The Necessity of Breastfeeding – Promoting Breastfeeding in the Primary Care Setting; A Community Pilot Project Applying the Tri-Core Breastfeeding Model: Beyond the Basics

Deborah Busch1, Leila Nassar2 and JoAnne Silbert-Flagg3*

1University of Maryland School of Nursing, Baltimore, USA
2Practicing Certified Lactation Consultant, Allentown PA, USA
3Johns Hopkins University School of Nursing, Baltimore, Maryland, USA

Abstract

The purpose of this pilot-project was to evaluate the effectiveness of a breastfeeding program designed to improve maternal and agency support and subsequently increase breastfeeding rates in a primary care practice. The practice is located in a U.S. suburban site that employs two pediatricians and two Certified Lactation Consultants (CLC), of which one is a medical-assistant and one is a pediatric nurse practitioner. The local hospital’s annual birth rate averaged approximately 4,500-5,000 births a year and the practice saw three to five newborns weekly. The general population of the study consisted of middle to low-income families of Caucasian, Latino, Asian, and African American decent. The study population (N of 50) included both married and single healthy mothers who had recently given birth to a healthy full term baby (37-40 weeks gestation) and who wished to breastfeed their infant within the early postpartum period. Infant feeding patterns were identified as breastfed (at the breast or bottle fed breast milk) exclusively, breastfed partially (some formula), and formula fed. The foundation for the pilot project incorporated the three core interventions of the Tri-Core model: 1) improving lactation support, 2) enhancing maternal and staff lactation education, and 3) fostering maternal confidence in their ability to breastfeed (self-efficacy). Project outcomes were measured by the assessment of breastfeeding rates, durations, and reported maternal self-efficacy levels at the newborn, one month, and two month visit. Significant gains in all breastfeeding rates were reported compared to previous rates, especially in the rates of exclusive breastfeeding. Demonstrating that initiating a targeted Tri-Core strategy can positively improve breastfeeding rates, duration, and maternal self-efficacy within the early postpartum period.

Keywords: Breast feeding; Families; Birth

Introduction

Clinical introduction and background etiology

An infant’s first and preferred source of nutrition should be their mother’s breast milk when ever at all possible [1,2]. Promotional lactation interventions are desperately needed in the community to initiate and foster breastfeeding efforts in the United States and worldwide. Ongoing evidenced-based practice findings strongly indicate that the lifelong health and economic benefits of breastfeeding that bestows the infant, also greatly contributes to the health status of the mother, family, and society at large. Resurgence in breastfeeding promotion has occurred in many hospitals across the United States of America (U.S.) and internationally. Recently the USA Baby-Friendly initiative has gained crucial headway in its efforts to transform hospital’s across the United States by enacting breastfeeding promotional strategies in the early postpartum period; the delicate initiation period [3] yet, lactation programs are needed beyond the newborn period to continue and ensure these sustaining efforts in the primary care community environment.

Cultivating a supportive breastfeeding environment is fundamental to healthcare. Worldwide breastfeeding (BF) trends are slowly improving, yet further promotion is needed in primary care; especially with high-risk populations. The immediate postpartum period is highly influential and delicate in regards to initiating breastfeeding between the mother and infant dyad. Ongoing research highly supports the tremendous short and long term benefits that breastfeeding incurs for the mother, infant, and society. Recent research by scientists at the Federal University of Pelotas in Brazil identified a significant correlation in brain development, IQ, verbal and nonverbal skills, and adult income directly proportional to the duration of breastfeeding [4]. Experts have agreed, “breast feeding is the most beneficial health promoting and disease-preventing activity a new mother can perform and is the utmost preferred infant nutrition, and only with rare exceptions is it ever contraindicated” [1].

