

"Kangaroo-Mother Care in Low Birthweight Infants, a Randomized Controlled Trial"

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Objective: To compare the kangaroo-mother care (KMC) and conventional method of care (CMC) for low birthweight infants (LBWi) in term of feasibility, acceptability to mothers and hospital staff, cost and health of the newborn; and to identify the constrains of KMC implementation

Design: Randomized, controlled trial, stratified by birth weight with a block size of six, blinding is not possible due to the nature of intervention

Settings: Neonatal unit, tertiary care hospital

Participants: One hundred and six infants born weighing 1000 - 1999 gm were enrolled into KMC or CMC methods of care after stabilization and informed consent. Exclusions were malformation and twins.

Interventions: Fifty-two KMC infants were kept close and continous skin-to-skin contact with the mothers, naked except fo napkins. Breast-feeding was the standard feeding method. Routine care was offered to 54 CMC infants, consisted of an artificial warming system (incubator), tube feeding, or mothers milk by spoon. The method of care was applied until discharge. Follow-up was performed on day-3, 10, 20 and 30 after discharge.

Main Outcome Measures: Informations of body temperature, vital signs, body weight, feeding provision, illness, length of stay, daily and total duration of skin contact. Records on the constraints of structural or managerial, the acceptability of the method for the mothers and staff and the cost

Results: There was no significant differences in growth and in the occurrence of hypothermia. Minor illnesses during hospitalization and its trend during follow-up period were found lower in the KMC group. Mean age of enrollment for CMC was 8.9 ± 3.5 days whereas for KMC was 8.7 ± 4.3 days (SD) with mean duration of skin contact of 10.6 ± 3.6 hours/day. No infants of KMC was drop out. Most infants were still breast-fed on 1 month follow-up. No significant constraints were offered by mothers or hospital staff. Total cost for KMC and CMC were \$ 14,615 and \$ 19,350, respectively (1 \$ = Rp. 2,400).

Conclusions: The KMC was applicable and beneficial method in hospitalized as well as home LBWi care. It was accepted well by the mothers and by the hospital staff. It was considered technically simple with provision of training and instruction of care.