



THE KNOWLEDGE AND ATTITUDE OF MOTHERS AND NURSES TOWARDS KANGAROO MOTHER CARE IN THE SOUTH DISTRICT OF DELHI

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ABSTRACT

Low income countries have recognized Kangaroo Mother Care (KMC) as a necessity to promote positive neo-natal health under adverse conditions. The benefits of KMC include empowering the mother to care for her LBW infant, decreasing infant mortality, encouraging breastfeeding and reducing the frequency of low birth weight babies visiting the clinics after discharge from hospital.

Objectives- To assess the knowledge and attitude of Kangaroo Mother Care (KMC) in mothers and nurses in the South District of Delhi

Methods- The survey was conducted on 25 Mothers and 25 Nurses of a hospital. They were interviewed through the Questionnaire including open ended questions regarding knowledge and attitude towards KMC.

Result: The majority of the mothers (88%) did not have prior knowledge of KMC. Sixty four per cent of the nursing staff did not have any KMC training.

Conclusion- The study showed that the mothers do not have basic knowledge about KMC and the Nursing staff was not properly KMC trained. Also Certain areas were identified that need to be addressed to improve KMC implementation.

KEYWORDS : Kangaroo Mother Care, Knowledge, Attitude, Low birth weight Infants

INTRODUCTION

Globally 25 million infants (17%) are born with low birth weight (LBW) and most of these occur in low income countries. A premature baby requires special care and positive interaction (mother-infant interaction) so as to minimise the danger of developmental delay. However, studies have shown that there's often less interaction between a premature baby and its mother. A number of things contribute to the present, including the very fact that the infant is within the neonatal medical care unit, which the mother feels overwhelmed, and like an outsider.^{2,4} it's also been proven that mothers of premature infants are naturally less empathetic towards their infants, and have a tendency to interact less with them visually, orally and tactilely.^{2,4}

Kangaroo mother care, also referred to as early skin-to-skin contact, is defined as carrying a stable, low birth weight (LBW) infant, dressed only in a nappy and a cap, and in some cases socks, between the mother's breasts, where he or she is kept warm, has ready access to feeding, is shielded from infection, and is given stimulation and safety. In other words, the mother acts as an incubator, and therefore the mother and infant aren't separated for long periods of your time.^{1,5-8} KMC was developed in Bogotá, Colombia, by Dr Edgar Rey and Dr Hector Martinez in 1978 in an attempt to increase the survival of stable LBW infants in resource-poor settings.⁵⁻⁸ KMC has physiological, behavioural, psychosocial and cognitive developmental benefits, and it enhances mother-infant bonding.^{4,6,8}

KMC is a practical and inexpensive option and therefore the best way to provide this care and warmth specially during the incidence of power failing and in households who do not have access to electricity. The immediate impact of KMC is to stop prolonged separation of the mother and her LBW child, which can contribute to an increase in morbidity, insufficient breast milk volume, poor growth and poor mother to infant bonding.

The purpose of this study is to provide the health facility in the community hospitals with information on how effectively the KMC policy is being implemented and to use this information

to facilitate enhancements within the implementation of KMC.

METHOD

The study site was the Al- Shifa Hospital, Okhla- South Delhi. A descriptive Survey study design was used to determine the knowledge of, and attitudes towards, KMC. The study population included 25 women who gave birth to a LBW infant (infant weighing < 2500 g), as well as a total of 25 nursing staff.

The questionnaire was completed by the researcher during face-to-face interviews, conducted with the mothers and nursing staff, within the language of their choice. Information was collected from the mothers regarding socio-demographics, information received during antenatal care, feeding practices, and KMC. Information collected from nursing staff included experience with prenatal care, training which they have in KMC, and knowledge, and attitudes towards, KMC.

A 5-point Likert scale (ranging from "strongly disagree" to "strongly agree") was used to assess their knowledge of, and attitudes towards, KMC. Closed ended questions were used to assess KMC practices, and open ended questions were used to evaluate their knowledge of KMC. Written informed consent was obtained from all participants. Permission to carry out this study was obtained from the hospital.

RESULTS

Characteristics of the kangaroo mothers and their infants
The mean age of the mothers was 27.5 years. The mean birth weight was 1.37 kg. The mean chronological age of the infants was 17.8 weeks.

Educational level and source of income. 53% (n = 16) of the KMC mothers had not completed their secondary education (Grade 8-12), and only about 3% of the KMC mothers (n = 4) had completed their primary level schooling (Grades 1-7). Almost 17% (n = 5) of the KMC mothers had completed their secondary level schooling (Grades 8-12); about 3% (n = 1) had obtained a tertiary education; and 3% (n = 4) of the mothers

had not completed their primary education level schooling. Fifty Six per cent of the KMC mothers (n = 14) were employed; almost 44% (n = 11) were unemployed.

Knowledge and practices. The majority of the mothers interviewed (92%) had not received any information regarding KMC at the prenatal clinics that they attended. Information on KMC that the mothers received from nursing staff at the clinics included: a LBW infant has got to stay within the hospital for an extended period of time, and that KMC would improve the weight gain of the infant.

Feeding practices. Seventy-six per cent (n = 19) of the mothers decided to breastfeed their infants. The reason given for their decision was their belief that breast milk is the best milk for their infants. The mothers who opted to mix feed (n = 6). These 24% mothers' decision was based on the fact they felt that their milk production was not sufficient for the infant.

Attitudes towards kangaroo mother care. The majority (96%) of the mothers felt positive towards KMC. Their main motivation for embracing it had been the well-being of their infants.

