

The impact of Kangaroo Mother Care on neonatal mortality in Brazil

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In order to reduce the neonatal mortality and achieve the Millennium Development goals for child survival, many developing and middle-income countries are struggling. The Humanized Attention for Low-birth Weight Infants – Kangaroo Mother Care (KMC) became a Brazilian public health policy for high risk pregnancy maternities in 2000. RCTs on KMC have failed to measure the impact on neonatal mortality. In the country, no evaluation has been published in order to identify its impact on the mortality of low-birth weight (LBW) infants. Here we identified a plausible impact of the KMC on mortality of LBW infants in Brazil. An ecological study was performed in 27 capitals in Brazil involving the five geographical regions. The analysis unit was high risk pregnancy maternities. Aggregated data was compiled from linkage between birth (DNV) and death information systems (SIM) per hospital in 2002. It allowed us to compute the late neonatal mortality rate of infants with birth weight ranging from 1,250-2,000g. Information about implementation of KMC and availability of technology was obtained by postal questionnaires. Exactly 97 of 110 valid questionnaires were received (88.2% response rate). Reliability coefficients for the implementation and technology scores were acceptable (Cronbach's alpha coefficient 0.81 and 0.79, respectively). The mean later neonatal mortality rate was 3.75 ± 0.57 /1000 live births. The partial correlation coefficient between mortality and implementation score, adjusted for region and technology score was -0.43 ($p < 0.01$). The regression coefficient was - 0.41 (IC 95% -0.58 to -0.23, $p < 0.01$). These results suggest that KMC as implemented in Brazil may contribute to reducing the later neonatal mortality rate among infants with birth weight of 1,250-2,000g. It provides some evidence in support of this national policy that should encourage other countries considering implementation of KMC to achieve the child survival Millennium Development Goal.