

Title: Barriers and Enablers for Early and Prolonged Kangaroo Mother Care- A Prospective Cohort Study.

Authors: Suman Rao PN, Shridevi Bisanalli, Shammah J,

Communicating author: Suman Rao PN (raosumanv@gmail.com)

Affiliations: Department of Neonatology, St. John's Medical College Hospital, Bangalore

ABSTRACT

Background

Despite the plethora of evidence for benefits of KMC, implementation by health personnel and adoption by families has been limited. Identifying barriers to KMC can help in determining solutions and thereby scale up KMC.

Methods

This cohort study was conducted in a tertiary care NICU to study the barriers and enablers for successful facility based KMC. Successful KMC was defined as “early” and “prolonged” KMC (EPKMC) where KMC was initiated within 72hours of life (early) and duration > 8 hours for 2 consecutive days prior to discharge (Prolonged). Infant details were recorded prospectively in a pre-structured proforma. The key factors that have improved KMC duration in the ongoing KMC quality improvement program in our unit in the past two years are described.

Results

147 infants were included in this study. 55 received EPKMC and 92 received NEPKMC (non EPKMC). Birth weight and gestational age were significantly lower in the NEPKMC group. CPAP ventilation, phototherapy and presence of central line were significant barriers for EPKMC. Lower birth weight and gestational age were however enablers for prolonged KMC. KMC counseling package, foster KMC practice, KMC nurse and KMC ward were key enablers for improving the duration of pre-discharge KMC from average duration 4.4 hours/ day to 15.7 hours/ day.

Conclusions

Phototherapy, presence of central lines and CPAP ventilation are major barriers for early initiation of successful KMC. Introduction of KMC nurse, encouraging foster KMC and dedicated KMC ward enable prolonged successful KMC. An ongoing QI initiative is successful in improving KMC duration.

Key words: Kangaroo mother care, facility based, enablers, barriers, QI