

Skin-to-Skin Care

Jean Musonda Chintende-BSc(Hons) Critical Care Nurse, MSc
Cardiac Nursing Student -Birmingham City University,
Women and Newborn Hospital, Zambia

Laura Maguire, Course Lead Neonatal Critical Care, Senior
Lecturer, Birmingham City University, United Kingdom

Kangaroo Mother Care



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Pine Koala Sanctuary



<https://littlesteps.co.za/know-your-premmie/>

Aim and Learning Outcomes

1. Define Kangaroo Mother Care
2. Mention the types of KMC
3. Explain the components of KMC
4. Discuss the benefits of KMC



KMC Background

1. **Simple and inexpensive way to care for the pre-term baby**
2. **Method first introduced in Bogotá, Columbia to address overcrowding-NICUs by Dr Martinez and Rey**
3. **Four and half decades since 1979 of implementation and research –More than alternative to incubators (Benefits)**



Introduction

- KMC is a simple, inexpensive way to care for Low Birth weight (LBW) Newborns
- KMC is effective for thermal control, breastfeeding and bonding in all newborns, irrespective of setting, weight, gestational age and clinical conditions
- It is a safe and effective alternative to incubator care for LBW babies.



Definition

- It is an early, prolonged and continuous skin-to-skin contact between a mother **or a substitute of the mother** and her low birthweight infant, both in hospital and after early discharge, **until at least the 40th week of post-natal gestational age**, with ideally exclusive breastfeeding and proper follow-up”



Types of KMC

1. Immediate KMC (New concept)
2. Intermittent KMC
3. Continuous KMC



Immediate Kangaroo Mother Care (iKMC)

- **IKMC**- keeping the mother and the baby together immediately/ or within 2 hours of birth with zero separation 8-24 hours per day of KMC
- Both mother and baby nursed in the same room (**M-NICU**) and reviewed by multidisciplinary team
- Reduced mortality by 25% (reduced hypothermia, reduced incidence of sepsis) (WHO. 2023)



fundacioncanguero.co/PFMMC/en/docs/KMCM/2. THE KANGAROO POSITION.pdf

Eligibility Criteria for Standard KMC

- A stable preterm or Low birth weight baby
- The baby should be free from major illness e.g. septicaemia, Pneumonia, Respiratory distress and Convulsions
- Mother should be willing to do KMC



1. Continuous KMC

- KMC continuously practiced ideally for 24 hours a day except for very short periods when the mother requires to attend to her personal needs.
- This requires support from other family including the husband. This type is usually done on stable babies



2. Intermittent KMC

KMC practiced intermittently for clinically unstable, sick, or very small babies that can only tolerate being KMC for a few hours

Indications

- Babies who have been started on antibiotics for suspected infection
- Babies on nasal oxygen
- Babies on CPAP
- Babies under phototherapy
- Mothers not able to practice continuous KMC



Dad And Baby Skin To Skin Stock Photos, Pictures & Royalty-Free Images - iStock

Benefits of KMC - Baby

- Improved cardiac and respiratory stability.
- Fewer episodes of desaturation & apnea.
- KMC can successfully treat mild respiratory distress.
- Improved gastrointestinal function.
- Initiation and increased duration of breastfeeding leading to satisfactory weight gain
- Decreases energy expenditure
- Bacterial colonization/Protection against infections
- Effective thermal control
- Neonates are much less stressed and this provides neurological protection.
- Improved neuro - development
- Better organised sleep patterns

Benefits of KMC - Mother

- Confidence in caring for her infant is boosted
- Improved bonding with infant due to the physical closeness.
- Empowered to play an active role in their infant's care
- Enabled to become the primary care giver of the infant
- Breast feeding is promoted

Benefits of KMC - Hospital

- Significant cost-savings as well as better outcomes
- Less dependence on incubators
- Less nursing staff necessary
- Shorter hospital stays
- Improved morale & quality of care.

Initiation of KMC

- The initiation of KMC depends on the condition of both the mother and baby.
- It is necessary to assess each mother baby pair separately as they will each have their own unique circumstances to be considered.
- To prepare the mother for KMC, discuss and counsel the mother on the type of KMC to be used, feeding, care of the baby, dangers signs and Dos and Don'ts.



