

Mother's Milk Messaging™ App and Online Support for Breastfeeding

Category

Mobile Health

Problem

Rates of breastfeeding are low and most current peer support interventions are not evidence-based

Technology Overview

A breastfeeding support mobile application which uses text messaging and online support

IP Status

- ▶ Available for Exclusive Licensing, Non-Exclusive Licensing, and Co-Development

Value Proposition

- ▶ Evidence-based and evaluated via clinical trial
- ▶ Users in trials reported higher confidence with breastfeeding and increased social support.
- ▶ Bilingual and targeted towards disadvantaged mothers

Market Attractions

- ▶ Mobile health market to reach \$216B by 2027 with a CAGR of 29.2%

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Problem: According to the CDC, many mothers initiate breastfeeding at birth, but only 22% of infants are exclusively breastfed for 6 months, and only 29% experience any breastfeeding in the first 12 months. Disparities exist, including differences related to race and ethnicity, and lower breastfeeding rates are associated with socioeconomic disparities which affect subsequent child health. Many intervention efforts do not adequately engage women of diverse backgrounds and socioeconomic statuses. For example, mothers in The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which serves about half of all infants in the United States, are less likely to breastfeed than non-WIC mothers. It has been shown that peer counselor programs are effective in increasing breastfeeding exclusivity. Peer support by “mentor mothers” who have breastfed and are from the same community or ethnic group can include support groups and one-on-one support through telephone calls or visits in a home or clinical setting. Peer support can also be found in apps on online support groups but most breastfeeding apps are not evidence-based and many online support groups and blogs are not moderated and are fraught with misinformation.

Solution: University of Colorado clinicians, led by Dr. Maya Bunik, have developed a breastfeeding support system called Mother's Milk Messaging™ (MMM). The MMM platform has three main elements: text messages which are tailored to be timed to the mothers' journey prenatally through birth and three months postpartum, support through social networking, and videos and written material available through the MMM app to facilitate knowledge acquisition and skills building. Content in the app can be delivered in English or Spanish. A screen shot from the app is shown in Figure 1. The recent clinical trial evaluation of the app included qualitative interview data and enrolled a total of 311 mothers. Mothers in the intervention group had higher confidence with their breastfeeding journey and increased social support than in the control. Mothers also responded positively to receiving text messages and to the reliability of the information.

Advantages and Value Propositions: This application specifically targets low-income and minority mothers, and has the potential to reach unprecedented numbers of mothers, to be standardized for later scalability, and to be cost-effective. The device's social media content facilitates private, peer and expert support for breastfeeding in real time on a channel preferred by first time mothers.

Additional Documents and Sources:

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- Bunik M. Breastfeeding Telephone Triage and Advice. 3rd Edition. American Academy of Pediatrics Publishing. Itasca, IL. 2019.
- Bunik M, Dunn DM, Watkins L, Talmi A. Trifecta approach to breastfeeding: clinical care in the integrated mental health model. *J Hum Lact.* 2014 May;30(2):143-7
- Neifert M, Bunik M. Overcoming clinical barriers to exclusive breastfeeding *Pediatr Clin North Am.* 2013 Feb;60(1):115-45.



Figure 1. Screenshot from the MMM mobile application

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