The American Academy of Pediatrics’ (AAP) updated statement on breastfeeding exclaims that “human milk is the preferred feeding for all infants including premature and sick newborns; with rare exceptions... babies should be exclusively breastfed until 6 months” [2]. Including in the AAP’s statement are the “Ten-Steps Best-Practice” intervention, which identifies ten actions to be initiated in primary care to support breastfeeding and for families [2,5]. The AAP and the National Association of Pediatric Nurse Practitioners (NAPNAP) encourages all healthcare professionals to become active in supporting mothers in their attempts to breastfeed their infants [2,6]. The AAP states “human milk is the preferred feeding for all infants including premature and sick newborns, with rare exceptions and that baby should be exclusively breastfed until 6 months of age” [2]. Reflecting the vital importance

*Corresponding author: JoAnne Silbert-Flagg, Johns Hopkins University School of Nursing, Baltimore, Maryland, USA, Tel: 410 614 4082; E-mail: jsilbert@jhu.edu

Received: April 21, 2015; Accepted: May 04, 2015; Published: May 05, 2015


Copyright: © 2015 Busch D, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
of breast milk, NAPNAP has also reissued their position statement recognizing the significance of promoting breastfeeding for the first six to twelve months or beyond [6].

The purpose of this pilot-project was to develop a 'Baby-Friendly' primary care BF support program, bridging the gap from hospital discharge into primary care; as suggested by the AAP’s 10-Steps to Support program [5]. The goal of this project, in addition to fostering a postpartum inter-professional and sustainable BF program, was to also improve maternal and agency support. The goal of the project was to improve existing rates closer to the Healthy People 2020 benchmark goals of 81.9% initiation and 46.2% exclusivity at three months of age [7]. Historically, the sharpest decrease in BF rates and trends occurs within the first 12 weeks postpartum. In 2013, 77% of mothers in the United States, attempted to breastfeed their infants and sadly by six months postpartum only 49% were still being breastfed [8]. Far below the up and coming Healthy People 2020 benchmark goals [7].

Breast milk is specifically designed for the unique mother-infant dyad changing with the infant’s age (including prematurity & toddlerhood), illness occurrence, growth and development [9]. Babies who are breastfed experience a reduced risk of ear infections by 50%, diarrheal illnesses by 64%, pneumonia by 72%, asthma by 30-40%, Leukemia by 15-20%, and obesity by up to 24% [9,10]. Benefits for mothers include reduced rates of postpartum hemorrhage, breast cancer by 4.3%, ovarian cancer by 21%, and improvement in self-esteem, enhanced mother-infant bonding, and a faster return to pre-pregnancy weights [11].

Discussing all of the outstanding qualities of breast milk is beyond of the scope and purpose of this article. The author’s purpose was to disseminate an evidenced based program that had demonstrated significant gains in improved BF rates and durations. The primary author began development of this project, in her doctoral program, by posting the very vital and crucial question, 'how do we best promote and support breastfeeding efforts in primary care?' [12]. Human breast milk has proven to be one of the most cost effective, safest, and life-sustaining pediatric health subsistence known to mankind; it is our responsibility as healthcare professionals to foster BF for all mother-infant dyads who do not have known true contraindications What will be presented is a unique pilot project enacted to improve breastfeeding rates and durations aimed at achieving the Healthy People 2020 goals within a community primary care setting.

Primary care pilot project

Project population, setting, need and IRB: The pediatric primary care office chosen for this project and data gathering was identified as a suburban pediatric office within the United States located in a major metropolitan Northeast area. The Primary Care Provider (PCP) office site was a small three-provider general pediatric office; two pediatricians, a medical assistant who is a certified lactation consultant and a pediatric nurse practitioner who is also a Certified Lactation Consultant (CLC) and the project implementer (PI). The PCP office is owned and operated by larger regional metropolitan academic center and is a designated Children’s Hospital. Hospital annual birth rate averages approximately 4,500-5,000 births a year. The PCP site accepts approximately three to five newborns weekly. The general population base is predominantly considered middle to low-income families of Caucasian, Latino, Asian, and African American descent. The patient population consisted of both married and single healthy mothers who had recently given birth to a healthy full term baby (37-40 weeks gestation) and who wished to breastfeed their infant within the early postpartum period. Participation in the pilot project was voluntary and withdrawal was voluntarily at any point in time.

The need to improve postpartum breastfeeding support was identified in two previous chart surveys’ (2006 and 2011) and a maternal questionnaire survey investigating BF rates, duration, and maternal support. Breastfeeding rates were found to exponentially decrease significantly throughout the first twelve months postpartum year, especially within the early 12-week/3-month postpartum period. Exclusive breastfeeding rates were shown respectfully to average from 53% at birth, 37% at three months, 27% at six months of age and any BF to be 15% at one year postpartum; far below Healthy People 2020 targets. These rates identify that the greatest time for BF interventions is within the first six months postpartum period where the sharpest decline in breastfeeding occurs, a 26% reduction. The target goal was to improve these rates and to achieve the Healthy People 2020 breastfeeding goals [7].