KMC Requirements

- An adult (Mother, Father or Guardian)
- Wrappers
- Towels
- Head gear
- Napkin
- Socks



Components of KMC

There are 4 components of KMC

- Kangaroo position (skin-to-skin contact-warmth):
- Kangaroo nutrition
- KMC support
- KMC Discharge



Kangaroo position

- Dress the baby in a nappy, hat and socks
- With the mother's top open, place the baby between the mother's breasts in an upright position
- Ensure that the baby's head is turned on one side in a slightly extended position to keep the airway open and allow eye contact between mother and baby
- Place the wrapper and tie firmly enough so that when the mother stands up the baby cannot slide out



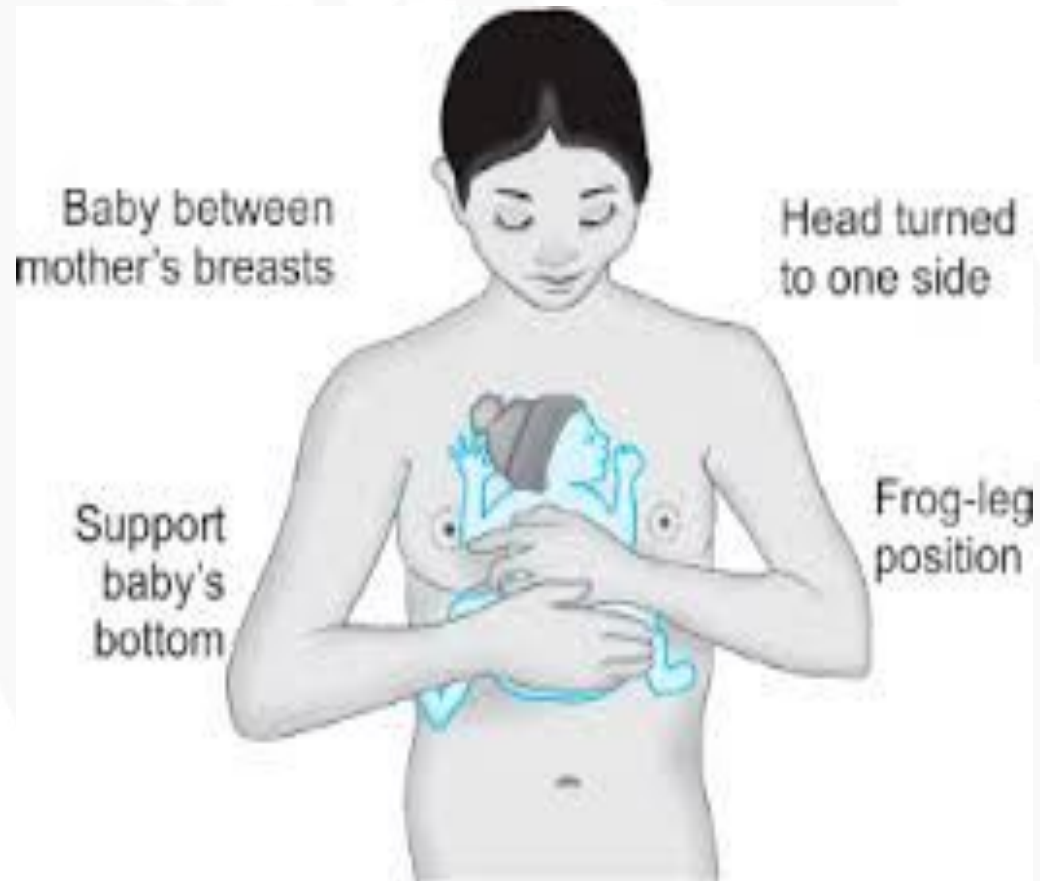
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- Ensure the top of the wrapper is just beneath the baby's ear
- Ensure that the tight part of the cloth is over the baby's chest
- The baby's abdomen should not be constricted and should be somewhere at the level of the mother's stomach. This way the baby will have enough room to breathe. The mother's breathing stimulates the baby to breathe
- The thighs should be flexed at the hip joint in a frog like position

