

The Effect of Lactation Educators Implementing a Telephone-Based Intervention Among Low-Income Hispanics: A Randomized Trial

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BACKGROUND

Despite health benefits associated with longer exclusive breastfeeding duration rates, exclusive breastfeeding duration rates are particularly low among low-income Hispanic women (Newton, et al., 2009).

One strategy for improving exclusive breastfeeding duration rates is to increase the number of health-care professionals and paraprofessionals who possess basic breastfeeding knowledge (US Breastfeeding Committee, 2010).

Clinical or licensed health care professionals (CLHCP) trained in basic breastfeeding knowledge can be effective at providing basic education and support; however, may not be the most cost-effective.

Low-cost breastfeeding peer counsellors are effective at delivering basic breastfeeding education and support to low-income Hispanic mothers (Anderson et al, 2005). Peer counsellors are mothers who have previously breastfed their own child, do not hold a professional healthcare license and have participated in training to provide them with the knowledge and skills needed to educate and support mothers with normal non-clinical breastfeeding concerns.

Similar to breastfeeding peer counsellors, lactation educators are also trained to provide basic education and support to breastfeeding mothers. Lactation educators do not necessarily have to be mothers who have previously breastfed their child, nor do they need to be CLHCP (Childbirth and Postpartum Professional Association, 2011).

Given rising healthcare costs and the link between breastfeeding knowledge & longer exclusive breastfeeding rates, it is important to expand the pool of cost-effective individuals that are trained to provide basic education and support to breastfeeding mothers.

PURPOSE

- The purpose of this study was to evaluate the efficacy of a cost-effective intervention designed to improve 6-months exclusive breastfeeding rates among low-income Hispanic women.
- Research Question:** Can a prenatal and postpartum phone-based breastfeeding intervention delivered by trained lactation educators who are not CLHCP nor have had prior personal breastfeeding experience influence 6-months-exclusive breastfeeding rates among low-income Hispanic women?

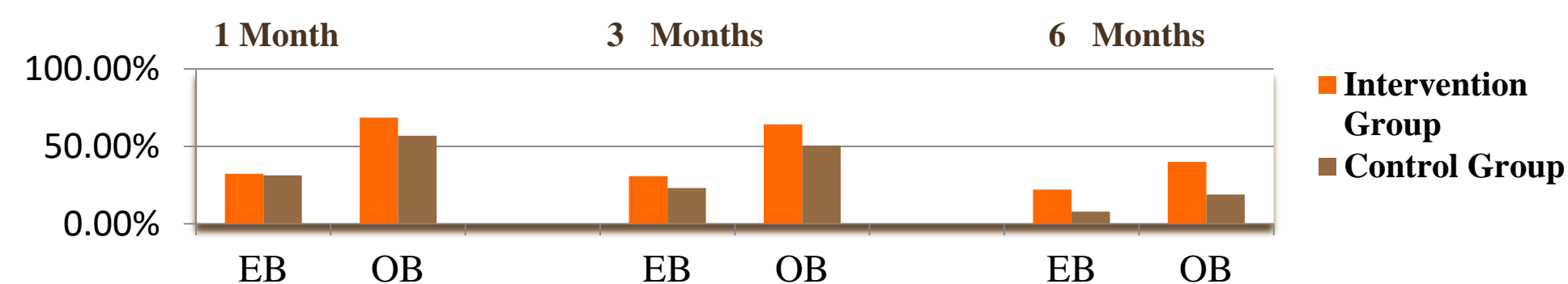
METHODS

- A two-group randomized clinical trial design was used. 298 pregnant low-income Hispanics were randomized to either the control or intervention group.
- Postpartum inclusion criteria: (1) the birth of a healthy full-term singleton; (2) an absence of congenital abnormality; and (3) the infant was not admitted to a neonatal intensive care unit.
- The intervention entailed 4 prenatal and 17 postpartum phone calls via an intervention protocol by undergraduate students who had completed a semester-long lactation education course and 10 hour post-course training.
- A phone questionnaire to collect data from the control and intervention group participants was used.
- Survey completion, retention and dis-enrollment rates were compared between groups at each data collection point (3rd trimester, 72 hours, 1 month, 3 months and 6 months) using logistic regression.
- Breastfeeding status is reported as N (%); Intention to treat (ITT) analyses were performed comparing intervention to control for these outcomes.

RESULTS

- Both groups had very high initiation rates and any breastfeeding rates (>98%).
- Findings suggest that the intervention was effective at significantly improving exclusive breastfeeding duration rates among participants who refrained from supplementing their baby with any fluid or solids during his or her first week of life (Cohen's D=.7) Among this subgroup of participants, the control group participants exclusively breastfed for 13 weeks, whereas the intervention group mothers breastfed exclusively for 22 weeks.
- While not statistically significant, a greater proportion of the intervention group mothers, compared to control group mothers, reported exclusively breastfeeding and only breastfeeding at 1, 3 and 6 months postpartum (see Figure 1).
- While the differences in not breastfeeding and only breastfeeding rates were similar at 72 hrs and 1 month, they began to diverge at 3 months with a monotonic increase in the difference in only breastfeeding across time: $OR_{72hrs} = 1.1$, $OR_{1mo} = 1.6$, $OR_{3mo} = 1.7$, $OR_{6mo} = 2.6$) between intervention and control mothers.

Figure 1: Exclusive Breastfeeding (EB) & Only Breastfeeding (OB) Rates At 1, 3 and 6 Months Postpartum between Groups



Note: Breastfeeding status at each data point was defined as follows: **Exclusive Breastfeeding (EB):** Since birth the mother reported that she only fed her baby breastmilk, meaning that her baby never received water, formula, folk remedies or other foods. **Current Exclusive Breastfeeding (CEB):** The mother had supplemented at least once since birth, but reported feeding her baby no other fluid or foods but breast milk at the current time. **Only Breastfeeding (OB):** Mothers who reported EB or CEB (i.e., mothers feeding their infants only breastmilk regardless of whether it was since birth or currently).

LIMITATIONS

- It is not possible to control for all variables that may influence breastfeeding behavior.
- The data was not blinded and research assistants served as both lactation educators & data collectors.
- The study was underpowered due to the attempt to avoid confounding the data with women who were assigned a peer counselor through the WIC program.

FUTURE RESEARCH

- Efficacy of the results using a larger sample size.
- More experienced lactation educators implementing the intervention.
- Utilize staff other than the lactation educators for data collection.

CONCLUSIONS

- A telephone-based breastfeeding intervention delivered by a newly trained lactation educator who is not a CLHCP nor has had prior personal breastfeeding experience shows promise as a cost-effective strategy for improving breastfeeding rates among low-income Hispanics.
- Intervention group mothers not only sustained breastfeeding for longer durations than control group mothers, but also provided their infants with greater amounts of breast milk over these longer durations.
- It appears that this intervention may have been effective at creating a trust relationship between lactation educators and mothers, thereby influencing mothers' perceptions that breast milk on its own is adequate nourishment for a baby's first 6 months.
- Additional research utilizing trained lactation educators, who are not CLHCPs nor have had prior breastfeeding experience, could provide more robust evidence to expand the pool of cost-effective individuals trained to educate and support mothers on the normal breastfeeding process.

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