

**Mother-NICU: An approach to reducing the Neonatal Mortality Burden**

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*Respected Mam*, Pakistan ranks 3rd on highest newborn deaths by WHO. Around 75% of all neonatal occur during the first week of life, with the most common causes being preterm birth, birth asphyxia, infections and birth defects.<sup>1</sup> Kangaroo Mother Care (KMC) is one of the best options to provide care for premature babies in low socioeconomic countries (LSIC). It involves continuous skin-to-skin contact of the infant with the mother and feeding of exclusively breast milk. It reduces neonatal mortality, improves weight gain, reduces hospital stay and promotes mother-infant attachment. Currently, WHO recommends initiation of continuous KMC sessions when an infant has stabilized,<sup>2</sup> which is usually after the first week of life in which most neonatal deaths happen. Previously studies showed that immediate KMC (iKMC) during incubator care before stabilization improves the survival of preterm (LBW) low birth weight infants.<sup>3,4</sup> A recent multicenter trial<sup>5</sup> was conducted by WHO KMC study group in five LSIC to study the efficacy of iKMC among LBW infants. The results showed significant improvement (25%) in neonatal survival. The trial was stopped early owing to the finding of reduced mortality among infants receiving iKMC. For the provision of iKMC, establishment of mother- Neonatal Intensive Care Units (M-NICU) is essential. In standard NICU, the mother is only a visitor but in M-NICU, she is a permanent resident with mother's beds alongside the baby's warmer/incubator. This facilitates longer iKMC sessions and she becomes an active caregiver to the baby.<sup>6</sup> Currently there are only 17 established KMC wards in Pakistan where UNICEF provides necessary equipment and

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training to healthcare staff. The establishment of M-MICU's reduce the neonatal mortality rate in LSIC like Pakistan. It involves the collaboration of administration and funding stakeholders to convert existing NICU to M-NICU's. Team work of Gynae/Obs and Neonatology departments is needed to provide post-delivery care to mothers in M-NICU's, KMC training to health care staff, surrogates for mothers who are unable to provide iKMC due to major post-op complications and awareness campaigns to make the concept of KMC more acceptable in our society.

**Disclaimer:** None.

**Conflict of Interest:** None.

**Funding Disclosure:** None.

**DOI:** <https://doi.org/10.47391/JPMA.4586>

**References**

1. WHO. Newborns: improving survival and well-being. [Online] [Cited 2020 February 12]. Available from: URL: <https://www.who.int/news-room/fact-sheets/detail/newborns-reducing-mortality>.
2. Team W. Kangaroo mother care: a practical guide 2003. [Online] [Cited 2020 June 23]. Available from: URL: <https://www.who.int/publications/i/item/9241590351>.
3. Worku B, Kassie A. Kangaroo Mother Care: A Randomized Controlled Trial on Effectiveness of Early Kangaroo Mother Care for the Low Birthweight Infants in Addis Ababa, Ethiopia. *J Trop Pediatr*. 2005; 51:93-7.
4. Chi Luong K, Long Nguyen T, Huynh Thi DH, Carrara HPO, Bergman NJ. Newly born low birthweight infants stabilise better in skin-to-skin contact than when separated from their mothers: a randomised controlled trial. *Acta Paediatrica*. 2016; 105:381-90.
5. Immediate "Kangaroo Mother Care" and Survival of Infants with Low Birth Weight. *New Eng J Med*. 2021; 384:2028-38.
6. Chellani H, Mittal P, Arya S. Mother-Neonatal Intensive Care Unit (M-NICU): A Novel Concept in Newborn Care. *Indian Pediatr*. 2018; 55:1035-6.