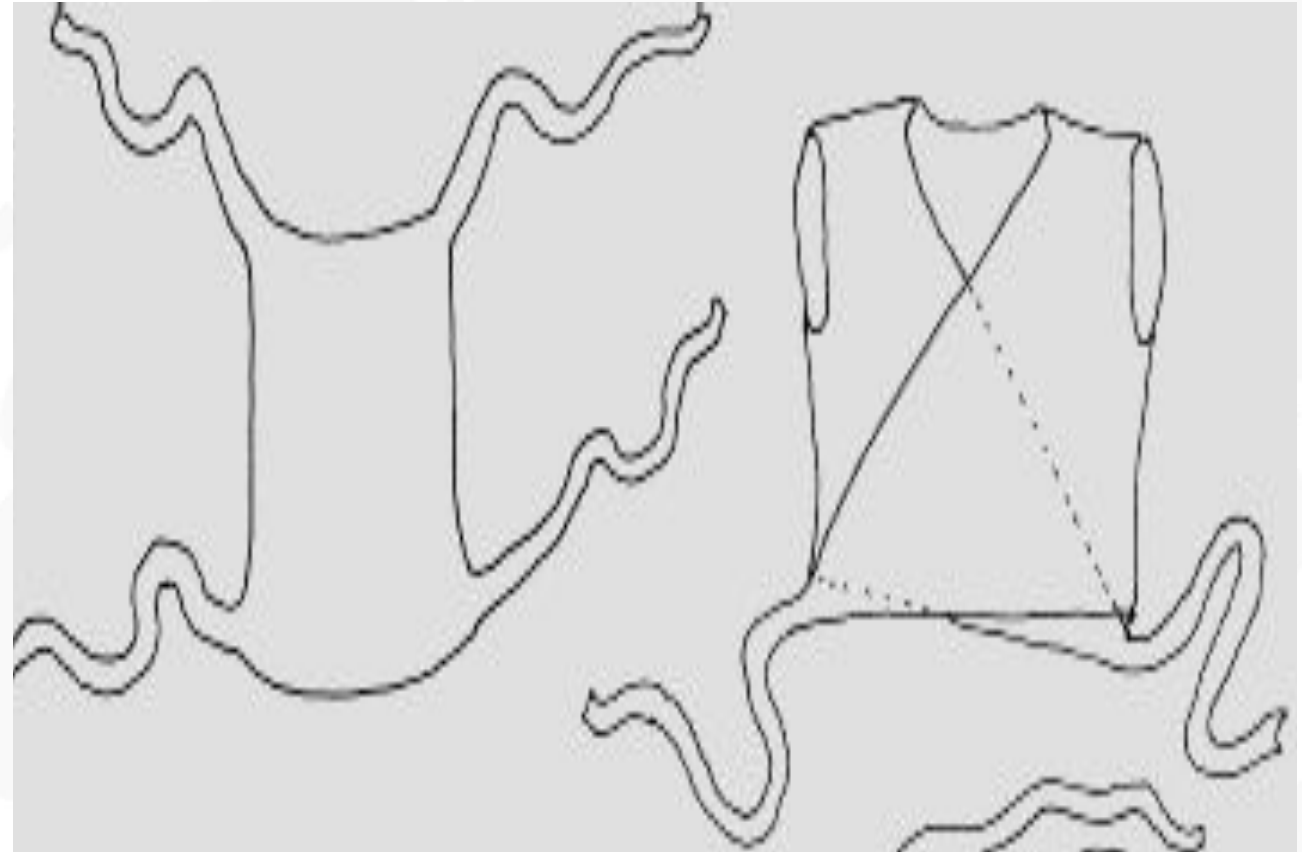


unhcr.org/sites/default/files/legacy-pdf/601bee014.pdf

Initiating KMC



Examples of Different Binders



Kangaroo Nutrition

- Before the baby is able to totally breastfeed, some babies need the help of other methods of feeding such as tube, cup or syringe.
- Other babies are able to move straight from expressed breast milk given by tube, cup or syringe to exclusively breastfeeding.
- Explain to the mother that she can breastfeed her baby while in KMC position.
- Ask the mother to breastfeed at regular intervals every 2-3 hours until the baby shows satisfactory growth and reaches 2500g



Kangaroo Nutrition



up.ac.za/media/shared/717/KMC/feeding-for-preterm-lbw-infants_technical-resource-doc_v1.2-2023-10-23.zp243054.pdf



rnz.co.nz/national/programmes/afternoons/audio/2018837742/our-changing-world-the-diamond-study-of-nutrition-for-preterm-babies



