

[Birth](#). 2009 Jun;36(2):97-109.

## Early contact versus separation: effects on mother-infant interaction one year later.

[Bystrova K](#), [Ivanova V](#), [Edhborg M](#), [Matthiesen AS](#), [Ransjö-Arvidson AB](#), [Mukhamedrakhimov R](#), [Uvnäs-Moberg K](#), [Widström AM](#).

Associate Professor, Department of Hospital Pediatrics, St. Petersburg Pediatric Academy, St. Petersburg, Russia.

**BACKGROUND:** A tradition of separation of the mother and baby after birth still persists in many parts of the world, including some parts of Russia, and often is combined with swaddling of the baby. The aim of this study was to evaluate and compare possible long-term effects on mother-infant interaction of practices used in the delivery and maternity wards, including practices relating to mother-infant closeness versus separation. **METHODS:** A total of 176 mother-infant pairs were randomized into four experimental groups: Group I infants were placed skin-to-skin with their mothers after birth, and had rooming-in while in the maternity ward. Group II infants were dressed and placed in their mothers' arms after birth, and roomed-in with their mothers in the maternity ward. Group III infants were kept in the nursery both after birth and while their mothers were in the maternity ward. Group IV infants were kept in the nursery after birth, but roomed-in with their mothers in the maternity ward. Equal numbers of infants were either swaddled or dressed in baby clothes. Episodes of early suckling in the delivery ward were noted. The mother-infant interaction was videotaped according to the Parent-Child Early Relational Assessment (PCERA) 1 year after birth. **RESULTS:** The practice of skin-to-skin contact, early suckling, or both during the first 2 hours after birth when compared with separation between the mothers and their infants positively affected the PCERA variables maternal sensitivity, infant's self-regulation, and dyadic mutuality and reciprocity at 1 year after birth. The negative effect of a 2-hour separation after birth was not compensated for by the practice of rooming-in. These findings support the presence of a period after birth (the early "sensitive period") during which close contact between mother and infant may induce long-term positive effect on mother-infant interaction. In addition, swaddling of the infant was found to decrease the mother's responsiveness to the infant, her ability for positive affective involvement with the infant, and the mutuality and reciprocity in the dyad. **CONCLUSIONS:** Skin-to-skin contact, for 25 to 120 minutes after birth, early suckling, or both positively influenced mother-infant interaction 1 year later when compared with routines involving separation of mother and infant.