

Feasibility of a Touch Screen Computer Based Breastfeeding Educational Support

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Summary: Human breast milk provides complete nutrition for healthy physical and mental development in the first critical months of life and protects against common childhood infections and diseases. Despite substantial evidence of the benefits of breastfeeding for both mother and child, recent surveys in the United States show that less than a third of 3-month-old infants are exclusively breastfed. Rates drop further for children 6 months of age. Mothers with lower education and income are less likely to exclusively breastfeed. Rural residents are also likely to have lower rates compared to urban residents, due to lower average education levels, lower incomes, higher fertility, more teen births, and geographic isolation.

This project explores acceptance of a bilingual, interactive, touch-screen patient education and motivation tool (PEMT). The goals of the PEMT are to improve breastfeeding knowledge and self-efficacy, and improve partial and exclusive breastfeeding rates among rural Hispanic women. The educational material is delivered using a variety of multimedia formats and includes combinations of audio, text, images, and video. The study design is a two-group randomized controlled trial, with the intervention group receiving the computer-mediated bilingual breastfeeding education and the control group receiving bilingual information on paper handouts.

Specific Aims:

- Examine factors that affect the decision to continue breastfeeding in Hispanic rural women using focus groups. **(Achieved)**
- Design and develop a bilingual, interactive, touch-screen program for breastfeeding education among Hispanic rural women. **(Ongoing)**
- Pilot test the acceptance of a computer-based breastfeeding educational support program and explore its effect on breastfeeding knowledge, breastfeeding self-efficacy, and partial or exclusive breastfeeding among Hispanic rural women. **(Upcoming)**

2012 Activities: Dr. Joshi and his team have conducted focus group discussions with Hispanic women living in rural areas to identify barriers to breastfeeding. Key findings include: limited availability of prenatal classes; limited understanding of benefits of breastfeeding; myths regarding appropriate nutrition for infants; family-centered beliefs and reliance on information and guidance from mothers-in-law; and low levels of confidence and self-efficacy to breastfeed. The project team is incorporating findings from the focus groups in the content development of the PEMT in both English and Spanish. Audio content for the PEMT has been recorded. The project team has also conducted several visits to Regional West Medical

Center in Scottsbluff, Nebraska, the study site.

As last self-reported in the AHRQ Research Reporting System, project progress and activities are mostly on track and project spending is on target.

Preliminary Impact and Findings: This project has no findings to date.

Target Population: Racial or Ethnic Minorities*, Rural Health*

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions in care settings, and the use of electronic exchange of health information to improve quality of care.

Business Goal: Implementation and Use

** This target population is one of AHRQ's priority populations.*