

# Save the Lives of Preterm through Kangaroo Mother Care in Pakistan

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## ABSTRACT

Neonatal mortality remains a pressing global concern, with millions of infants succumbing to preventable causes within their first month of life. One promising solution that has gained attraction is Kangaroo Mother Care (KMC), an innovative and cost-effective approach that has demonstrated remarkable success in improving survival rates among newborns. Neonatal morbidity and mortality can be reduced by providing KMC to babies. KMC is a simple yet powerful intervention that involves continuous skin-to-skin contact between a mother and her preterm or low birth-weight infant. Pakistan bears a heavy burden of neonatal mortality, with a reported rate of 42 deaths per 1,000 live births as of the latest data. Implementing Kangaroo Mother Care in a country as diverse and populous as Pakistan presents a unique set of challenges. However, the government, non-governmental organizations (NGOs), and healthcare professionals have made commendable efforts to integrate KMC into the existing healthcare system.

**Keywords:** Neonatal mortality, kangaroo mother care, skin to skin contact.

## INTRODUCTION

Neonatal mortality remains a pressing global concern, with millions of infants succumbing to preventable causes within their first month of life. Due to their lowered breathing capacity, challenging feedings, inability to regulate their body temperatures, and increased risk of getting ill, preterm newborns are especially susceptible to problems. There were around 1 million mortality worldwide due to premature birth problems, which are the greatest cause of death in children under the age of 5 [1]. Pakistan, like many developing countries, faces a daunting challenge in reducing neonatal mortality rates. Pakistan is one of the world's top ten nations in terms of premature babies per thousand live births. Every Newborn Action Plan (ENAP) has emphasized Kangaroo Mother Care (KMC) as an important aspect of prenatal healthcare efforts around the world [2]. One promising solution that has gained attraction is Kangaroo Mother Care (KMC), an innovative and cost-effective approach that has demonstrated remarkable success in improving survival rates among newborns. This article delves into the concept of Kangaroo Mother Care and explores its implementation in Pakistan as a vital strategy to combat neonatal mortality. Neonatal morbidity and mortality can be reduced by providing KMC to the babies [3].

## UNDERSTANDING KANGAROO MOTHER CARE

Kangaroo Mother Care, initially introduced in Colombia in the 1970s, is a simple yet powerful intervention that involves continuous skin-to-skin contact between a mother and her preterm or low birthweight infant [4]. The baby is positioned upright on the mother's chest, mimicking the natural kangaroo pouch and providing

crucial warmth, protection, and nourishment. KMC promotes exclusive breastfeeding, stabilizes the baby's body temperature, and enhances bonding between the mother and child, all of which contribute to reducing neonatal mortality [5].

### Neonatal Mortality in Pakistan

**A Grim Reality:** Pakistan bears a heavy burden of neonatal mortality, with a reported rate of 42 deaths per 1,000 live births as of the latest data [6]. Numerous factors contribute to this dire situation, including inadequate access to quality healthcare, limited maternal education, and prevailing socio-economic disparities. Addressing neonatal mortality requires a multi-faceted approach, with Kangaroo Mother Care emerging as a potential game-changer.

### Implementing KMC in Pakistan

**Challenges and Progress:** Implementing Kangaroo Mother Care in a country as diverse and populous as Pakistan presents a unique set of challenges. However, the government, non-governmental organizations (NGOs), and healthcare professionals have made commendable efforts to integrate KMC into the existing healthcare system. Specialized training programs have been initiated to educate healthcare providers and mothers about the benefits and proper techniques of KMC. Furthermore, hospitals have established dedicated KMC units to ensure optimal care for premature and low birth-weight infants.

### Benefits of Kangaroo Mother Care

**Neonatal Survival:** Numerous studies have shown that KMC significantly reduces neonatal mortality rates, particularly among preterm and low birth weight infants. KMC represents among the most economical approaches for reducing newborn mortality. KMC doesn't require specialized equipment, intensive care units, or technological skills. According to a current

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meta-analysis, KMC could decrease newborn mortality in premature and low birth-weight infants by up to 36% [7]. The skin-to-skin contact and increased breastfeeding lead to improved immune function and nutritional intake, enhancing the newborn's chances of survival. The increased weight growth seen in these premature infants may help to shorten the typical hospital stay and reduce healthcare costs. KMC could be utilized to reduce the stress of preterm newborns and their moms [8].

### Thermal Regulation

One of the critical aspects of KMC is its role in maintaining the infant's body temperature. Skin-to-skin contact helps the baby regulate their temperature more effectively than conventional methods, reducing the risk of hypothermia [9].

### Breastfeeding Promotion

KMC encourages early initiation and exclusive breastfeeding, which is crucial for a newborn's health and development. Breast milk provides essential nutrients and antibodies that protect against infections and diseases [10].

### Bonding and Psychosocial Well-being

The physical closeness between mother and child fosters a strong emotional bond, promoting the baby's emotional and psychological well-being. Mothers also report increased confidence and reduced stress when practicing KMC [11].

