission (wks.)	30 ±1.49	32 ±2.54

Table- II: Effects on Feeding

Time of initiation of breast feeding (days: mean±SD)	5.66 ±3.66	5.00 ±4.24	0.41
Time of achieving full feed (days: mean±SD)	4.33 ±2.87	4.8 ±2.8	0.73

Table- III: Effects on Apnea and Hypothermia

Apnea	5 (8%)	6 (15%)	0.024
Hypothermia	2 (3%)	12 (30%)	0.0002

Table- IV: Hospital stay and Weight gain

Mean Hospital stay (days: mean\pmSD)	15.61 \pm 10.56	18.15 \pm 4.5	0.1545
Weight gain (gm: mean\pmSD)	299.41 \pm 219.27	126.00 \pm 347.74	0.0029

Table- V: Outcome

Mortality	2 (3%)	3 (7.5%)	0.3490

•2 babies from KMC were shifted to incubator for deterioration (repeated hypothermia).







Conclusion

- **In our setting KMC has also proved its effectiveness in better thermal control, apnea reduction, weight gain and shorter hospital stay.**
- **We hope it will help in boosting our confidence and motivation that KMC is feasible in health facilities as well as in the community of Bangladesh.**

Other experience in Bangladesh

- **KMC was initiated more than a decade ago at a faith-based hospital in northern rural Bangladesh- LAMB Hospital.**

KMC at LAMB Hospital

- Started in 1998**
- More than 4000 babies given KMC from facility**
- Initially difficult to do well**
 - Barriers: doctors, nurses and families**
- Now routine care for all babies under 2500g at LAMB Hospital**
- Mortality decreased as quality of KMC improved**
- LAMB KMC bag found to be very helpful.**
- Recently KMC started in LAMB Community**

Asha story

- **“Asha” was born in LAMB Hospital, in rural Bangladesh 8 weeks early (32 weeks), weighing only 1250g.**
- **LAMB nurses and doctors immediately helped her start KMC**



KMC at ICDDR,B- Matlab

- Started at 2007**
- Total patients -162 up to 2009**
- AGA -49%**
- SGA -26%**
- Term with SGA-25%**
- Death -11 (ELBW & Septicemia)**
- Others discharged with breast feeding**



Dhaka Shishu (children's) hospital KMC Team



Thank you all