JSI's contribution under Vriddhi for implementation of *Kangaroo Mother Care* in District Hospitals

The issue

Nearly a quarter of the 0.7 million global neonatal deaths in 2014, occurred in India[1]. Half of the 80 newborns that died every hour in India were either premature or low birth weight[2]. KMC reduces early neonatal mortality by preventing hypothermia, improving breastfeeding and preventing infections among preterm and low birth weight newborns and improves mother-baby bonding[3]. KMC is more effective for newborns who weigh <2000 gms or are born prior to 37 weeks of gestation. It's a low cost technique which further reduces cost of care by reducing duration of incubator care and hospital stay[4].

In 2014, Government of India (GOI) included KMC for small babies in the India Newborn Action Plan and concomitantly released Operational Guidelines on facility based KMC with the goal of 50 percent KMC coverage by 2020[5]. It was expected that state governments would adopt and implement these guidelines. However, most states have found it difficult to roll out KMC guidelines.

Before Vriddhi Project, GOI did not have a systematic approach to roll out KMC. It was being practiced at scattered locations by individual champions in All India Institute of Medical Sciences, King Edward Medical College, Mumbai, Byramjee Jeejeebhoy Government Medical College, Pune and others. Under Vriddhi, JSI is providing technical assistance on rolling out KMC in government district hospitals in high priority districts (HPD).

Government of India released guidelines on Kangaroo Mother Care (KMC) in 2014. However, its implementation was limited in most north Indian states till as late at 2016. While sporadic efforts were made to institutionalize KMC in hospitals, there was no plan for roll out of KMC guidelines in the states.

Implementation

JSI's technical assistance approach on KMC is presented in Table 1.

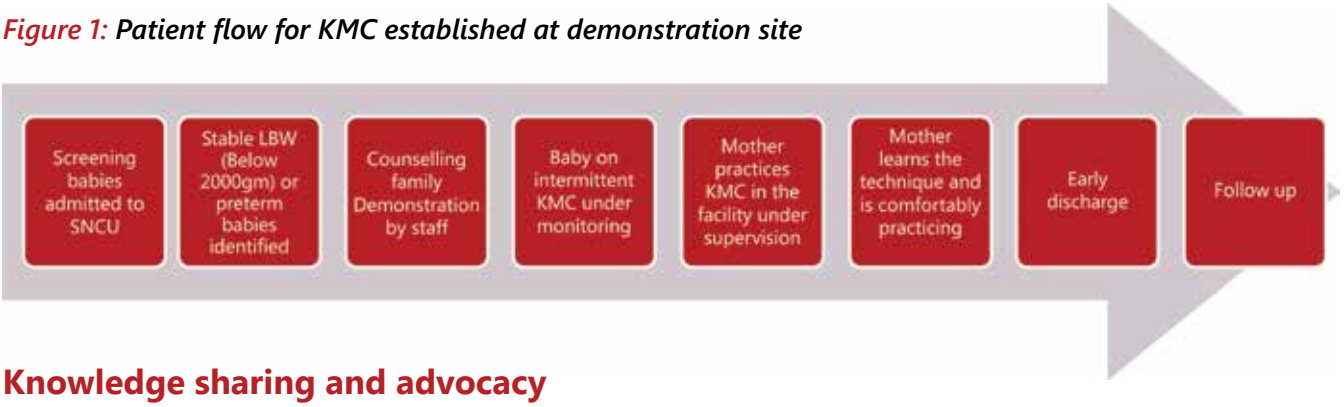
Table 1: JSI's approach for providing technical assistance on KMC roll out

Evidence generation	Knowledge sharing	Advocacy	System strengthening
Demonstration sites in two HPDs (monitoring, assessments)	Dissemination workshop, stakeholder discussions	National and State advocacy for KMC capacity building	Evidence based plan for enhancing system and human resource capacity

Evidence generation

Based on pre-set criteria of high Neonatal Mortality Rate (NMR), contribution of NMR to Infant Mortality Rate (IMR) and Institutional deliveries, in consultation with partners and governments one HPD each namely Haridwar and Gumla, in Uttarakhand and Jharkhand respectively was selected for establishing KMC demonstration site. Facilities with high delivery case load and functional newborn illness management facility such as Sick Newborn Care Unit (SNCU) in the shortlisted HPD was selected. JSI's technical assistance includes 1) embedding a KMC policy, 2) advising on infrastructure and supplies, 3) training relevant staff on KMC and counselling techniques and 4) establishing a patient flow for KMC in these facilities. The ultimate aim of the technical assistance is to institutionalize KMC in the facility and recommend scale up approaches based on this demonstration model.

Figure 1: ***Patient flow for KMC established at demonstration site***



Knowledge sharing and advocacy

The project creates as well as uses existing platforms to share learnings from the demonstration sites at national, state and sub-state levels. In August 2017, in collaboration with the Ministry of Health and Family Welfare, a national dissemination meeting was organized. The dissemination was attended by experts from across the country who shared evidence and perspectives on strategies to scale-up KMC in public and private facilities. Project learnings are contributing to national training and recording tools on KMC as Vriddhi partners are nominated by GOI on the National Technical Advisory Group for KMC.