[A Simple Device For Helping Premature Babies Breast-Feed - Fast Company](#)

KMC Support

- A mother needs physical and emotional support from the whole range of people.
- Emotional support is provided through encouragement and reassurance
- Physical support with household chores is needed in the first few weeks, so that she can get rest.
- Encourage to continue practicing KMC at home.
- Educate and sensitize the community on the importance of KMC for LBW newborns.



iris.who.int/bitstream/handle/10665/42587/9241590351.pdf?sequence=1

Monitoring of babies on KMC

- Vital signs should be done at least every **4 hours**
- Monitor activities, colour, intake and output
- More frequent monitoring is needed, **at least every 2 hours** if there is a problem

Monitoring charts

- Weight chart
- Feeds chart
- Vitals (TPR) chart
- KMC Scoring Sheet



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KMC DAILY/PRE-DISCHARGE READNESS SCORING SHEET

KMC Daily Score Sheet Based on the Intra-hospital KMC Training Programme in Bogotá, Colombia				Date →																		
Name:		Breastfeeding:	Started 24h KMC:	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16	Day 17	Day 18	
Reg No:		Formula:	/...../.....																			
Evaluation	Score			Weight →																		
	0	1	2	Remarks																		
Socio-economic support	No help or support	Occasional help or support	Good support system																			
Mother's milk production	Expresses 0-10 ml breast milk	Expresses 10-20 ml breast milk	Expresses 20-30 ml breast milk	<i>Must score 2 before discharge. N/A for formula</i>																		
Positioning and latching baby onto breast	Always needs assistance	Occasionally needs assistance	No assistance needed	<i>Not applicable for formula feeding</i>																		
Baby's ability to suckle at the breast / bottle	Gets tired very quickly	Gets tired infrequently	Takes all feeds well																			
Confidence in handling baby i.e. feeding, bathing, changing	Always needs assistance	Occasionally needs assistance	No assistance needed																			
Baby's weight gain per day	0-10g	10-20g	20-30g	<i>Must score 1 or 2 for a few days before discharge</i>																		
Confidence in administering vitamin and iron drops	No confidence	Some confidence	Fully confident																			
Knowledge of KMC	No knowledge	Some knowledge	Knowledgeable																			
Acceptance & application of KMC	Does not accept or apply KMC method	Partly accepts & applies KMC method	Fully accepts and applies KMC method	<i>Applies KMC without having to be told</i>																		
Confidence in caring for baby at home	Does not feel sure or able	Feels slightly unsure & unable	Feels confident																			
TOTAL SCORE per day																						

Ready for discharge: Breastfeeding: if baby and mother score >19



Formula feeding: if mother and baby score >15

Adapted from the Groote Schuur Hospital, compiled by Kalafong KMC Unit

KMC Summary

Considerations for Discharge

Baby

- Feeding well
- Maintaining stable body temperature in KMC position (axillary temperature of 36.5°C – 37.5°C)
- Gaining weight (15g per day on three consecutive days)

Mother

- Capable of breastfeeding and expressing breast milk
- Accepts the method, is willing to continue with KMC at home, and has support from family
- Able to identify danger signs and bring back the baby to the hospital



Counselling of mother and the family on discharge

- The most important element for the mother or guardian to remember is the skin-to-skin contact
- This skin-to-skin contact is to be maintained continuously, as practically, as possible, day and night, even during work, such as preparing food and ironing
- During the time the mother is not able to perform skin-to-skin contact (e.g. when taking a shower or bath), a relative or husband as applicable, can take over

Danger signs Requiring Readmission

- Stops feeding, not feeding well, or vomiting
 - Restlessness and irritable, lethargic or unconscious
 - Fever (body temperature above 37.5°C)
 - Hypothermia - body temperature below 36.5°C) despite rewarming
 - Convulsions
 - Difficulty breathing
 - Diarrhoea
- ❖ If the baby is not gaining weight despite feeding counseling in the previous visit needs to be readmitted

END OF PRESENTATION



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References



Protecting, promoting and supporting breastfeeding
THE BABY-FRIENDLY HOSPITAL INITIATIVE FOR SMALL, SICK AND PRETERM NEWBORNS

