CASE STUDY

Fathers helping babies survive: A case study from Ganesh Das Hospital, Shillong, Meghalaya

Summary

In December 2016, the USAID ASSIST Project started providing support to improve the quality of newborn care at Ganesh Das Hospital, one of the busiest hospitals in the state of Meghalaya. Of the 1,800 babies admitted to the Sick Newborn Care Unit (SNCU) of GDH each year, the majority are either preterm or low birth weight (LBW) babies. Kangaroo mother care (KMC), in which the mother or another caregiver provides the newborn with skin-to-skin contact, is a simple and cost-effective intervention to save the lives of premature or LBW newborns by regulating body temperature, promoting breastfeeding, enhancing brain growth and development, and reducing the risk of infection and other morbidities. When the intervention began, babies in the SNCU were receiving about an hour of KMC per day, well short of the recommended 9-12 hours per day for high-risk infants. By involving fathers and other caregivers in the provision of skin-to-skin care, GDH was able to increase KMC that premature and low birth weight babies received to an average of six hours per day.

Background

Ganesh Das Hospital (GDH), in Shillong, India, is a government health facility that serves a population of 3.5 lakh (350,000) and conducts approximately 12,000 deliveries annually – or 25% of total institutional deliveries in the state. This is one of the busiest hospitals in the district providing both maternal care and specialized care to sick newborns. The hospital admits an average of 1,800 babies in the Sick Newborn Care Unit (SNCU) annually. Shillong, the capital of Meghalaya, is a predominantly mountainous district with unfavorable weather conditions. This district is primarily inhabited by Khasis, a matrilineal community, in which women earn a livelihood for their families while also looking after the well-being of their children. This, coupled with challenging terrain and weather, makes it difficult for women to access and use the healthcare services. The infant mortality rate of Meghalaya is 42 per 1,000 live births; the highest among all Northeastern states. At Ganesh Das Hospital, despite the provision of specialized care, an average of 180 newborns still die annually. A lack of proper hospital infrastructure, human resources, medical supplies and equipment as well as inefficient processes are some of the factors influencing quality of care, and consequently mortality, at GDH.

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Kangaroo Mother Care (KMC) in Ganesh Das Hospital

The USAID ASSIST Project started providing support to improve the quality of newborn care at GDH in December 2016. Of the newborns admitted to the SNCU, the majority are either preterm or low birth weight (LBW) babies requiring extra care to avoid illness and death from secondary preventable complications like hypothermia and infection. Kangaroo mother care (KMC), in which the mother or another caregiver provides the newborn with skin-to-skin contact, is a simple and cost-effective intervention to save the lives of premature or LBW newborns. This approach helps regulate body temperature, promote breastfeeding, enhance brain growth and development, and reduce the risk of infections and other morbidities.

The duration of KMC per baby in the SNCU of GDH was on average one hour per day per baby, which is very low in comparison to the present guidelines of 9-12 hours daily\(^2\). This, in turn, increases the length of stay of babies in the hospital and means that the beds of SNCU are occupied for a longer period of time, reducing the availability of beds for other high-need newborns. The hospital had been trying to improve in this area for several years but had not made much progress. So, the team identified this as the area of care that they wanted to address using quality improvement (QI) methods and set as their aim: “To increase the duration of KMC from an average 1 hour of KMC per day per baby to 5 hours of KMC per day in hemodynamically stable babies weighing less than 2 kg within 10 weeks”.

After the team agreed upon their goals, they then discussed the various reasons responsible for the limited duration of KMC. The factors identified were as follows:

- Mothers\(^3\) lacked awareness of the benefits of KMC and the recommended duration of KMC per day to be provided to the babies.
- Mothers felt exhausted after delivery and were not comfortable sitting for long hours holding the baby.
- There was no separate KMC room, KMC gown, or reclining chair available.
- Staff nurses were very busy due to high admission load; therefore, they were not able to provide counseling to mothers effectively.


\(^3\) The name Kangaroo Mother Care itself puts the responsibility on the mother to provide skin-to-skin contact, but inside the guidelines it is written anybody can provide care. Frequently, while mothers have been asked to do this job, the involvement of fathers or other relatives has been hardly explored. Moreover, even the nurses and other hospital staff are often not aware that skin-to-skin care can be provided by caregivers other than the mother. However, through the application of improvement methods to KMC, hospital staff at GDH began encouraging fathers and relatives to support mothers.
Based upon the analysis, the team developed and tested various change ideas as follows:

- Pediatricians taught nurses about the benefits and techniques of KMC.
- Nurses provided frequent counseling to mothers whenever they visited their newborn at the SNCU for breastfeeding.
- GDH allocated a separate room for providing KMC.
- Hospital staff, mainly nurses, encouraged and counseled fathers, grandmothers, and other relatives to provide KMC to the baby.
- Nurses used smart phones and computers placed in the SNCU to show mothers and fathers videos of KMC, downloaded by the pediatrician from the government website, to teach them the right technique of providing skin-to-skin care.
- GDH engaged champion fathers and mothers – those who had applied KMC successfully – to encourage and counsel other parents.
- Nurses reviewed KMC duration data each shift to find out the actual causes of the low duration of KMC.

**Results**

**Figure 1. Average number of minutes that babies were provided KMC per day in SNCU (by week)**

![Graph showing the average number of minutes that babies were provided KMC per day in SNCU (by week)].

**Conclusion**

With the involvement of fathers and other relatives, the average duration of KMC received by babies in Ganesh Das Hospital SNCU increased from an average of 1 hour per day to six hours per day over the course of the intervention. Throughout India, KMC caregivers are primarily mothers; however, the study revealed that fathers, along with other relatives, are seemingly interested in providing skin-to-skin care and participated actively in improving the health of their newborns. This will not only help the baby in early recovery, but also helped the parents to share caretaking responsibilities and increase the bonding between the father and baby; thus, improving the caregiving environment for their child. Both maternal and paternal care are equally important for the survival of preterm and low birth weight babies and the success of this intervention means the hospital team is trying to encourage more fathers to do the same.