

Early essential newborn care is associated with increased breastfeeding: a quasi-experiment study from Sichuan Province of western China

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Abstract

Background: Breastfeeding is critical to promote maternal and child health in a short and long term.

China has set national targets to further improve the exclusive breastfeeding rate. We aimed to examine associations between the provision of Early Essential Newborn Care (EENC) and breastfeeding outcomes among full-term vaginally delivered neonates in the first six months of life.

Methods: We conducted a quasi-experiment study in eight maternal and children's hospitals in Mianyang City and Deyang City in Sichuan Province of western China. Four hospitals were randomly selected as the intervention group with the implementation of EENC while others as the control group receiving routine care. We assessed effects of EENC on breastfeeding initiation time, duration of first-time breastfeeding, and exclusive breastfeeding rates up to six months of age. Data in both groups were collected after delivery, at hospital discharge, 1 month, 3 months, and 6 months post birth in the baseline phase and post-EENC phase. Written consent was obtained from eligible mothers enrolled in this study. We performed univariate analyses to ascertain differences between the two groups, and difference in difference (DID) models to explore the net effects.

Results: Of the 1349 enrolled mother and newborn pairs in our study, 1131 were followed up at 1 month of age, 1075 at 3 months, and 981 at 6 months. EENC was associated with earlier median time to initiate breastfeeding (25min vs. 33min, $P<0.01$), an increased chance of successful first-time breastfeeding (OR=5.534; 95% CI: 2.687-11.399), longer duration of skin to skin contact (SSC) (21.529 min; 95% CI: 18.171-24.887) and longer duration of the first breastfeed (4.157 min; 95% CI: 2.098-6.217), and an increased likelihood of being exclusively breastfed at discharge (74.5% vs. 55.0%, $P<0.001$), 3 months (OR=3.197; 95% CI: 1.008-10.144), and 6 months (OR=4.913; 95% CI: 1.709-14.130) of age.

Conclusions: EENC enhances early and successful breastfeeding initiation, prolongs duration of the first breastfeed, and increases the rate of exclusive breastfeeding at six months of age. Our evidence suggests that nation wide scale up of EENC would increase the exclusive breastfeeding rate in the first six months of life.

Full Text

Due to technical limitations, full-text HTML conversion of this manuscript could not be completed.

However, the manuscript can be downloaded and accessed as a PDF.

Figures

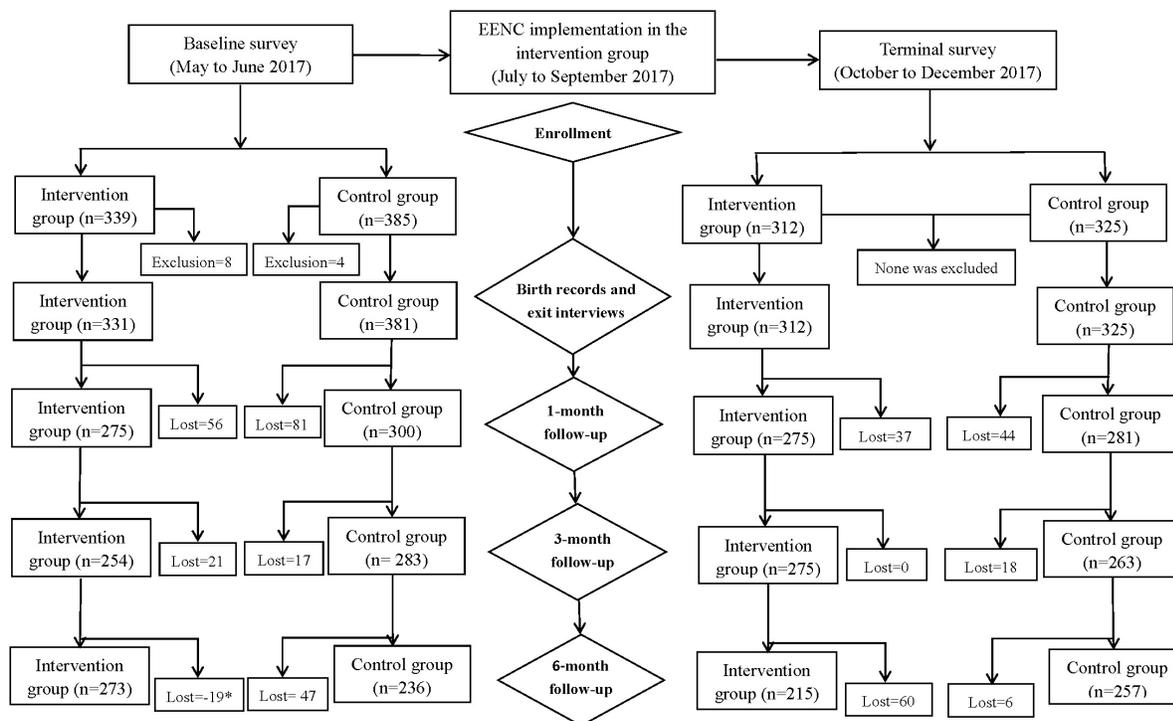


Figure 1 Flow chart for data collection

* Note: 19 mother-infant couples withdrew from the study at 3 months after delivery but were followed up at 6 months.

Figure 1

Flow chart for data collection