An Institutional Review Board (IRB) approval was received from the Hospital Health Network associated with the project site six months prior to project implementation as a pediatric departmental quality initiative (QI) project. Supplementary approval was given to implement the project strategies among seven additional hospital-owned practices as well, void of any data gathering efforts. Data retrieval and outcome evaluation of the project was approved for just the primary clinical site of the PI. The ultimate goal of the project was to formulate a self-sustaining multi-professional program by applying a tri-core interventional strategy focused on breastfeeding promotion within the primary care setting as evidence by improved rates and outcomes.

The project review of literature

Optimally, breastfeeding promotion and support should be the fundamental endeavor within the practice of pediatrics and family medicine. Providing families with accurate evidence-based care forms the foundation for the establishment of successful BF that produces lifelong benefits. A comprehensive literature review was implemented so that the most significant and outstanding evidence-based practice (EBP) postpartum BF interventions would be embraced. The purpose of the EBP pilot-project was to develop an effective lactation interventional program, soundly based on current research that will assist in improving BF outcomes and rates. The project PI delved into the literature to determine what were the most effective strategies to support breast feeding families that foster all efforts and will decrease the early postpartum BF declines.

Methodology

Search parameters were set at articles written in English and identified research studies/articles/guidelines written from 2003 to present. Primary research studies/articles prior to establish dates were included if deemed significant to the knowledge base. Systematic data subgroups were formed for research literature analysis and organization. These subgroups were identified as: (1) Primary care EBP research and interventions (2) Government and professional goals and guidelines (3) Lactation support interventions (4) BF educational materials (5) BF Self-Efficacy Theory, concept, tool and interventions and (6) Public health and financial Implications. Every research source was reviewed and placed into one of these six sub-groups; often a study cross-qualified into several subgroups simultaneously.

Search criteria were established in respect to the problem identified as: "postpartum primary care maternal breastfeeding interventions
aimed at improving breastfeeding rates and self-efficacy outcomes”. Key words were: breastfeeding (primary key word), primary care, postpartum, interventions, self-efficacy, support, lactation consultant, education, booklet, goals, BF-rates, postnatal complications & variables, evidence based practice, Healthy People 2020, counseling, benefits, financial outcomes, and BF promotion. A review of literature was performed applying the key words to identify what are the most effective strategies aimed at promoting and improving breastfeeding in primary care.

**Review of Literature Findings**

Current evidence indicates that a multifaceted BF intervention strategy yields the greatest improvement in BF outcomes and rates. Breastfeeding promotion requires a multi-interventional collaborative approach to succeed and avoid early problem-related premature weaning [13,14]. Within the vast consensus of literature, three specific EBP interventions are frequently identified as being the most highly effective which are early and aggressive lactation support, maternal and staff education, and enhanced maternal confidence support (self-efficacy). The review of data concluded that; early and aggressive lactation support, maternal and staff education, and maternal confidence support interventions provided the best EBP strategy for improving breastfeeding outcomes [15-17]. As noted, the AAP’s Ten Steps to Support Parents Choosing to Breastfeeding highly encourages pediatric providers to have a more active role in promoting breastfeeding efforts among families (2014).

Combining the three target interventions together has shown to provide a significantly higher BF rate outcome than each of the three interventions alone; indicating a combination interventional approach provides the most significant impact on improving BF outcomes [13,18-22]. Not surprisingly- it is the same identified factors, lack of lactation support, education, and maternal confidence that often lead mother’s to stop breastfeeding earlier than their desired durations [23,24]. Providing a constant environment of positive breastfeeding support within the community aimed at the unique needs of mothers greatly enhances their BF success and feelings of competency [25,26].

The overall opinion found in the review of literature concluded any effort to support, sustain, promote and/or assist a mother’s breastfeeding efforts to be beneficial for improving outcomes. The interventions presented all appeared to be safe and non-harmful with little if not any risks to either the mother or infant. Additionally, the importance of creating a ‘Baby-Friendly’ office environment in the pediatrician’s office has shown to be an additional crucial component in assisting the promotion of BF efforts by families [5,27]. Even with such an extensive literature review, a useable conceptual BF model was not identified to help guide those in the primary care setting to promote BF. Upon close examination of the literature findings, the chief-author has developed a primary care BF model applying the three core elements titled ‘The Tri-Core Breastfeeding Model’ [1].

