

Kangaroo Mother Care Saves Newborns

The Facts

Worldwide, preterm birth is now the second leading cause (15%) of childhood death after pneumonia (17%). Without rapid scale-up of available interventions, preterm birth is likely to become the top cause of death by 2015. It is estimated that 15 million babies are born prematurely every year. Preterm birth has become the leading cause of neonatal death, followed by birth asphyxia and infections.



Born Too Soon: The Global Action Report on Preterm Birth highlights two important strategies to prevent newborn deaths: 1) preventing prematurity, and 2) implementing priority, evidence-based interventions to address complications from prematurity. This global call to focus and accelerate action—using this two-pronged strategy against prematurity and its complications—has fueled the efforts of individuals, communities, health professional organizations and governments to effectively address this challenge.

In the Philippines, preterm birth is now the leading cause (19%) of childhood deaths. According to the 2012 estimate, the newborn mortality rate is 14/1,000 live births, constituting 48% of under-five deaths. The Philippines has the highest burden of low birth weight (LBW) newborns in the region.

The national figure, however, hides the disparities across regions and socioeconomic groups. In some regions of the country, the neonatal mortality rate can be as high as 29/1,000. These rates translated to about 69,000 children dying before their fifth birthday in 2012. Of this number, 29,000 died within 28 days of birth. About 15% of all births in the Philippines are preterm, making this condition a significant contributor to newborn deaths in the country. Accelerated implementation of proven interventions must be prioritized nationally to reduce unnecessary deaths from preventable and treatable causes.

Kangaroo Mother Care (KMC) is a high-impact, cost-efficient intervention that has proven effective in saving the lives of premature/LBW newborns. KMC is the early, prolonged and continuous skin-to-skin contact between the mother (or adult substitute) and her baby—both in hospital and after discharge—with support for feeding (ideally exclusive breastfeeding) and close follow-up after early discharge from the hospital. This approach helps regulate the baby's body temperature, facilitates early initiation of and continued breastfeeding, reduces the risks of infection, and enhances brain growth and development.

The Benefits

- KMC can prevent up to 450,000 newborn deaths per year globally;
- A recent meta-analysis of three randomized trials in low-income settings showed a 51% reduction in mortality through the use of KMC for newborns weighing under 2,000 g compared to conventional incubator care;

- KMC has been found to reduce infection (including sepsis, hypothermia, severe illness, lower respiratory tract disease) and length of hospital stay compared to intensive newborn care unit and incubator care;
- The psychosocial effects of KMC include reduced stress and enhanced mother-infant bonding, with positive effects on the family environment and the infant's cognitive development; and
- KMC can be initiated and practiced within existing postnatal wards.

Philippines Experience

KMC was first established at Dr. Jose Fabella Memorial Hospital in Manila in 1999. After just two years, the successful experience at Fabella was expanded to seven other hospitals in Metro Manila. In 2004, all lying-in clinics under the Manila City Health Department received KMC training and a citywide KMC network was established in 2005. In 2008, the Bless-Tetada Kangaroo Mother Care Foundation, Inc., was established to develop, monitor and accredit other KMC centers across the country. While efforts of the Department of Health are under way to integrate and strengthen KMC through a national policy of care for preterm and LBW newborns, the urgency to accelerate the adoption of KMC as the standard of care for all LBW newborns to contribute to the achievement of MDG 4 by 2015 is unmistakably palpable.

Fabella Experience:

- Reduced risk of mortality among LBW newborns <2,000 gm by 15% (range 10–25%)
- Reduced incidence of death due to sepsis among LBW newborns from 34% to 24%
- Significant improvement in breastfeeding practice up to six months post-discharge
- Drop in length of hospital stay by 50% and a cost savings of around 75%

KMC implementation requires the commitment of health facility administrators, knowledge and skills of medical and nursing staff, willingness of the mother and family, and a functioning and sustained community- and health facility-based follow-up and support mechanism.

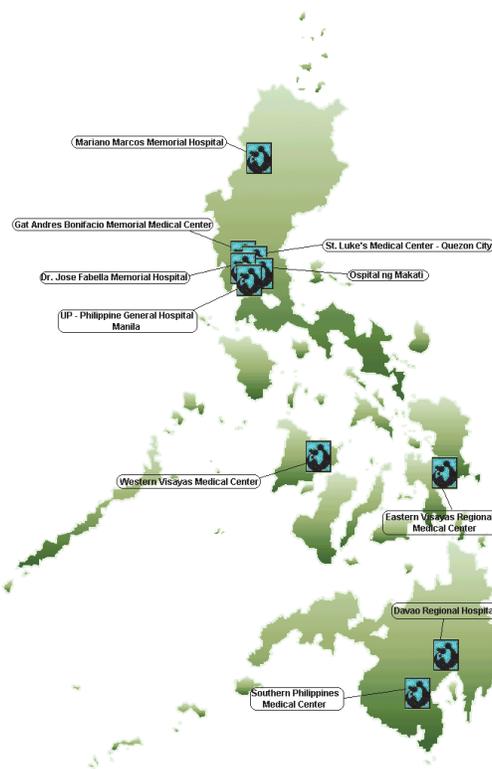
List of **KMC facilities** in the Philippines:

