

## Kangaroo mother care: for all small newborns everywhere MAMI Global Network, March 2024

### Acknowledgments

We would like to thank Dr Helen Brotherton for presenting on the topic of **Kangaroo mother care: for all small newborns everywhere** at a recent MAMI Implementers' group meeting and for the following resources. Dr Brotherton is a clinical academic focused on hospital care of the small vulnerable newborn. She is a Consultant Neonatologist and Paediatrician in the Scotland and a Clinical Assistant Professor at MRC Unit The Gambia at LSHTM. Her research interests are centred on improving neonatal outcomes in a global context, including small and sick newborn care, kangaroo mother care and prevention of antimicrobial resistant bacterial acquisition. Her presentation can be found on MAMI YouTube here:

[Video: Kangaroo mother care: for all small newborns everywhere](#) ENN. March 2024.

### Background

Kangaroo mother care (KMC) is a package of care for small newborns. It is a complex intervention that includes the following key components: prolonged skin-to-skin contact, exclusive breastmilk feeding, early hospital discharge, and adequate support and follow-up. KMC works via multiple physiological pathways and oxytocin as a lifesaving practice with several benefits for newborns, mothers and health systems. The evidence base for KMC is strong, with recent research demonstrating that KMC for a minimum of 8hours/day in infants <2.5kg leads to a significant reduction in neonatal mortality and stress response, while also stimulating breastmilk production. The research also highlights that the duration of KMC has a direct impact on neonatal growth, highlighting that continuous KMC promotes weight gain in low birthweight infants (minimum 6 hours/day), with a greater effect on weight gain being reported the longer KMC is provided for.

### Resources

#### Efficacy/effectiveness

Immediate KMC (iKMC trial): <https://www.nejm.org/doi/full/10.1056/NEJMoa2026486>

Early KMC for unstables neonates <2kg (eKMC trial):

[https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(21\)00330-8/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(21)00330-8/fulltext)

#### **Systematic reviews:**

Most recent meta-analysis of KMC efficacy, on which WHO Small Newborn (2022) guidelines are based, including identification of dose-dependent effects (8h/day):

<https://gh.bmj.com/content/8/6/e010728.long>

#### **Previous Cochrane reviews:**

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002771.pub4/full> (2016)

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002771.pub4/full> (2011)

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD002771.pub4/full> (2003)

Minimum 6hours/day KMC needed for growth impact:

<https://pubmed.ncbi.nlm.nih.gov/32683720/>

Evidence for community initiated KMC in reducing neonatal mortality:

<https://pubmed.ncbi.nlm.nih.gov/31590989/>

## Implementation

Barriers and facilitators of facility-based kangaroo mother care in sub-Saharan Africa: a systematic review (from caregivers/HCW/health systems perspectives)

<https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-021-03646-3>

Barriers and enablers of kangaroo mother care implementation from a health systems perspective: a systematic review: <https://pubmed.ncbi.nlm.nih.gov/28973515/>

Kangaroo mother care: a multi-country analysis of health system bottlenecks and potential solutions (from a health systems perspective): <https://pubmed.ncbi.nlm.nih.gov/26391115/>

Barriers and enablers of health system adoption of kangaroo mother care: a systematic review of caregiver perspectives: <https://pubmed.ncbi.nlm.nih.gov/28122592/>

Barriers and enablers to kangaroo mother care prior to stability from perspectives of Gambian health workers: A qualitative study (perceptions towards providing KMC to unstable neonates <2kg): <https://www.frontiersin.org/articles/10.3389/fped.2022.966904/full>

“We all join hands”: Perceptions of the kangaroo method among female relatives of newborns in the Gambia (Qualitative study of female relative's perceptions towards KMC for neonates < 2kg): <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7882999/>

Process and costs for readiness to safely implement immediate kangaroo mother care: a mixed methods evaluation from the OMWaNA trial at five hospitals in Uganda (Cost of implementing immediate KMC): <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-023-09624-z>

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### **Also see:**

[Kangaroo Mother Care – Healthy Newborn Network](#) for guidance, research and country specific experiences, including WHO statements:

- [Global position paper on kangaroo mother care: a transformative innovation in healthcare](#) (2023)
- [Kangaroo mother care: implementation strategy for scale-up adaptable to different country contexts](#) (2023)
- [WHO recommendations for care of the preterm or low-birth-weight infant](#) (2022)

### **Global Media Health Videos on how to wrap the baby and infant:**

- [Continuous skin-to-skin care: small babies series](#)
- [Carrying your baby skin-to-skin](#)
- [Wrap designs for skin-to-skin care](#)