**Tri-Core breastfeeding model**

**Theoretical foundation:** The need to develop a BF model was identified for project implementation and the Tri-Core Model was developed based on Bandura’s (1995) Theory of Self Efficacy and Dennis’ Breastfeeding Self-Efficacy Theory (BFSE) [28]. Noting “persons belief about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives…self-efficacy belief determine how people feel, think, behave and motivate themselves (Bandura, 1994, p.71. Identifying a specific Breastfeeding Theory, concept, and tool was essential for the project’s theoretical foundation. Noted by Dennis, the core principle to BFSE Theory demonstrates that mothers with low-levels of confidence (self-efficacy) will easily give-up efforts unless highly supported and those with higher levels of self-efficacy and confidence are more likely to persist with BF when confronted with difficulties; employing a type of self-efficacy to continue to breastfeed [29]. A breastfeeding self-efficacy intervention plan must be based on maternal need, and derived from evidence based practice theoretical and empirical research to enact the most efficient BF implementation (McQueen, Dennis, Stremler, & Norman, 2011). Integrating self-efficacy enhancing strategies in primary care will help to increase a mother’s confidence (self-efficacy) in her ability to breastfeed and to persevere if she does encounter difficulties thus affecting the success of breastfeeding.

**Tri-Core project methodology:** The foundation for the pilot project originated in the three core EBP interventions conceptualizing the Tri-Core model [1] (see Appendix A): a) improving lactation support, b) enhancing maternal and staff lactation education, and c) fostering maternal confidence in their ability to breastfeed (self-efficacy). Lactation support interventions were developed with the aim of improving access to professional lactation counseling, establishing office BF policy and protocols, enacting a Baby-Friendly office environment, and encouraging all healthcare providers to practice the most current BF guidelines and modalities for breastfeeding management based on the Academy of Breastfeeding Medicine’s (ABM) clinical protocols (2015) [30].

Findings suggest that by providing up-to-date evidenced-based practice (EBP) educational materials for both staff and families greatly contribute to improving BF educational support and knowledge [20]. Educational practice site staff in-services were conducted to improve all HCP’s general BF knowledge, program intervention awareness, establishment of a staff BF Champions team, and distribution of new educational materials. On-going office support was provided on how to translate their lactation care into the Tri-Core model approach and incorporate the ABM’s EBP clinical protocols [1,30]. Offices were able to immediately disseminate newfound knowledge to fostering breastfeeding education and promotion among patients. Lastly, specific strategies to support a mother’s self-efficacy levels were integrated into the design by identifying common barriers and issues often encountered early on that interfere with successful outcomes.

**Lactation support for staff and families:** Improving postpartum lactation support entails adopting strategic strategies aimed at enhancing breastfeeding promotion within the practice site (see Appendix B & C). Developing new lactation support guidelines necessitated creating a breastfeeding office policy, formulating new BF office guidelines, educating staff, improving availability of lactation consultant visits, incorporating the ‘Ten-Steps to a Baby-Friendly’ office environment [5] and formulating office and phone-call triage-protocols. At each infant office visit, well and sick, the mother’s breastfeeding (or formula) status was addressed. Occurring at all visits, simple questions such as “how is breastfeeding going, do you have any questions or concerns we can address?” were asked. Providing easy to obtain lactation materials or lactation visits were enacted and encouraged to address acute lactation issues quickly. In the event of infant sick visits, continual praise and support for the mothers to continue breastfeeding (unless contraindicated) and offering guidance regarding the concurrent infants’ illness. Through supplementary
grant monies, lactation supplies were purchased and provided to needy mothers, these included educational materials/ handouts, nipple shields and hand-held breast pumps.

Lactation visits and phone calls were highly encouraged and offered. The PI is a certified lactation consultant (IBCLC) and pediatric nurse practitioner that is expertly qualified to provide specialized lactation counseling along with the co-author who is also an IBCLC. The co-author, also a IBCLC, held the position of lead BF Champion for the Tri-Core project. Lactation counseling and extra phone-call support was readily provided from these two individuals weekly. Furthermore, two days a week lactation-specific office visits were set aside for patients. Appropriate allocations of approved-billable BF ICD-9 codes were utilized so that participants would only have to pay their insurance co-pay for the visits [31].