- Dr. Jose Fabella Memorial Hospital (Manila, National Capital Region)
- Mariano Marcos Memorial Hospital and Medical Center (Batac, Ilocos Norte, Region 1)
- Eastern Visayas Regional Medical Center (Tacloban City, Region 8)
- Southern Philippines Medical Center (Davao City, Region 11)
- Gat Andres Bonifacio Memorial Medical Center (Manila, National Capital Region)
- Western Visayas Regional Medical Center (Iloilo City, Region 6)
- Davao Regional Hospital (Tagum City, Region 11)
- Philippine General Hospital-UP Manila, (National Capital Region)
- St. Luke's Medical Center (Quezon City, National Capital Region)
- All 12 lying-in clinics under the Manila Health Department

The Way Forward

As one of the pioneer countries in Asia implementing KMC, the Philippines possesses a vast wealth of knowledge and local experience that can be adopted to reach every newborn in the country. Now is the appropriate time to prioritize widespread implementation of this technically simple, inexpensive and highly effective form of care to save preterm/LBW newborns by:

- Establishing national operational guidelines and a national coordinated plan to make this intervention available in all health facilities—private and public—where babies are delivered;
- Mobilizing commitment of national, regional and local government authorities;
- Integrating LBW follow-up care in health policies of local government units;
- Incorporating KMC into clinical training materials;
- Monitoring supervision schedules and tools;
- Integrating recordkeeping and reporting on KMC into routine monitoring and evaluation systems;
- Sharing implementation lessons on a regular basis;
- Promoting KMC among populations, medical professionals, and community- and facility-based health care workers, including social workers, civil society organizations and academe;
- Conducting research and case studies to gather local evidence for policy and budget advocacy; and
- Creating a supportive environment for mothers, their families and relatives to practice KMC in health facilities and, upon discharge, at home, with community support.



Map of KMC facilities in the Philippines - 2014

A Mother's Personal Story

By Dr. Jennifer Jill V. Nagrampa-Andres



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The author, a physician training in Ob-Gyn, practices KMC with her preterm newborn.

My baby boy was born two months premature and weighed just 1.16 kg. On the day he was born, I was only able to have a brief look at his cute little face and give him a quick kiss on his cheek before he was immediately taken to the neonatal intensive care unit (NICU). It was not until a day after my surgery that I was allowed to go on a wheelchair ride to the nursery.

I started doing Kangaroo Mother Care that same day. My baby was so small that he could fit in my husband's palm! The moment I had my newborn son on my chest, I felt so happy and all I could say was, "finally!" It was the first time I held my baby boy and it felt oh, so good!

The first two weeks of doing Kangaroo Mother Care were the hardest physically. My surgical wound was still very painful, which made going to the nursery a chore. At that time, both my son and I also had our own IV lines. It always took us some time to get into position, taking care not to dislodge any of our IVs. Those IV lines attached to my son also meant that we had very little space to maneuver. We had to stay close to the incubator because of the length of the tubing. The NICU was not conducive to doing Kangaroo Mother Care. The chairs were not comfortable, only one parent was allowed to stay at a time and there was no privacy, which prevented my husband from doing Kangaroo Mother Care whenever another mother was breastfeeding.

My heart broke when I was discharged before my son. He stayed at the NICU for more than a month. But I was there every single day, doing Kangaroo Mother Care the whole day—from 9:00 in the morning to midnight—breaking only for lunch and dinner, and expressing breast milk for my son. No matter how uncomfortable the chairs, I loved doing Kangaroo Mother Care! It gave me the reassurance that my son was doing okay, that he was breathing, that he was alive! I loved the feel of his breath on my chest, his arms on my chest and shoulder, his legs near my belly. I especially loved how I could feel his heart beating next to mine.

The whole time we did Kangaroo Mother Care, my son's heartbeat remained strong and normal and he maintained his body temperature. He always seemed content and happy where he was. When we had to refrain from doing Kangaroo Care for about a week because of precautions against seizures, I was again heartbroken. It was agonizing being in the same room as my son and not being able to hold him, especially when he looked so uncomfortable in his incubator.

We continued doing Kangaroo Mother Care at home when my son was discharged after spending a little more than a month in the NICU. He slept in the Kangaroo Mother Care position at night and in the mornings we would continue doing the same thing. Now my son prefers moving around more often, but he still goes back to the Kangaroo Mother Care position when he wants to sleep. He is more comfortable that way.

During the whole time that we were at the NICU, the nurses would often tell me that one of the main reasons why my son was doing so well was that I was always there doing Kangaroo Mother Care. Without a doubt, Kangaroo Mother Care greatly helped my son to improve quickly. However, Kangaroo Mother Care also helped me a lot, giving me the reassurance that I needed by letting me feel my son's steady heartbeat, smell his sweet fragrance and feel his little body next to mine. As a physician who now knows both the theoretical and actual benefits of Kangaroo Mother Care, I will definitely recommend it to my patients. Kangaroo Mother Care does not only help babies, but also parents as well!

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