

## **On Early Growth and Breastfeeding in Normal Birthweight Newborns Effect of Kangaroo Mother Care during the first 72 Hours of Life**

A recent paper published describes the protocol for a randomized controlled trial examining the benefits of [Kangaroo Mother Care](#) (KMC) for babies born at normal birthweight. The study involves three centers in Uttar Pradesh, India.



### **Study**

The protocol describes a multicenter, pragmatic, individually randomized, controlled, open-label superiority trial involving 516 healthy singleton newborns weighing at least 2,500 g at birth and their mothers. The current study was designed to recruit participants following uncomplicated vaginal deliveries at three [public health](#) facilities in and around Lucknow, Uttar Pradesh. Prolonged KMC was provided during the first 72 hours after birth, along with standard newborn care.

Mother-infant dyads were randomized 1:1. Both groups received a common minimum package of essential newborn care, including breastfeeding initiation through uninterrupted SSC during the first hour, counseling, vaccinations, routine clinical care, and advice on thermal care, hygiene, [breastfeeding](#), and recognition of danger signs.

The intervention group receives KMC counseling from a trained team, which includes at least 8 hours of SSC daily, with [prolonged exposure](#) encouraged, during the first 3 days after birth. The intervention combines this prolonged SSC with exclusive breastfeeding in the KMC position.

The newborn and mother remain bare-chested during SSC, with the baby wearing a cap and socks and a blanket covering the baby's back and the mother's chest for warmth. The mother may be semi-reclined or practice ambulatory KMC using a binder. Mothers were the primary KMC providers, although [family members](#) may support SSC to extend its duration.

Mothers are encouraged to continue these practices according to their comfort level throughout the first 28 days after [childbirth](#). Mothers are also taught safe positioning, binder use, and ambulatory KMC, with family members able to provide some support.

[Breastfeeding](#) is newborn-led and on demand. Mothers were encouraged to allow the newborn to self-latch while in the KMC position, using the baby's primitive reflexes to facilitate attachment.

Their role included positioning and supporting the breast to keep it stable while the infant attempted to latch without interference.

A trained KMC support team counsels mothers, provides [practical assistance](#), and records SSC exposure. Mothers discharged before completing 72 hours are encouraged to continue KMC at home, with telephone follow-up to assess exposure.

## **Findings**

All infants eligible for this study are healthy singleton newborns weighing at least 2,500 g, without major [congenital abnormalities](#), delivered vaginally and not requiring immediate resuscitation or intensive-care admission. Mothers must intend to breastfeed for the first 28 days and live within the study catchment area of about 50 km.

The study excludes Cesarean births, multiple births, significant maternal complications, and several other circumstances that could prevent SSC. Eligibility is based on birth weight rather than gestational age because the researchers report variable quality of [gestational-age](#) information in the study setting.

The three co-primary outcomes are mean percentage weight change at 48 hours after birth, [weight gain](#) velocity during the first 28 days, and the proportion of mother-infant dyads with moderate-to-poor breastfeeding quality at seven days (a Bristol Breastfeeding Assessment Tool (BBAT) score below 7 out of 8).

The researchers hypothesize that prolonged KMC will reduce mean early [weight loss](#) by 25%, increase the rate of weight gain by 20%, and reduce moderate-to-poor BBAT scores by 50%.

Secondary outcomes include exclusive breastfeeding, maternal breastfeeding experience and self-efficacy, possible serious bacterial infection, [maternal depression](#), and mother-infant bonding.

Participating mothers and the teams delivering the intervention cannot be blinded to group allocation, but independent outcome assessors will remain masked. Both groups receive the same standard care. Follow-up assessments occur at approximately 24 and 48 hours, and then at home on days 4, 8, 15, and 29. Home visits evaluate [newborn](#) and maternal outcomes after discharge.

The protocol includes standardized training and quality-control procedures, along with [electronic data collection](#). A random 10% of study visits undergo detailed quality checks.

Primary analyses use the intention-to-treat population. Using linear mixed-effects models, the researchers plan to evaluate continuous outcomes, including weight change and weight gain velocity. Mixed-effects [logistic regression](#) will be used for breastfeeding outcomes.

The models account for study site, parity, infant sex, and [baseline birth weight](#). A secondary per-protocol analysis includes intervention-group participants receiving at least 8 hours of SSC with exclusive breastfeeding in the KMC position on each of the first three days. The investigators do not plan to perform a formal statistical adjustment when testing the three primary outcomes because they regard them as complementary measures of successful neonatal transition.

Instead, they plan to consider the direction and clinical magnitude of findings across the three outcomes.

Safety-related events are documented using standard adverse event reporting forms for newborn death or admission to a Level 2 or higher newborn care unit. A Data and Safety Monitoring Board will conduct a masked interim safety analysis after 50% of participants have completed follow-up, comparing the incidence, severity, and patterns of serious [adverse events](#) between groups.

### **Conclusion**

Current recommendations for healthy infants focus on uninterrupted SSC for the first hour after birth, until breastfeeding is initiated. However, this study examines whether the benefits of KMC during the first 72 hours extend to [normal-birthweight babies](#), helping improve their growth patterns and establish breastfeeding.

The results could also guide future studies of KMC use in other delivery settings, including [Cesarean births](#), different KMC durations, and longer-term maternal and developmental outcomes. This may help reconsider and consolidate recommendations for early postnatal maternal and infant care across settings.

### **Source:**

<https://www.news-medical.net/news/20260927/Kangaroo-care-helps-smaller-babies-Now-researchers-are-studying-babies-born-at-normal-weight.aspx>