A future project goal is to have a CLC at each practice site by sponsoring to certify some of the BF Champions to further their education. Educating the staff and providers regarding current breastfeeding management modalities was key to providing mothers with the most current EBP lactation care; such as treatment guidelines for newborn jaundice, maternal or infant BF related infections, low milk supply or slow-weight gain to name a few [30]. Dyad assessments of BF status, feeding frequency, milk transfer/latch, baby weights, soreness, infant jaundice, maternal milk supply, maternal diet and any outstanding needs or issues were continually evaluated. A multi-professional team of staff and volunteering BF Champions was organized. Encouragement was given for all team members to pursue improvement in lactation knowledge via free online modules, such as the WellStart Breastfeeding Modules [32] and participation in the regional BF Coalition group meetings.

Lactation education for staff and families: Providing families with culturally sensitive and postpartum specific BF educational materials and handouts proved to be an effective EBP intervention. Anticipatory breastfeeding guidance packets and materials were provided to families at designated infant well exams. Information was specifically aimed at common educational needs and frequent barriers encountered by families that lead to early weaning. Content materials addressing milk-supply, maternal diet and safe-galactogones (herbs and foods that help to increase milk supply), successful latch techniques, importance and benefits of BF, risks of not-breastfeeding, work and employment, pumping and breast milk storage, childcare provider considerations, and father/family support information were provided. Further materials were made available if needed covering a wide range of topics from breast infections, infant colic, smoking, BF twins, premature, and improving milk supply. Accessibility of the materials for distribution was key; handouts were kept at the nurse’s stations, phone-triage areas, and exam rooms for quick retrieval. Two community-sponsored grants were awarded to assist in funding the educational materials for patient distribution. Materials were evaluated to be culturally sensitive, copyright-permissible, accessible, and easy to read at a 6th-grade reading level. Furthermore, each participant was given a free-copy of the book “New mother’s guide to breastfeeding” [33] via available grant funding.

Initial staff and provider in-services were conducted at each clinical site during project implementation. In-services consisted of viewing an informative 90-120 minute breastfeeding educational power point lecture discussing a broad-range of clinical practice aspects of breastfeeding. Educating the staff regarding current rates and trends, EBP guidelines and protocols were reviewed as well as the most concurrent infant and maternal lactation management techniques were shared. Offices were given a large 3-ring binder containing all of the new BF educational materials and staff resources including patient anticipatory-guidance materials, specific problematic handouts, EBP office protocols and guidelines for monitoring BF, and proper infant growth charts. Several text resources were provided such as Medications and Mothers Milk [34] and Breastfeeding: A Guide for the Professional (Lawrence & Lawrence, 2013) as additional office BF education resources.

Initiating maternal breastfeeding self-efficacy support: Research clearly identifies the need to assess and evaluate a mother’s confidence within herself to successfully breastfeed and any contributing barriers that may impede effective BF outcomes [35]. There are many challenges that may have a significant effect on whether mothers can successfully BF her baby. Identifying predisposing variables that may contribute to the likelihood of a success or failure is essential to improving BF rates and duration, such as lack of social support systems, partner support, concurring health conditions or previous attempts at BF. All family members were encouraged to attend infant visits, especially fathers, partners, and/or grandparents for social support. Moreover, information regarding community lactation peer-support groups and lactation supply retailers were readily provided.

It was noted among the program participants, that there were some who kept striving for efficacious BF, while others would quickly become discouraged. Those that quickly became discouraged were at higher risk for weaning when common barriers or obstacles were encountered. Recognizing which moms were at higher-risk for early cessation was a crucial component to improving BF outcomes; for these participants required additional breastfeeding guidance, support and monitoring. Furthermore- identifying what the mother’s BF goals were and to strive to mutually reach these goals was equally crucial in establishing maternal confidence and improving rates and durations.

Mothers were provided a short survey to complete within the early post-partum period to identify those at the highest risk for early cessation. The Breastfeeding Self-Efficacy Short Form (BFSE) is a concise 14-item qualitative specific survey tool used to identify high-risk mothers who may wean early due BF obstacles or barriers [28,29] and has proven validity and reliability factors. When a high-risk mother was identified- extra care was utilized to identify where her needs were and to attempt to assist her in establishing a breastfeeding relationship with her infant; even if that meant partial breastfeeding and using supplemental formula.

