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Evidence-based Guidelines for the use of the Kangaroo Mother Care Method (KMCM) in the provision of health care to stable LBW infants in Colombia.

Executive summary.

Rationale:

The Kangaroo Mother Care method (KM CM) is a set of interventions aimed at providing appropriate health care to LBW infants, both immature (preterm) and intrauterine growth restricted more mature infants. The cornerstone of KMC is the kangaroo position in which the infant is hold in skin-to-skin contact on his/her mothers' chest. Since the original description in 1978 by E. Rey et. al. considerable variability has developed regarding the different concepts and components of the method: a) definition of the target population and of the therapeutic goals, b) time for starting skinto-skin contact, c) continuity (intermittent vs continuous) and duration of the kangaroo position, d) feeding strategies, and e) discharge policies ("early" to home or to a kangaroo ward while in kangaroo position or "late", discharging the infant when the position is no longer needed).

At the same time, KMC has been the focus of a considerable body of research, aimed at answering different questions, with a wide variety of methods and quality.

Currently in Colombia KMC is used basically as an alternative to usual in-hospital intermediate and minimal care for stable LBW infants who have overcome most of the challenges of the transition to extra-uterine life.

In Colombia KMC has been regarded by many, particularly by health care insurers as a means for saving direct medical costs. One of the consequences has been the local proliferation in Colombia of so-called KMC programs which wide variation in the type, intensity and overall quality of the components of the intervention. This circumstance represents an actual danger of offering sub-standard care under the label of KMC. n response, a task force was assembled to generate Evidence-based, locally appropriate, locally applicable recommendations, standards and protocols.

In fact this undesired and wide variability in the delivery of KMC care is one of the most important motivations for undertaking this exercise of formulating and implementing evidence-based guidelines for the appropriate delivery of KMC. Recommendations are to be regarded not only as prescriptions for best KMC practice but also as normative quality standards. This is why local and national health authorities were invited to participate as active members of the KMC guidelines developing task force.

Objectives

1. To develop clinical practice guidelines with the following attributes: Evidence-based, locally applicable, having a positive impact in equity and being locally appropriate (feasible and acceptable for those involved).
2. To identify quality of health care indices both of processes (compliance with recommendations) and of selected health outcomes.
3. To identify and propose minimal and desirable quality standards for the provision of KMC ("Good KMC practices")

Methods

The first step carried out was the assembling and training of the task force. The task force is composed of a core (technical) group and the other members. The task force should not only be technically competent but also should have ample, equitable and respectful participation of representatives of clients, users, target population and stakeholders. The TF is the one that actually develops the process of generating recommendations.
A basic training and standardization process was conducted, which included elements of guidelines production and use, elements of clinical epidemiology and biostatistics needed for understanding principles of critical appraisal and evidence grading, and basic group management and consensus building techniques.

The procedure that is being followed for developing the guidelines involves the following steps:

1. Identification of purpose and objectives:
2. Framing of the Problem:
   2.1. Background information about the health problem
   2.2. Constructing a model for a generic clinical scenario ("typical" or reference KMC model.)
3. Identifying key questions (answers will become specific recommendations)
4. Definition of search strategy (based on key questions) and identification of evidence sources (databases, published and unpublished evidence, gray literature)
5. Selection of papers
6. Retrieval of papers
7. Synthesis of evidence
   7.1. Critical appraisal
   7.2. Judgment on consistency, clinical relevance and external validity
   7.3. Tables of evidence
   7.4. Grading of evidence
   7.5. Formulating graded statements, which are the proposed answers to each main question. Grades of recommendations are based on the following key aspects:
      7.5.1. Degree of confidence on the estimation by the guide developers on the balance between risks-costs and the benefits of proposed recommendations (different from perceived relevance of the question or expected impact if recommendations were valid)

7.5.2. Level of evidence: Study design + quality of methods and conduction of studies.
7.5.3. Relevance of evidence: closeness of study objectives to the respective guideline question, clinical relevance of reported outcomes (favoring patient centered outcomes), applicability to broader spectrum of settings, patients etc.
7.5.4. Strength of evidence: magnitude, precision and consistency of reported effect (treatment), association (risk or prognostic factor) or discriminating ability (diagnostic test).
7.5.5. Potential access of patients to recommended interventions (economic, cultural, social and political barriers to access). This involves all aspects regarding feasibility of implementation of recommendation and equitable access
7.5.6. Expected impact and local relevance (expected effect i.e. absolute risk reduction) if recommendations were valid
7.5.7. Resources implications: local present and future economic feasibility of proposed interventions. "Second best" alternatives might be proposed based on economic feasibility.

7.6. Grading scale: adapted from the following sources: SIGN Grading system, Evidence-Based Medicine Working Group grading system, Oxford's EBM grading system.

Current Status

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The task force was assembled in January 2006, including the participation of task force members in a two and a half workshop on basics of evidence-based guidelines development. The task force has been meeting regularly since, (once to twice a month). Conceptualization (basic definitions of terms, scope and objectives of guidelines) was completed in March. The task force members agreed on the model for characterizing and delivering Kangaroo Mother Care, and questions about the three main components were formulated: kangaroo position, kangaroo nutrition and kangaroo discharge and follow-up policies.
Based on those questions, the core group developed an evidence search and retrieval strategy. Literature search have been conducted for all questions related to the first two topics. Scientific articles have been recovered, screened and evaluated systematically for quality. Those selected papers (based on relevance and quality) were reviewed for data extraction in order to answer each one of the questions prepared by the task force. Information was compiled in evidence tables and draft versions of recommendations were formulated.
Each recommendation and the evidence supporting it were presented to and extensively discussed with the task force members, until a consensus was built. Each recommendation has been assigned a level of evidence and a grade of recommendation.
Work on the last component (kangaroo discharge and follow-up policy) is currently being developed. After that, recommendations will be presented to external peers and to local focal groups, before final compilation and publication. Work is expected to be completed by the end of2006.

Conclusions

Work is still in progress, but several important products have been completed as described earlier. Already, draft recommendations for kangaroo position and feeding are available. Input from external peers (all of you!!!) at this stage is of invaluable importance.

Although sound guidelines should be tailored to local needs and conditions, and this particular exercise is focused in the Colombian situation, it is reasonable to expect that many of the recommendations and certainly most of the evidence appraised will be a useful input for guidelines development elsewhere.