Telephone-based peer support increased the duration of breast-feeding in primiparous mothers

Dennis CL, Hodnett E, Gallop R, Chalmers B. **The effect of peer support on breast-feeding duration among primiparous women: a randomized controlled trial.** CMAJ. 2002 Jan 8;166:21-8.

QUESTION

Do primiparous, breast-feeding mothers who receive telephone-based peer support continue breast-feeding longer than women who receive conventional care?

DESIGN

Randomized (allocation concealed*), blinded (outcome assessors),* controlled trial with follow-up at 4, 8, and 12 weeks postpartum.

SETTING

2 semiurban community hospitals near Toronto, Ontario, Canada.

PATIENTS

258 in-hospital, primiparous, breast-feeding women who were ≥ 16 years of age, were able to speak English, had a singleton birth at ≥ 37 weeks of gestation, and were accessible by a local telephone call. Exclusion criteria were factors that could seriously interfere with breast-feeding (e.g., serious maternal illness or infant congenital abnormality) or prenatal enrollment with the participating volunteer breast-feeding organization. 256 women (99%) completed the trial and were included in the analysis. Most (75%) were between 25 and 34 years of age.

INTERVENTION

132 women were allocated to the peer-support group, which included telephone-based peer support plus conventional in-hospital and community postpartum services (e.g., a hospital-based breast-feeding clinic and support services by public health nurses). Each new mother was paired with a peer volunteer (i.e., a mother who had ≥ 6 mo of previous breast-feeding experience, a positive attitude toward breast-feeding, and completed a 2.5-h orientation session) who lived nearby and was readily available. Peer volunteers were asked to contact the new mother within 48 hours after hospital discharge and as frequently thereafter as the mother deemed necessary. 126 women were allocated to conventional care only.

MAIN OUTCOME MEASURE

Main outcome was self-reported breast-feeding (receipt by the infant of any breast milk) in the 24 hours before the interview.

MAIN RESULTS

Analysis was by intention to treat. Mothers who received peer support were more likely to be breast-feeding at 4, 8, and 12 weeks postpartum than were mothers who received conventional care only (Table). Furthermore, mothers in the peer-support group were more likely to be breast-feeding exclusively at 12 weeks (Table).

CONCLUSION

Primiparous, breast-feeding mothers who received telephone-based peer support were more likely to still be breast-feeding at 12 weeks postpartum than were mothers who received conventional care alone.

Sources of funding: University of Toronto Faculty of Nursing and Maternal, Infant, and Reproductive Health Research Unit.

For correspondence: Dr. C.L. Dennis, University of Toronto, Toronto, Ontario, Canada. E-mail cindylee.dennis@utoronto.ca.

*See Glossary.

Peer support vs conventional care for breast-feeding in primiparous mothers†

Outcomes	Peer support	Conventional care	RBI (95% CI)	NNT (CI)
Breast-feeding at 4 wk‡	92%	84%	11% (1 to 16)	12 (8 to 191)
Breast-feeding at 8 wk‡	85%	75%	17% (3 to 25)	8 (6 to 40)
Breast-feeding at 12 wk‡	81%	67%	25% (9 to 35)	6 (5 to 17)
Exclusive breast-feeding at 12 wk	57%	40%	41% (9 to 84)	7 (4 to 24)

†Abbreviations defined in Glossary; RBI, NNT, and CI calculated from data in article.
‡Based on adjusted analysis.

COMMENTARY

Breast-feeding is known to reduce the incidence of infections and allergies and improve nutritional status and neurodevelopment in infants (1–3). Although many mothers start breast-feeding, many stop in the first 6 weeks postpartum. The study by Dennis and colleagues was done in a semiurban setting. 75% of the mothers were college or university educated. It is uncertain, therefore, if these results could be reproduced among low-income women, who typically have low rates of breast-feeding (4). More women in the intervention group than in the control group had decided to breast-feed prenatally, which is known to increase the likelihood of successful breast-feeding (4), possibly confounding the results.

Breast-feeding is widely promoted. The effectiveness of large initiatives, however, has seldom been rigorously evaluated. Most studies have assessed professional rather than peer support.

The results provide evidence that a simple and inexpensive telephone-based peer-support program can increase the duration of breast-feeding among well-educated women. Such programs could be readily established in collaboration with existing volunteer breast-feeding support groups. Further study is needed to determine whether the intervention would be successful among poor mothers, who are less likely to start and sustain breast-feeding.

Karen Simmer, MBBS
King Edward Memorial Hospital for Women and Princess Margaret Hospital for Children
Subiaco, Western Australia, Australia

References

1. **Lucas A, Brooke OG, Morley R, Cole TJ, Bamford MF.** Early diet of preterm infants and development of allergic or atopic disease: randomised prospective study. BMJ. 1990;300:837-40.
2. **Lucas A, Morley R, Cole TJ, Lister G, Leeson-Payne C.** Breast milk and subsequent intelligence quotient in children born preterm. Lancet. 1992;339:61-4.
3. **Hylander MA, Strobino DM, Dhanireddy R.** Human milk feedings and infection among very low birth weight infants. Pediatrics. 1998;102:e38.
4. **Scott JA, Aitken I, Binns CW, Aroni RA.** Factors associated with the duration of breastfeeding amongst women in Perth, Australia. Acta Paediatr. 1999;88:416-21.