Regular sharing meetings are held with Mission Director, technocrats and managers in state governments of the two states. District officials are also updated on a monthly by project teams.

National Dissemination of the Learnings from the demonstration sites of KMC.

System strengthening

JSI's system strenghtening inputs are in four strategic areas (Table 2).

Table 2: JSI's strategic areas for system strengthening inputs

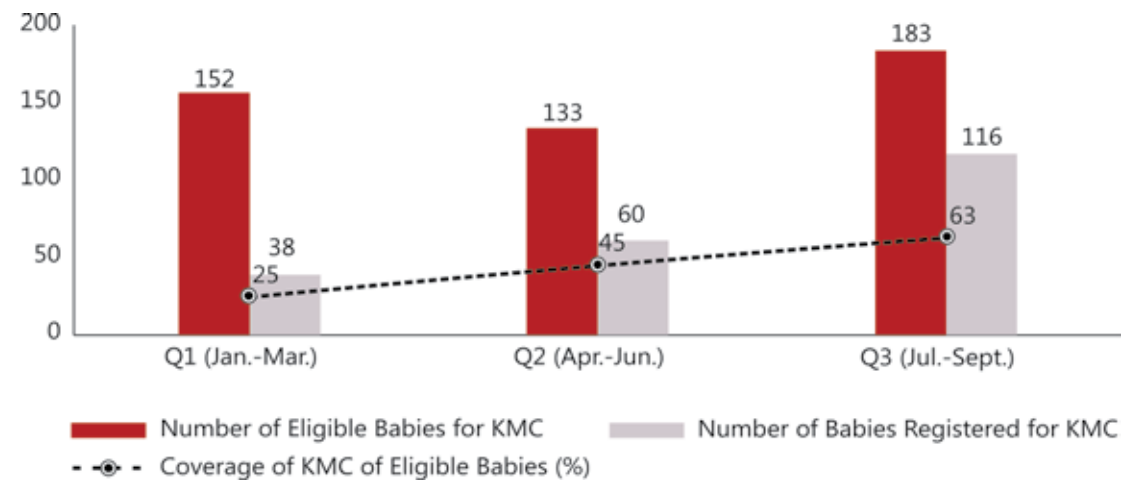
Training	Supportive supervision	Logistics and supply chain management	Data for decision making
Cascade training model developed with emphasis on theory and practicum 50 doctors and 300 field workers trained.	Frequent supervisory visits in the initial three months, gradually tapering. Checklists developed for supervisory visits.	Managing KMC supplies from available funds and ensuring inclusion in annual plans for streamlining future costs.	Facility monitoring and follow-up formats developed. Staff trained on using them and reviewing progress.

Impact

1. Life-saving KMC services were available to 133 babies in nine months of implementation.

In absence of Vriddhi, these babies would have been deprived of this life saving and healing intervention. As shown in Figure 2, KMC coverage is steadily increasing as it becomes part of routine care of small newborns in the demonstration sites.

Figure 2: ***KMC coverage in two demonstration sites, January to September, 2017***



An internal assessment by project team indicates that infants received KMC for four hours a day in facility and the same duration at home after discharge. These infants are likely to have better weight gain, better bonding with mother and would fall sick less often. Other projects and researchers have noted that continuity of KMC and its duration are known challenges in KMC follow up.

2. Lessons on roll-out and scale up of KMC are available.

- With guidance and initial handholding KMC services can be initiated within available resources at a district hospital relatively rapidly.
- Despite its simplicity, health workers need training of at least one-day duration to cover all aspects of KMC- method, duration, breastfeeding practices and follow-up schedule.
- Counselling is a critical factor for KMC initiation, continuation and quality. Trained counsellors can be effective in offering this service in setting where doctors and nurses have high workload.
- Private sector engagement is essential for wider reach and acceptance of the technique. Collaborations with professional organizations of medical and nursing practitioners may be helpful.

3. Scale up initiated in Jharkhand and Uttarakhand.

Sustained advocacy by the project has resulted in State Governments of Uttarakhand and Jharkhand endorsing scale-up of KMC at all district hospitals state wide under technical guidance of Vriddhi. Scaling up will potentially bring nearly 70,000 small babies born yearly in these two states under the program.

4. Evidence based national policy and planning.

As Vriddhi partners are nominated by GOI on the National Technical Advisory Group for KMC, the project has a policy platform to inform the roll out of KMC country wide.

Continued support has potential to institutionalize KMC in ten functional SNCUs in the two states. The intervention will be initiated at upcoming 13 new SNCUs in these States and further be scaled up to include more than 30 Newborn Stabilization Units and Post Natal Care wards. The practice of KMC will lead to improved weight gain, reduced infections thereby substantially reducing costs incurred by facility and family in caring for a small or sick newborn effort, helping India achieve SDG 3 targets.

References

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