Physician Education on Breastfeeding Management in Family Medicine Residency Programs

Background and review of the literature:

The decision to breastfeed her baby is one of the most important choices a new mother can make, but occurs during a period of great physical and emotional stress. Family Medicine physicians are in a unique position to support mothers and infants during this critical time. According to the American Academy of Family Physicians' (AAFP) breastfeeding policy statement: "Breastmilk offers medical and psychological benefits not available from human milk substitutes." Known benefits for infants include decreased risk of gastroenteritis and atopic dermatitis. Breastfeeding mothers benefit from a lifelong decrease in breast and ovarian cancer risk, lower postpartum depression rates, and lower risks for type 2 diabetes mellitus and hypertension. The research is clear that breastfeeding is the most beneficial source of nutrition for infants and is recommended for at least 1 year according to AAFP and 2 years according to the World Health Organization. If the benefits are common knowledge, why is it that only 35.9% of infants born in the United States in 2015 were still breastfeeding at 12 months of age? The Center for Disease Control quotes an initiation rate of 83.2% in the year 2015, showing that most mothers desire to breastfeed their children. A clear disconnect exists between initiation of breastfeeding at birth and baby's first birthday.

Where is it that primary care providers, especially Family Medicine physicians, can intervene to bring the percentage of mothers nursing at 12 months closer to the initiation percentages? In a 2010 United Kingdom-based survey, the most common reasons why mothers report having stopped breastfeeding were improper latch, painful breasts/nipples, and worries about insufficient milk production.⁴ These concerns can easily be addressed by Family Medicine physicians on the labor and delivery floor, in the mother-baby unit, and in outpatient clinic if physicians are properly trained and feel confident on these topics.

Several recent small studies evaluating the efficacy of educational interventions for physicians in residency to improve knowledge and skills regarding breastfeeding education and management. Few focused on Family Medicine residents, as most target Obstetric and Pediatric training programs. In 2015, Pound et al. published a set of focused learning objectives developed from multi-specialty needs assessments of Canadian physicians.⁵

The proposed survey questions will establish the level of training currently being provided at US military family medicine residencies. This will serve as a needs assessment relevant to US military Family Physicians to inform how residency education can be expanded to help our patients in successfully breastfeeding for at least 1-2 years. Information gathered will ultimately be incorporated into formal curriculum development for implementation in military Family Medicine residency training.

Objectives, aims and hypothesis of proposed research questions:

The objective of this research study is to assess the confidence of military family physicians caring for breastfeeding patients and determine the correlation, if any, to the amount of formal residency training focused on lactation, to include patient education and the management of breastfeeding concerns.

- Aim 1: Describe the amount of formal breastfeeding education offered by Family Medicine residency programs.
- Aim 2: Describe the amount of informal breastfeeding education sought out by Family Medicine Physicians.
- Aim 3: Quantify the amount of time spent on patient education on breastfeeding by Family Medicine physicians.
- Aim 4: Assess the confidence of Family Physicians counseling patients on breastfeeding initiation and common related concerns in the early newborn period.
- Aim 5: Assess the confidence of Family Physicians addressing concerns about milk production and supply in their breastfeeding patients.

- Aim 6: Assess the confidence of Family Physicians managing co-existing medical concerns in a breastfeeding mother.
- Aim 7: Identify the resources commonly used for breastfeeding concerns by Family Medicine Physicians at the point of care.
- Aim 8: Describe the involvement of lactation consultants in the Family Medicine Residency Program.
- Aim 9: Identify interest of Family Medicine physicians in additional breastfeeding education.
- Hypothesis 1: There are very few Family Medicine residency programs with a formal curriculum to address lactation medicine.
- Hypothesis 2: There are very few Family Medicine residency programs that provide exposure and training on how to provide breastfeeding education to patients.
- Hypothesis 3: Family Medicine Physicians who have participated in self-directed informal and formal breastfeeding education feel more confident counseling patients and managing common breastfeeding concerns compared to physicians with no targeted educational experience.

Proposed survey questions:

- 1. During the course of your residency training, approximately how many hours of formal education on breastfeeding management were/are offered?
- a. 1 hour
- b. 2 hours
- c. 3 hours
- d. >3 hours
- e. N/A
- 2. Approximately, how many hours have you spent engaged in informal education regarding lactation medicine and the management of common breastfeeding concerns? (Engaging with knowledgeable staff, attending support groups, self-directed evidence based medicine review, etc...)
- a. 1 hour
- b. 2 hours
- c. 3 hours
- d. >3 hours
- e. N/A
- 3. In a typical encounter with a new mother, how much time do you spend providing breastfeeding education?
- a. 1-10 minutes
- b. 11-20 minutes
- c. 21-30 minutes
- d. >30 minutes
- e. N/A
- 4. How confident are you in managing/educating breastfeeding mothers on initiation of breastfeeding, difficulties latching, and proper timing/duration of nursing?
- a. Not confident at all
- b. Slightly confident
- c. Somewhat confident

- d. Fairly confident
- e. Completely confident
- 5. How confident are you in managing/educating breastfeeding mothers on milk production, maintaining supply, and pumping?
- a. Not confident at all
- b. Slightly confident
- c. Somewhat confident
- d. Fairly confident
- e. Completely confident
- 6. How confident are you in managing/educating breastfeeding mothers on the safety of medications and radiology studies?
- a. Not confident at all
- b. Slightly confident
- c. Somewhat confident
- d. Fairly confident
- e. Completely confident
- 7. If you are unsure about a patient's question regarding breastfeeding, what resources are available to you? (***Prefer this be a free text response question if audience response system allows***)
- a. Textbooks
- b. Old lecture material (powerpoints, handouts, notes)
- c. Online resources
- d. Support groups
- e. Knowledgeable Staff (IBCLC, experienced physicians or nurses, etc)
- f. No resources are available to me
- 8. Did/does your residency program have an affiliation with an International Board Certified Lactation Consultant (IBCLC)?
- a. Yes
- b. No
- 9. If more formal education about managing breastfeeding mothers were offered, would you be interested in further training?
- a. Yes
- b. No

Analysis plan:

- 1. Determine the prevalence of Family Medicine residency programs offering breastfeeding education for physicians in training.
- 2. Determine the accessibility and types of resources available to physicians that manage breastfeeding patients.
- 3. Using a simple t-test, determine if an association exists between physician confidence in breastfeeding management and the amount of formal breastfeeding education (in hours), amount of informal breastfeeding education (in hours), presence of a lactation specialist, or time spent on patient education.

References:

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- 5. Pound C, Moreau K, Hart F, et al. The planning of a national breastfeeding educational intervention for medical residents. Med Educ Online. 2015; 20:10.3402/meo.v20.26380.