

Rey-Martinez Kangaroo Mother Program: An Alternative Way of Caring for Low Birth Weight Infants? One Year Mortality in a Two Cohort Study

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Objectives. To assess the effectiveness and safety of the Kangaroo mother intervention (KMI).

Design. Observational, analytic, prospective (two cohorts) study.

Setting. Two large tertiary care obstetric hospitals, one offering "traditional" care and the other KMI.

Patients. Newborn infants with birth weights ≤ 2000 g, who survive the neonatal period and are eligible for an in-patient minimal care unit (MCU) (having overcome major adaptation problems to extra uterine life).

Interventions. "Kangaroo infants" (KI) were discharged as soon as they were eligible for MCU, regardless of weight or gestational age. Infants were kept 24 hours a day in an upright position, in skin-to-skin contact and firmly attached to the mother's chest until the KMI was not tolerated anymore. Control babies (from the other facility) were kept in incubators at the MCU until they satisfied usual discharge criteria for the control hospital. Both groups were followed periodically up to the age of 1 year.

Results. Three hundred thirty-two eligible infants were recruited, 162 at the Kangaroo hospital and 170 at the control hospital. KI came from a much lower socioeconomic class and were more ill before eligibility. Relative risk of death was higher for KI (RR 1.9), although this figure was reversed after adjusting for weight at birth and gestational age (RR 0.5). KI grew less in the first 3 months and had a higher proportion of developmental delay at 1 year, and a multivariate analysis failed to control for the large baseline differences in socioeconomic levels and babies' health status between the two cohorts.

Conclusions. In spite of major baseline differences between studied cohorts, the survival of LBW infants in Bogotá is similar between the KMI and the "traditional care". Questions remain about quality of life, especially regarding weight gain and neurodevelopment, that may be answered by a Randomized Controlled Trial.

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