# CarePlus Helping Babies Grow





Every year about 15 million babies are born prematurely.¹ One million of them die of preterm related complications while another one million die of causes where preterm is a risk factor, and over one million of the survivors develop some degree of impairment.¹ Kangaroo Mother Care (KMC) consists of continuous skin-to-skin (StS) contact, providing temperature support and facilitating breastfeeding. It also helps to prevent infection and enables earlier discharge.² Near universal coverage of KMC could save 450,000 newborn lives every year.³,4

Report titled Consensus to Kangaroo Mother Care Acceleration, published after the KMC summit held in Istanbul, Nov 2013 summarises the barriers for KMC uptake as follows:

- KMC is incorrectly perceived as a practice for preterm in low-income countries only, as a next best alternative to incubator care.
- Many health care providers (at all levels) do not know or do not believe in the benefits of KMC, and lack the skills for effective implementation.
- Cultural and social norms related to mother and newborn practice make community uptake of KMC challenging.
- Human resources for health required for KMC have been lacking, and the role of mothers and communities has been overlooked.
- KMC has not been included in many country level government newborn agendas and policies.

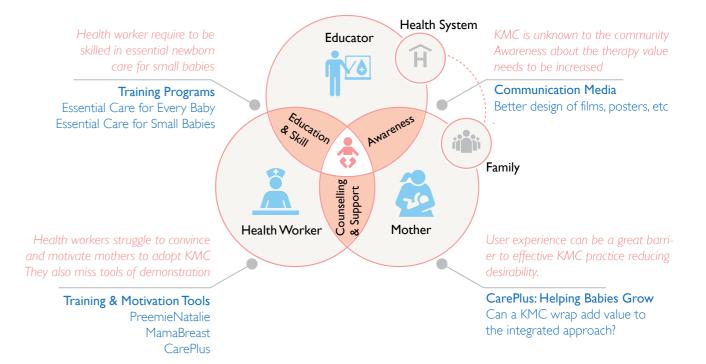


A KMC ward, Malawi

# An Integrated Approach

KMC implementation remains extremely poor worldwide despite its introduction more than 30 years ago. An integrated approach - that involves all the stakeholders of the system may have the most potential for an impact.

Learning from the success of Helping Babies Breathe, the integrated approach works on the same philosophy that - 'Training drives therapy'. Below illustration explains the integrated approach.



## **Training Programs**

New training programs - Essential Care for Every Baby and Essential Care for Small Babies developed by the American Academy of Paediatrics according to the WHO guidelines covers the period after birth through until discharge. Skin-to-skin care and kangaroo mother care are important elements in the curriculum of the training programs.

# **Training Tools**

To facilitate effective learning through simulation, Laerdal has developed the PreemieNatalie - a preterm simulator and MamaBreast - breast feeding simulator. Both the simulators are not only very effective for training health workers in KMC but are very useful as counselling tools for mothers as well.

"Can a purpose designed wrap act as a cultural ambassador or messenger to increase the adoption of KMC by improving the experience around the therapy?"

A well designed, user focused KMC wrap may accelerate adoption by:

# $\bullet \ \, \mathsf{Increasing} \, \mathsf{Visibility}$

By being more visible as a stand-out product. It might raise curiosity and trigger conversations about KMC.

### • Changing Perception

Custom purpose of the wrap helps reinforce the therapy message and also raises the status perception of KMC.

# Creates Desirability

An attractive product combined by peer use may create desirability. The improved user experience only strengthens and sustains the practise over prolonged period.

This wrap could be one of the many accelerator ideas to drive adoption. A simple, open source design should not only benefit from encouragement for local production but also improvisations to match the custom requirements.

# **Challenges Today**

A lot of time was used in field research to understand the challenges a KMC provider, primarily the mother in most cases faces to provide the therapy to the newborn. The field time was spent in India, Tanzania and Malawi, understanding the perspective of health workers as well as mothers.

Even in locations with successful implementation of KMC, the quality of KMC was questionable. There were separate challenges for continuing KMC in the facility and after discharge within the community. The user related challenges can be briefly summarised as follows:

- 1. Duration of stay in KMC wards is often too short due to limited bed capacity. Mothers are often occupying uncomfortable situations in an overcrowded KMC ward..
- 2. Most current solutions are home sourced like the Kanga in Africa or the Duppata in India. Both just long pieces of cloth require an assistant to apply the solution.
- 3.Mothers cover themselves with lot of layers of the wrap for security which over heats the mothers. The knot in the back is not convenient for lieing down. These layers of fabric make frequent breastfeeding or changing for cleaning the baby a tiresome chore.
- 4. At home the challenges increase due to lack of beds and obligations to domestic duties.
- 5. Fathers are not too supportive in sharing the task of KMC.

The wrap underwent multiple iterations in its development journey and a lot of mothers and health providers have helped to fine tune the design to its present form.



Laerdal designer working with health worker and mother to develop the KMC wrap, India

Mothers helping each other with the wraps, Malawi

# CarePlus - Helping Babies Grow

CarePlus is designed with a goal to help mothers in providing continuous and quality KMC to their newborns. In comparison to existing solutions and methods, the users perceived CarePlus as:

### Safer

It feels more secure and keeps babies in correct posture. Mothers seemed to relax and did not feel the need to hold the baby.

### Comfortable

Allows movement, Less fatigue for back and shoulders due to wide straps on the shoulders.

### • Easy to Use

Does not need an assistant. Facilitates frequent removal for breastfeeding.

### • Gender Neutral

The look was very acceptable to wear for fathers as well.

# Here is a second of the second

A mother trying CarePlus for the first time, Malawi

# User Feedback & Implementation

CarePlus has been developed by actively engaging the end user in their surroundings. The engagement continues in the form of studies and feedbacks for CarePlus. The final iteration has been tested in focused group discussions in India, Nepal, Tanzania and Malawi. A select number of mothers have also been given the wraps to try at home post discharge.

Although reasons for low uptake are complex, our studies show that a wrap has the potential to help increase the uptake and quality of KMC. We look forward to collaborators to optimise on the implementation models to make it available and affordable.















# Related products

Laerdal strongly believes in 'training drives therapy'. Our conviction is reinforced by the effectiveness and the outcomes of training programs like Helping Babies Breathe and Helping Mothers Survive.

Laerdal Global Health continues to direct similar efforts to help save lives of newborns under the Helping Babies Survive initiative. The new training programs 'Essential Care for Every Baby' and 'Essential Care for Small Babies' are being supported by the development of PreemieNatalie and MamaBreast simulators.











### PreemieNatalie - Preterm Simulator

PreemieNatalie is a preterm simulator with realistic appearance and weight. It supports training in correct nasogastric tube placement, proper breastfeeding attachment, and spoon, cup and nasogastric tube feeding.

# MamaBreast - Breastfeeding Simulator

MamaBreast is filled with water, and allows realistic simulation of breast milk expression. Use together with PreemieNatalie to practice correct breastfeeding position, attachment and skin-to-skin / Kangaroo Mother Care.

MamaBreast and PreemieNatalie are excellent to use in the Essential Care for Every Baby training, as well as other premature care, essential newborn care and Kangaroo Mother Care training programs.

More information on CarePlus and the new tools to help save lives of newborns visit us on www.laerdalglobalhealth.com