## SUCCESS STORIES FROM PAKISTAN

Pakistan's efforts in implementing KMC have yielded promising results. In Sindh, for instance, the Lady Dufferin Hospital in Karachi has established a dedicated KMC ward that has witnessed a remarkable reduction in neonatal mortality rates. Moreover, NGOs, like Save the Children, have partnered with local communities to raise awareness and provide training on KMC, leading to positive outcomes in rural and underserved areas.

Kangaroo Mother Care has emerged as a beacon of hope in Pakistan's battle against neonatal mortality. This innovative and humane approach has the potential to reshape the country's healthcare landscape by reducing mortality rates and empowering mothers to take an active role in their infants' well-being. With continued dedication, collaboration, and investment, Pakistan can harness the life-saving potential of Kangaroo Mother Care and pave the way for a brighter and healthier future for its newborns.

Despite the promising outcomes, the full-scale implementation of Kangaroo Mother Care in Pakistan is not without its challenges. Insufficient KMC understanding, mindset, and practices among families of infant babies; financial, societal, and structural elements; community norms and standards regarding premature and LBW babies; health professionals' willingness to

embrace KMC, along with their inspiration to carry out practices; and an inadequate supply in medical facilities are all potential barriers to KMC practice [12].

1. **Cultural and Social Norms:** Cultural beliefs and practices can sometimes hinder the adoption of KMC. In some communities, exposing a newborn's skin may be considered inappropriate or may face resistance from family members. Sensitizing communities through culturally sensitive awareness campaigns can help address these misconceptions and promote acceptance [13].
2. **Infrastructure and Resources:** Inadequate infrastructure, limited resources, and overcrowded healthcare facilities pose significant barriers to implementing KMC effectively. Hospitals and clinics may lack the necessary equipment and dedicated spaces for practicing KMC. To overcome this challenge, investments in healthcare infrastructure and the creation of well-equipped KMC units are imperative.
3. **Maternal Education and Awareness:** Many mothers, particularly those in rural or marginalized communities, lack access to information about the benefits of KMC. Comprehensive maternal education programs that emphasize the advantages of KMC for both the mother and baby can help upscale KMC in the community [14].
4. **Healthcare Workforce Training:** Healthcare providers may require specialized training to effectively implement KMC. Integrating KMC into medical and nursing curricula, as well as providing continuous professional development opportunities, can enhance healthcare workers' capacity to promote and practice KMC [15].
5. **Socio-Economic Factors:** Poverty and lack of access to healthcare services are key determinants of neonatal mortality. Families facing economic hardships may struggle to afford transportation to healthcare facilities or take time off work for regular KMC sessions. Government subsidies, financial incentives, or mobile KMC outreach programs can address these economic barriers.
6. **Monitoring and Evaluation:** A robust monitoring and evaluation system is vital to track the progress of KMC implementation and assess its impact on neonatal mortality rates. Regular data collection and analysis will help identify areas for improvement and enable evidence-based decision-making.
7. **Scaling Up and Sustainability:** Scaling up KMC across a large and diverse country like Pakistan requires a comprehensive and sustainable strategy. Partnerships between government agencies, NGOs, and international organizations can provide the necessary resources, technical expertise, and

support to ensure the long-term success of KMC implementation [16].

### THE WAY FORWARD

While progress has been made, there is still much work to be done to fully integrate Kangaroo Mother Care into Pakistan's healthcare landscape. To ensure sustained success, key steps include:

**Policy Support:** Government commitment to KMC integration through policy development and allocation of resources is crucial.

**Healthcare Provider Training:** Continuous training and education for healthcare providers will ensure that KMC is practiced effectively and consistently.

**Community Engagement:** Raising awareness and engaging communities, especially in remote areas, will promote the widespread adoption of KMC.

**Research and Monitoring:** Ongoing research and data collection are essential to measure the impact of KMC on neonatal mortality and identify areas for improvement.

### CONCLUSION

Kangaroo Mother Care has emerged as a beacon of hope in Pakistan's battle against neonatal mortality. This innovative and humane approach has the potential to reshape the country's healthcare landscape by reducing mortality rates and empowering mothers to take an active role in their infants' well-being. With continued dedication, collaboration, and investment, Pakistan can harness the life-saving potential of Kangaroo Mother Care and pave the way for a brighter and healthier future for its newborns.

By addressing the challenges and barriers to KMC implementation, Pakistan can forge a path toward significantly reducing neonatal mortality rates. Through a combination of policy support, community engagement, healthcare provider training, and awareness campaigns, the nation can unlock the transformative power of Kangaroo Mother Care and create a positive impact on the lives of countless newborns and their families. As Pakistan strives for improved neonatal health, KMC stands as a beacon of hope, demonstrating that even the simplest and most natural solutions can bring about profound change in the fight against neonatal mortality.

### CONFLICT OF INTEREST

The author declare no conflict of interest.

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