

Immediate Kangaroo Mother
Care implementation
in Nigeria

The Study Facility

Obafemi Awolowo University, Ile-Ife



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The Neonatal Ward – pre IKMC



- Has been doing KMC in a 10 bedded room which is linked to the SCBU by a door
 - Stable babies only and
 - 50 bedded NICU
 - 20 nurses running shifts
 - 1 consultant, 1 SR, 1 registrar and two House officers
 - A seminar room
 -

Preparation for IKMC study

- Training of Health care workers in the neonatal ward
- Training of Research Staff
- Adaptation of WHO minimal Care package
- Upgrading of infrastructures
 - CPAP
 - Phototherapy Stands
 - Pulse oximeters
 - Warmers
- Mobilization

Preparatory Phase

- Training of Health care workers in the neonatal ward
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- Created Awareness

- Highlight magnitude of problem
- KMC cost-effective strategy
- Support by evidence for buy-in

Among

- Hospital Community
 - Health care workers in NNW and Obstetrics
 - Catchment area
- Advocacy
 - Hospital Leadership
 - Community Leadership

Preparation: Training

Training of health workers



Training of Research Assistants



Intercountry consultation on scaling-up KMC in South-East Asia

Preparation: Training components

- WHO Minimum Package of Care (MPC)
 - Thermoregulation
 - Resuscitation
 - Respiratory care (CPAP, Oxygen & monitoring)
 - Hygiene, infection control
 - Feeding (fluids, milk and breastfeeding)
 - Early enteral feeding
 - Breastfeeding
- Minimum Package for MOTHERS

Preparation: Training components

- iKMC Intervention:

- Immediate skin-to-skin contact (SSC)
- Safe transfer
- Intervention - Continuous SSC unstable (72h)
- All enrolled – Continuous SSC when stable
- Support for breastfeeding (early expression, etc)
- Safe technique

Adaptation of the WHO Minimal Care Package

- Equipment present Pre-study
 - Five functioning incubators
 - One resuscitaire
 - Oxygen cylinders
 - Three Pulse oximeters
 - Four functioning phototherapy stands
- During study
 - 20 Pulse oximeters
 - Continuous and ambulatory with appropriate probes
 - 10 CPAP machines
 - Six functioning incubators
 - 8 Led Phototherapy machines
 - 4 Radiant warmers
 - Bilirubinometer and microhematocrit reader

Conversion of Seminar room to Stable KMC ward

- 10 Adjustable Beds
- Wall Thermometer
- Resuscitation corner
 - resuscitaire, oxygen, ambu bag and suctioning machine
- Television
- Toilet facilities



Study

- KMC rooms within NICU (M-NICU)
 - Wall thermometer
 - Warmer
 - Phototherapy stand
 - C-PAP
 - Pulse Oximeter
 - Reclining Chair
 - Bed with adjustable headrest
 - Suctioning machine



Transfer from Labour Ward Theatre



Surrogate mother with Baby



Mother in IKMC Ward



Follow-up Visit

Follow-up Visit



Follow -up

- See once a week until baby's weight is 2500g
- Then see once a month until aged 12 months then continue until 24 months post conceptual
- See anytime danger signs appear

Implementation Challenges and solutions

• Hypothermia

- Pre-warmed Kanga carrier
- Hot water bottles
- The resuscitation and iKMC rooms heated
- Radiant warmer in all the iKMC rooms
- Windows in the iKMC room remain closed
- Constant electricity

Neonatal Jaundice

- Bilirubinometer in the side lab
 - Minimized frequent physical examination
 - Enabled frequent (6hourly) bilirubin checks
- Intensive phototherapy machines
 - Optimized mother-separation time
- Intermittent phototherapy

Implementation Challenges and solutions

- **Duration of KMC**

- Intensive Counselling during pre-consenting
- Availability of surrogates
 - Most were either grandmothers or sisters.
- Allowing relatives into the MNICU
- Babies on CPAP were placed on continuous monitoring as well as in KMC at the same time (simultaneously).

- Delayed Maternal transfer

- Collaboration with Obstetricians
- MNICU transfer within two hours of delivery if clinically stable. (Well-defined criteria for assessing stability).

Quality assurance

- Random quality checks by the supervisors
 - during observations
 - when obtaining information
 - consent taking
 - clinical observations.
- Random checks by the Principal investigator
- Verification of forms by the supervisors and data clinician

Comments by Mothers and health care staff

We spent fewer days in the hospital number of days as the weight gain was faster

Mothers randomized to standard incubator care commented they would have preferred iKMC.

It saved us a lot we would have spent on incubator

I continued at home.

This is my second time doing IKMC and I love it.

- Health care staff
 - It reduced our work burden

Thank You for listening

