Universal access to Kangaroo Mother Care

New Manhattan Project, Erice 2016

Nathalie Charpak, Julieta Villegas
KMC intervention

Kangaroo Mother Care Method has three fundamental components:

1) **Kangaroo position (KP)** - ideally 24hrs/day
2) **Kangaroo nutrition** and feeding strategy based on breastfeeding (KN)
3) **Kangaroo discharge policy**: Timely (early) discharge in kangaroo position with close and strict outpatient follow-up
THE PROBLEM

• 18 million children are born premature or LBW each year (10% of all deliveries in the world)

• Prematurity and LBW are a direct, or associated cause, of 50% of the 3.200.000 children’s deaths occurring annually in the world

• 90% of LBW infants are born in low and middle income countries

• Diffusion of KMC is too slow and coverage is not sufficient
## Main causes of premature and LBW infant mortality in low income countries

<table>
<thead>
<tr>
<th>Hypothermia</th>
<th>Hypoglycemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ No availability or non-functional incubators</td>
<td>➢ Health Staff shortage</td>
</tr>
<tr>
<td>➢ <strong>The Kangaroo Position</strong> (direct skin to skin contact) allows a perfect</td>
<td>➢ Premature infant has no coordination between suction and deglutition because</td>
</tr>
<tr>
<td>thermal regulation (excellent scientific evidence)</td>
<td>of immaturity, feeding is time consuming</td>
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<tr>
<td></td>
<td>➢ <strong>The Kangaroo Nutrition</strong> based on breast milk administered by the mother</td>
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<tr>
<td></td>
<td>directly or by tube every 2 hours during the Kangaroo Position is a</td>
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<td>reasonable, efficient and humane solution</td>
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</tbody>
</table>
Quality of the survival of the premature and LBW infants in the developing world

And what happens if they survive?

Absence of the following:

- Follow up
- Growth monitoring
- Detection of psychomotor and neurological problems in relation with prematurity
- Detection of behavioural problems
- Detection of deafness or blindness or refractive visual problems

- The third component of the KMC method is a solution:
- Multidisciplinary high risk follow up with evaluation of the development, growth monitoring and provision of a strong education to the parents on how to manage their infant during the first year of life
THE SOLUTION (a partial but rapidly available solution)

The KMC Method

The KMC Training Program

- KMC Excellence Centers
- The KMC E-Learning Platform in different languages
- A Multilevel Training Program: “see one, do one, and teach one”

The KMC Data recording system
KMC in Colombia

Actually:
- More than 50 KMC Centers
- About 50,000 infants / year
- KMC included in the obligatory health plan of the Health Ministry

Since 35 years:
- 350,000 infants
- 350,000 mothers
- 125,000 fathers
Research in Colombia

Science is essential to improve practice

- Database of 36,000 infants managed in KMC Programs
- Agreements with the National University of Colombia and Javeriana University to explore this database as a research tool to improve the health of the premature and LBW infants in Colombia
**PROOF OF CONCEPT**

**KMC in the World**

Now:
- 30 Countries
- 70 KMC Centers trained
- 50,000 infants/year

Since 20 years:
- 1,000,000 infants?
- 1,000,000 mothers?
- 1,000,000 fathers?

**KMC is adopted now by:**
Governments, WHO, UNICEF, USAID, big NGOs (BGF, CIF….)
Applied research: Pilot study in Africa (South south cooperation supported by GCC)

Mali and Cameroon, the highest rate of premature and LBW infant mortality in the world

- Re-training of 1 Excellence Center in each country (Douala and Bamako)
- Training in the use of a new built KMC-e-learning platform
- Training of 5 regional centers by the Excellence Center and in the use of the e-learning platform
- 8 months: decrease of the mortality in infants with birth weight <2000 g from 47% to 30% in the Excellence Center in Cameroon
OBJECTIVES OF THE PROJECT

1) Training and Certification of 10 KMC Centers of Excellence in 10 different countries

2) World diffusion of the KMC E-learning platform in 10 languages

3) Design of a KMC national scaling strategy with the 10 chosen countries

4) To decrease neonatal mortality and to improve quality of the survival of these infants
SPECIFIC OBJECTIVES

• Translation and adaptation, for each local context, of the KMC E-learning platform in 10 languages (English, Spanish, Hindi, Kannada, Bengali, Malay-Indonesian, Arab, Portuguese, Tagalog, Vietnamese)

• Design and implementation with Crossknowledge of a deployment strategy to technically diffuse the E-learning platform

• Retraining and certification of 10 KMC Centers of Excellence in 10 different countries through, theoretical and practical training (3 countries in Africa, India, Bangladesh, Indonesia, Brazil, Peru, Philippines, Vietnam)

• With each local Excellence Center, to design a KMC national scaling strategy in order to reach countries regions with different levels of health facilities or care

• To reach an average of 20 % reduction of mortality for premature and LBW infants reducing hypothermia, hypoglycemia and nosocomial infections
THE SCALING STRATEGY FOR KMC

National Level

KMC Excellence Centers

Regional Level

KMC Program in Regional Hospitals

Local Level

KMC Unit in Local Health Centers

KMC Training Program
“See one, do one and teach one”

KMC E-Learning Platform
Virtual courses, Technical directives, Monitoring and Evaluation program, Certification.

