Breastfeeding, Skin-to-Skin Contact, and Maternal Interactions

Ann E. Bigelow, Michelle Power, Doris Gillis, Janis MacLellan-Peters, Marion Alex, & Claudette McDonald

Department of Psychology, St. Francis Xavier University, Antigonish, NS, Canada

ABSTRACT

The effect of skin-to-skin contact (SSC) on breastfeeding and the effect of breastfeeding on mother-infant interactions were longitudinally examined over full-term infants' first 3 months. Mothers in a SSC group provided approximately 5 hours/day of SSC with their infants in the infants' first week and then over 2 hours/day until the infants were 1 month. Mothers in a control group provided little or no SSC with their infants. Mothers reported the type of feeding they provided for their infants at 1 week, 1 month, 2 months, and 3 months. At each of these times, the Caregiver Subscale of the Nursing Child Assessment Feeding Scale (NCAFS) was used to assess maternal behavior. At 1 week, the percentage of breastfeeding dyads was similar in the SSC and control groups. The percentage of breastfeeding dyads declined in the control group as the infants aged but remained stable in the SSC group. Breastfeeding dyads had higher scores on the NCAFS Caregiver Subscale, indicating more positive maternal interactions, at 1 week, 2 months, and 3 months. SSC facilitated the maintenance of breastfeeding, and breastfeeding was associated with increased positive maternal interactions during the infants' first 3 months.

BACKGROUND

Feeding is where the mother-infant relationship is first established. In addition to being the optimal source of nourishment for young infants, breastfeeding also facilitates the physical contact and perceptual stimulation that promotes the development of the mother-infant relationship. The World Health Organization recommends exclusive breastfeeding through the infants' first 6 months, yet many mothers do not follow these recommendations. Most mothers who initially choose to breastfeed, but stop before the infant is 6 months, do so in the infant's first month. Thus interventions that help mothers to maintain breastfeeding in the infants' early months may facilitate sustained breastfeeding over longer periods. One such intervention that is accessible to all mothers is mother-infant skin-to-skin contact (SSC).

Mother-infant skin-to-skin contact (SSC) is a method of care for young infants in which the infant is placed between the mother's breasts, only dressed in a diaper so that frontal body contact of mother and infant is skin-to-skin. Although numerous studies have shown SSC to benefit newborns' physiological adjustment, few studies have investigated the effect of SSC on breastfeeding duration beyond the newborn period. The present study investigated the effect of SSC on the maintenance of breastfeeding over the infants' first 3 months and the effect of breastfeeding on mother-infant interactions during this time.

SSC and Control Groups

Mothers (N =77) were recruited prior to the birth of their infants at two hospitals with similar demographics. One hospital was designated the SSC site and the other the control site. Halfway through the data collection period, the group selection sites were switched. Mothers in the SSC group were requested to provide 6 hours of daily SSC to their infants in the first week of life and then 2 hours per day until the infants were 1 month of age. No request for SSC was made to the mothers in the control group. Daily records of SSC were kept by both groups.

METHOD

Dyads were seen in the home when the infants were 1 week, 1 month, 2 months, and 3 months. On each home visit, the mother reported the type of feeding she was providing for her infant currently and since the previous visit: exclusive breastfeeding (breastmilk only), partial breastfeeding (breastmilk + formula/other foods), or no breastfeeding (formula/other foods only). During the visit, the mother fed her infant and the feeding session was scored on the Nursing Child Assessment Feeding Scale (NCAFS). The Caregiver Behavior Subscale of the NCAFS assesses maternal sensitivity, nurturing, and fostering of social-cognitive growth, independent of the feeding method.

RESULTS

At 1 week, there was no significant difference in the percentage of infants who were breastfed (either exclusive or exclusive + partial) in the SSC and control groups. The SSC group showed no significant decline in the percentage of infants who were breastfed (either exclusive or exclusive + partial) over the 3 month period. However, fewer infants in the control group continued to be breastfed (either exclusive or exclusive + partial) as the infants aged.

At 1 week, there was no significant difference in the percentage of infants who were breastfed (either exclusive or exclusive + partial) in the SSC and control groups. The SSC group showed no significant decline in the percentage of infants who were breastfed (either exclusive or exclusive + partial) over the 3 month period. However, fewer infants in the control group continued to be breastfed (either exclusive or exclusive + partial) as the infants aged.

CONCLUSIONS

Feeding is the familiar and intimate context in which mothers and infants learn to adjust and adapt to the behavior of the other. The results of the study show that breastfeeding dyads have more positive maternal interactions than non-breastfeeding dyads. Interventions that encourage the sustained duration of breastfeeding over the infants' early months have benefits that include the well-being of the mother-infant relationship, which has long-term positive outcomes for children's social, emotional, and cognitive functioning. SSC is such an intervention. By engaging in SSC, mothers who choose to breastfeed their infants are increasing the likelihood of their continued breastfeeding, which will enhance the health of infants and the developing mother-infant relationship.