Title: "Kangaroo mother care: acceptability for mothers and health workers".

Dra S.Quintero, Italy

Kangaroo mother care (KMC) improves the health and survival of low birthweight infants (LBWI). To be implemented and to achieve these benefits KMC must be acceptable for mothers and health workers. During a multicentre controlled trial on the effectiveness and feasibility of KMC, we studied acceptability by means of quantitative and qualitative questionnaires, administered by trained interviewers to mothers 8-12 days after admission to KMC or conventional care (CC) and to health workers at least six months after the beginning of the study, and through focus group (FG) discussions with groups of 6-8 mothers or health workers. The randomized trial was fully completed at the Ethio-Swedish Children Hospital (ESCH) in Addis Ababa, Ethiopia, at Gadjah Mada University Hospital (GMUH) in Yogyakarta, Indonesia, and at the Centro Medico Nacional El Fenix (CMNF) in Merida, Mexico. The Medical College & Civil Hospital (MCCH) in Ahmedabad, India, carried out a controlled study without randomization, while the Instituto Materno Infantil de Pernambuco (IMIP) in Recife, Brazil, conducted an observational study on a sample of KMC infants.

Tables 1 and 2 show some of the results about acceptability for health workers. Overall, we interviewed 30 doctors, 31 nurses, 23 auxiliaries and a social worker. For none of them the presence of mothers in the ward represented a problem. Most health workers considered KMC beneficial because it ensures thermal control, it enhances bonding, breastfeeding and growth, it protects against infection, and because it empowers mothers. The disadvantages included boredom and the lack of rest for mothers. The CC does not have these problems; in addition, it allows health workers to better monitor the health of sick LBWI, but it increases the risk of hospital infections and it separates infants from their mothers. Some health workers mentioned among the advantages of KMC the improvement of the relationship within the family and the mutual support among mothers. All health workers agreed that KMC helps humanizing neonatal care.

Tables 3 and 4 show some of the results about acceptability for mothers. All mothers considered that the information they had received about KMC and CC was adequate. The majority of mothers thought that KMC was better because it is more natural and it allows staying with the baby. Twelve mothers in Merida rejected CC for KMC after informed consent and random assignment, because they wanted to stay with their babies. One mother in Addis Ababa accepted the assignment to CC but declared that she would switch to KMC soon after discharge. Many mothers in the CC group found it uncomfortable and inconvenient because of the need to travel often to hospital from home and between wards in the hospital. They were worried about the temperature they would find at home after discharge; the KMC mothers did not express this concern. Some mothers in the CC group were sad because they "could not see the face movements of their babies", "could not know if they were smiling or crying", or "found the baby asleep each time they were allowed to stay with him". The advantages of KMC most frequently expressed were bonding, breastfeeding, better growth, thermal control, protection from infection, and the skills quickly learned for caring LBWI. The consciousness that KMC improves bonding is well expressed by these words said by a mother in Merida: "My baby knows that I am with him and he listens to my words". Mothers in Merida and Addis Ababa often said that KMC was "still keeping the baby inside". Complains about the long stay in the hospital were expressed more often in Recife and Addis Ababa than in the other three

hospitals, but were in any case irrelevant compared to the commitment that all mothers showed for the implementation of KMC. Partners were much more involved in baby care in the KMC than in the CC group.

The FG sessions with mothers allowed to pick up feelings and problems not detected by questionnaires. Many mothers could express the fear and anxiety they had felt after delivering a LBWI. One of the mothers had experienced the death of a preceding LBWI and maintained that that baby would have not died if KMC were available. One mother was surprised by her capacity to deal with twins using KMC. Overall, mothers expressed their profound emotion for staying with their babies (many mothers cried during the discussion) and were surprised by how easy KMC was. They felt all very satisfied with their capacity to manipulate LBWI. Among negative feelings, some mothers expressed their boredom and loneliness, or their concern for partners and other children; one mother in Recife said that she was feeling like in jail. These problems were in any case compensated by the joyful responsibility to care for their babies they had taken. The FG sessions were useful also because mothers were able to propose improvements in the organization of the KMC wards, such as more recreational activities (reading, radio, television), some training on income-generating skills (sewing, cooking), and better use of time for health education.

The FG sessions with health workers allowed to point out both negative and positive aspects of KMC. Among the former: light and television on until late at night, and inadequate hygienic habits of some mothers. Among the latter: better collaboration between mothers and staff and among mothers themselves. Overall, health workers expressed more positive than negative feelings.

Table 1: Acceptability for health workers in the three sites with randomization.

ESCH GMUH CMNF

Number interviewed 19 17 13

Mean age (range) 36 (22-50) 33 (25-52) 36 (26-48)

Percentage of males 12% 21% 44%

With children 74% 100% 92%

KMC CC KMC CC KMC CC

Consider mothers able to care for LBWI 90% 48% 88% 88% 92% 77%

Consider KMC at least as safe as CC 100% - 88% - 85% -

Would prefer KMC in case of LBWI 100% 0% 41% 6% 100% 0%

Table 2: Acceptability for health workers in the two sites without randomization.

MCCH IMIP

Number interviewed 20 16

Mean age (range) 26 (24-54) 28 (20-40)

Percentage of males 67% 0%

Consider mothers able to care for LBWI 100% 100%

Consider KMC at least as safe as CC 100% 100%

Would prefer KMC in case of LBWI 100% 100%

Table 3: Acceptability for mothers in the three sites with randomization.

ESCH GMUH CMNF

KMC CMC KMC CMC KMC CMC

Number interviewed 50 50 52 54 41 22

Mean age (range) 26 (18-39) 23 (15-38) 28 (18-42) 26 (19-36) 25 (17-37) 26 (16-40)

Mean parity 2.4 2.2 1.8 1.8 2.0 2.3

% of primiparae 44% 52% 54% 45% 46% 27%

Married/with partner 83% 70% 100% 96% 100% 91%

Illiterate 13% 26% 0% 0% 0% 0%

Unemployed 73% 66% 86% 94% 5% 9%

Happy with

assignment 92% § 46% § 92% 100% 100% 96%

Would prefer

other group 19% 68% § 2% 2% 3% § 68% §

Find it comfortable 92% § 50% § 79% 87% 97% 91%

Find it convenient 88% § 42% § 98% 98% 97% 96%

Find it easy 98% § 56% § 92% 89% 91% § 50% §

Feel able

to care at home 100% §76% § 89% 94% 100% 96%

Feel supported

by mothers 96% 98% 77% 89% 97% † 73% †

Feel uneasy for the long

hospital stay 13% - 4% - 3% -

Would like more time with

baby - 96% - ? - 95%

† p<.05 § p<.001

Table 4: Acceptability for mothers in the two sites without randomization.

MCCH IMIP

Number interviewed 38 106

Mean age (range) 23 (16-35) 23 (13-39)

Mean parity 2.5 1.7

Percentage of primiparae 39% 68%

Married/with partner 100% 87%

Illiterate 68% 8%

Unemployed 92% 67%

Happy with KMC 82% 85%

Would prefer CC 0% 1%

Find KMC comfortable 82% 90%

Find KMC convenient 79% 90%

Feel able to care at home 58% 100%