KMC Data recording System
Data Base

Step 1

Step 2

Step 3
<table>
<thead>
<tr>
<th>General Aspects</th>
<th>KMC Training Program</th>
<th>KMC Toolbox</th>
<th>KMC Data Collection</th>
<th>KMC Expert Forum</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction to KMC</strong></td>
<td>6 training Modules</td>
<td>Assessment Formats</td>
<td>KMC outcomes</td>
<td>Space for professionals</td>
</tr>
<tr>
<td><strong>KMC according to levels’ facilities</strong></td>
<td>Modules Evaluation (quizzes)</td>
<td>Guide books and complementary information</td>
<td>KMC indicators</td>
<td>News and Information</td>
</tr>
<tr>
<td><strong>State of art</strong></td>
<td>Specific Learning tools (videos...)</td>
<td>Implementation Diagrams and Protocols</td>
<td>KMC statistical analysis</td>
<td>KMC Network</td>
</tr>
<tr>
<td><strong>Learner Activity</strong></td>
<td>Follow-up</td>
<td>KMC Literature</td>
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</table>
An interesting tool for training a KMC Excellence Center

Introduction à la Plateforme

Origine, Objectifs et Audience de la plateforme e-learning Kangourou

La MMK - Qui, que, quoi, dont, où?

Historique, Concept, Philosophie - en savoir plus

Parcours de Formation sur La Méthode Mère Kangourou

- Kangaroo Method
- Avant de débuter la MMK
- La Place Kangourou
- La Nutrition Kangourou
- L'Adaptation Kangourou intra-hospitalière
- Le Suivi Ambulatoire Kangourou
- Les Aspects sociaux et émotionnels

Collecte de certaines données importantes

Pour mesurer l'efficacité d'un Programme Mère Kangourou ou de l'application de certaines composantes de la méthode, certaines indicateurs ont été définis pour chaque Niveau de soins (Basique, 1, 2, 3). Il faut remplir ces données car ces sont les qui vous aideront à baisser la morbidité et à améliorer les soins kangourou donnés aux enfants.

My discussions

[Erreur] Dans le récapitulatif

ELKE BERGEN 05/06/16 11:10
Bonjour Marius, merci pour la question. Je comprends que dans votre cas, ...

Massage en Position Kangourou

ELKE BERGEN 23/04/16 16:03
Bonjour Marius, merci pour votre notification. Je peux vous confirmer que...

Start a new discussion

Actualités du site de la Fondation Kangourou

GSK and Save the Children Healthcare Innovation Award 2016

Document complémentaires : Vidéos, e-books, bibliographie, documents d'intérêt, guides, formats et manuels des tests
La Position Kangourou

Ce Module de formation aborde l'une des trois composantes de la Méthode Mère Kangourou (MMK), la Position Kangourou. Après avoir parcouru ce module d'apprentissage, vous serez capable d'expliquer Quand, Où, Pourquoi et Comment mettre en place la Position Kangourou avec la mère et le reste de la famille.

Ce parcours de formation est structuré en deux étapes qui contiennent, chacune, un module de formation et des ressources complémentaires d'approfondissement. Il est recommandé de consulter ces documents complémentaires après avoir parcouru l'ensemble du Module pour ne pas interrompre sans cesse le déroulement de la formation.

En savoir plus

<table>
<thead>
<tr>
<th>Type</th>
<th>Learning product</th>
<th>Duration</th>
<th>Progress</th>
<th>Score</th>
<th>Launch</th>
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<td>resource</td>
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THE KMC E-LEARNING PLATFORM

ADVANTAGES

• Ability to reach large numbers of people in different languages and different countries

• Support the successful implementation, development and efficient functioning of KMC programs

• Strengthen local training of KMC Excellence Centers

• Establish a KMC network at a country level

• Allows a detailed pedagogical design according to Hospital level of care – Training paths

• Establishment of a reliable information system to measure impact on mortality and morbidity indicators

• Measurement of the degree of success of the implementation of KMC programs and networks (regional and local levels)
WORKING PROGRAM - Calendar

First phase, 2017
- Translation and adaptation of the KMC E-learning Platform in 4 languages
- Training and KMC Certification of 2 Excellence Centers
- Deployment strategy design to technically diffuse the E-learning platform

Second phase, 2018 - 2019
- Translation and adaptation of the KMC E-learning Platform in 6 languages
- Training and KMC Certification of 6 Excellence Centers
- KMC E-learning Platform access for all continents and all countries
- Data collection in all participant countries

Third phase, 2020
- Training and KMC Certification of the last 2 Excellence Centers
- Results presentation in a Final Workshop with all participant countries
EXPECTED IMPACTS

10 Certified Excellence Centers ready to diffuse regionally in their country

KMC for 100,000 infants/year

KMC Data from 10 countries

KMC E-learning Platform in 10 languages for world diffusion

20% Decrease of LBW Mortality

Strategies for KMC national diffusion
COMMUNICATION ACTIVITIES

• INK Workshop and Congress, Trieste, Nov. 2016
• Crossknowledge annual meeting, Paris, Mar. 2017
• Every Newborn Action Plan Congress, 2017-2020
• SPR congress, 2017-2020
• INK Congress, Bogota, Nov. 2018
• And much more…..