The main problem in developing countries such as Indonesia is the high incidence of low birth weight infants. The morbidity and mortality rates are still high. The aim of this study is to know several benefits of the Kangaroo Mother Method (KMM) Care on low birth weight infants at home to prevent hypothermia. A cohort prospective study on low birth weight infants was carried out in the Neonatal Intensive Care Unit (NICU) and in Ward 17 of dr. Hasan Sadikin General Hospital. The inclusion criteria were: general condition were good and stable, low birth weight infants (< 2250 grams), primitive reflexes were positive, breast-fed only, parents' address were clearly in Bandung Municipality. Several days before discharged every mother was trained to use KMM, cared her baby, breast-fed and measure body temperature three times a day during one month. The control group were similar condition babies but maintained the optimal body temperature by conventional care and got breast-feeding/breast-feeding + formula/formula only. One week after discharge, home visits were done by trained midwives or nurses every week for one month; they measured body temperature, body weight, vital signs and, noted the response of the mothers/families to KMM care. Focus group discussion was done after two times home visits. The results: The whole characteristic of respondent from KMM group versus control group were similar, except in gestational age babies (p:0.0037). No significant difference in body weight and velocity of weight gain during home visits (p<0.01). The curve of weight gain in KMM group was linier but not in control group. During follow-up home visits there was no hypothermia on KMM group but it always occurred in control group (10%, 6%, 2% and 4%, respectively). On focus group discussion all respondents had the opinion that the KMM care was useful. Conclusion: The whole condition of low birth weight infants with KMM was less advantaged than the control group. Actually, in KMM the low birth weight infants care was better in maintaining the optimum body temperature and the velocity of weight gain. KMM was very useful to prevent hypothermia in low birth weight infants care at home. The mothers not fully used the KMM method at home.