Implementation of kangaroo mother care practices by mothers with low birth weight infants. Eighty per cent (n = 20) of the mothers started to practice KMC within 24 hours post-delivery. Of these, 13 initiated KMC within one to six hours, four within seven to 12 hours, and three within 13-24 hours. Three (12%) of the mothers only initiated KMC within 25-48 hours, due to their infants needing some form of medical intervention post-delivery. Two of the mothers (8%) could only initiate KMC within 72 hours after giving birth because their infants had been placed in an incubator.

Duration of kangaroo mother care. The majority of the mothers (n = 22) practised KMC regularly. Three practised intermittently because their infants were in an incubator at night.

Acceptability of kangaroo mother care by mothers. Twenty-three (92%) of the mothers found KMC to be acceptable, and that they would continue it at home, post-discharge. Only two mothers (8%) indicated that they would not continue KMC at home, but were willing to do it in the hospital.

Support received while within the kangaroo mother care ward. The KMC mothers felt very positive about the support they received from one another while they were within the ward. Ways during which they supported one another included the following: they reminded one another about the importance of KMC for his or her babies; discussed the way to comfort their babies, and how to kangaroo the infants properly, as demonstrated; and exchanged ideas on how to minimise discomfort. Twenty-one of the KMC mothers (84%) felt that they had received adequate support from the nursing staff. However, four (16%) of the mothers indicated that they, as mothers, would have preferred to have been more involved during ward rounds. They also indicated that they needed regular information sessions, which dedicated nurses should be available to offer them continuous support. The mothers also indicated that they wanted to be included in the training given by the occupational therapist.

Qualifications, work experience and kangaroo mother care training of nursing staff. Five professional nurses (20%), five senior nurses (20%), five junior nurses (20%), and ten were nursing assistants (40%). Sixteen per cent (n = 4) of all the nursing staff who participated in the study did not have any KMC training. 21 nurses working in the KMC ward had received formal training on KMC (84%). Four of the hospital nursing staffs had between one and five years' work

experience (16%), five had six to 10 years' work experience (20%), six had 11-15 years' work experience (24%) and ten had 16-20 years' work experience (40%).

Knowledge of nursing staff regarding the benefits and drawbacks of kangaroo mother care. According to 88% (n = 22) of the nursing staff, KMC has no disadvantages, but 8% (n = 2) indicated that KMC is disadvantageous to the children and family members at home, due to their long separation from the mother, who is required to stay at the hospital with the LBW infant. Four per cent (n = 1) indicated that KMC might also be harmful to the infant, should the mother forget about the infant on her chest, and accidentally smother him or her when she turns over in her sleep.

Nursing staff's knowledge and attitudes. Overall, all the nurses agreed that KMC promoted mother-infant bonding, enhanced the mother's confidence with regard to how to handle her LBW infant, and resulted in effective breastfeeding. Approximately 28% (n = 7) of the nurses agreed that both parents should be involved in KMC practice, and 72% (n = 18) of the nurses agreed that nurses should always facilitate KMC. All nursing staff supported the implementation and facilitation of KMC because they believed that it was very beneficial to the LBW infant.

Needs identified by nursing staff for the successful implementation. Three (12%) of the nurses indicated that they were concerned about the insufficient space available for the number of KMC mothers admitted to the KMC ward. Seven (28%) of the hospital nurses reported that more facilities such as lockers and cupboards, a laundry area and dining area, as well as proper beds, were required to make the KMC mothers' stay more comfortable.

DISCUSSION AND CONCLUSION

a. The Knowledge of mothers about KMC: Although the mothers did not receive any KMC education at the prenatal clinics, they did know the importance of KMC for the well being of their baby. The information they received when they were admitted to the gynae ward include the Importance of KMC for the rise of the burden of the child and the importance of breastfeeding for the infant's development¹⁰. Some mothers felt that they needed more support from the nursing staff, such as assistance with expressing breast milk, continuous assistance and availability of nursing staff exclusively for kangaroo mothers and regular information sessions.

b. The Knowledge of nursing staff on KMC: The nursing staff mentions the most commonly cited advantages of KMC. They are-Empowering the mother to worry for her child, Decrease the risk of LBW mortality, Increase breast milk stimulation, Improve weight gain, Reduce nurses work load, Lower and stabilize heart rate, Better maintained body temperature, Decrease in stress hormones, Decrease in severity of infections, Decrease in hospital stay⁶⁻¹⁰.

c. Attitude of Kangaroo Mothers towards KMC: Information received from the mothers indicates that they have a positive attitude towards KMC and that they were fully aware of the importance of KMC to the development of their infant. More felt confident in handling their infant and support other mothers who struggle caring for the infant. This support is important to the mothers especially for first time mothers. Therefore a step down unit with higher facilities / a {more robust | an improved} equipped space and more workers can be advantageous for the mother's and infant's well being¹⁴.

d. Attitude of Nursing Staff towards KMC: All the nursing staff interviewed had a positive attitude towards the implementation of KMC for low birth weight infants. The nursing staff required support from the mothers by being more

dedicated to their infants. They reported that some of the young mothers were not dedicated enough in caring their infants and that they do not want to stay in hospital for long^{5,6,10}.

e.KMC Practices of mothers with low birth weight infants: KMC is an applicable method in decreasing death rate. KMC should start as soon as possible after birth when the baby is stabilized. From the data collected the majority of mothers started KMC soon after they get educated about KMC after delivery^{8,9}. The nursing staff also felt that this involvement of the family will help the mother emotionally and serve as an encouragement to continue KMC. The nursing staff also felt that this involvement of the family will help the mother emotionally and serve as an encouragement to continue KMC.

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