Data collection and findings

Project outcomes were measured by the assessment of breastfeeding rates, durations, and reported maternal self-efficacy levels at distinct intervals utilized to compare with the Health people 2020 benchmark goals and from the two previous chart surveys. Breastfeeding rates were gathered at the newborn, one, and two months of age intervals. Infant feeding patterns were identified as BF exclusive, BF Partial (some formula), and formula; in addition use of a bottle (expressed breast milk or formula) was also documented. Assessment of maternal self-efficacy levels via the BFSE-SF was incorporated at the one and two-month infant visits. The initial cohort for the pilot projects consisted of 50 mother/infant dyads of both BF and formula feeding families.

Newborn BF rates: Breastfeeding rates substantially increased from the two previously gathered data sets of 60% (2005) and 40% (2010/11). Project newborn initiation rates in among the initial 50 participants in 2013 were noted to be 80% BF (partial and exclusive) and 20% full formula feeding. Of the 80% initial newborn BF rate, 62% of the participants were exclusively BF. It is important to note, initial
newborn BF rates are dependent on hospital birthing practices and discharge status. Some dyads arrive home partially BF (BF and formula feeding), indicating that babies were supplemented with formula while still in the Newborn Nursery. It is vital to recognize these rates and evaluate 1-month BF exclusivity rates for improvement comparative to the newborn BF partial and exclusive rate.

One-month BF rates: The most outstanding project data outcomes occurred at the valid average 1-month age-interval percentages. A valid average is applied when the participant volume is reduced due to age attribution, thus were less 1-month participants when compared to the initial 50 participant group. The 1-month valid participant volume was 35 BF dyads. Breastfeeding rates increased from 80% at the newborn to 87.5% at the 1-month, a remarkable 7.5% gain in the project cohort. Typically BF rates will decrease from the newborn highest level to lower levels throughout the first year. The Tri-Core program proved the opposite, showing an increase in rates from the newborn to the 1-month interval. Exclusive BF rates showed an outstanding improvement from 62% newborn to 65% exclusivity at the 1-month interval, another marked increase in rate improvement. Demonstrating that an early lactation promotion not only sustains BF rates it can improve BF exclusivity rates and durations.

Typically BF rates begin to decrease exponentially from the newborn to the 6-month interval, averaging a 30% reduction in national BF rates [8]. The Healthy People 2020 newborn goal of 81.9% of any BF was achieved at the 1-month (87.5%) interval in part due to the program’s success at supporting BF efforts of mothers indicating a remarkable achievement. Data comparisons to pre-intervention rates at the 1-month interval in 2005 were 69.1% for any BF and 51.5% exclusivity, indicating a 18.4% any BF and a 13.5% improvement in respectable BF rates. National 1-month BF trends are 72% for any BF and of that percentage, 48% are exclusively BF at 1-month postpartum [8].

Two-month BF rates: The adjusted 2-month attained valid participant volume was 10; indicating only ten dyads reached that designated infant age at the data gathering interval. Although subsequent mothers continued to BF and yet were outside the window of the project’s IRB approved BF rate retrieval. Breastfeeding rates gathered at the 2-month interval continued to demonstrate the program’s success. An exceptional 76.9% of valid participants continued to breastfeed, and of that value 100% continued to exclusively BF at the 2-month interval (76.9%). Pre-intervention rates in 2005 were shown to be 62.5% partial BF and 46.3% exclusive BF at the 2-month interval. Also to note- maternal enthusiasm for the project was very high.

The 2010/11 BF rates demonstrated to be 75% for partial/any BF and an exclusive rate of 60.7% BF at the 2-month postpartum interval. Demonstrating a significant improvement in the 2-month BF rates when compared to the 2005 data respectively at a 14.4% increase in partial BF and a 30.6% increase in exclusivity BF rates comparatively to the project 2013 outcomes. Improvement in comparative rates were also seen with the 2010/11 analysis, indicating an improvement of 1.9% for any/partial BF and a 16.2% increase in exclusivity rates, indicating project success in surpassing pre-intervention data outcomes.

National U.S trends have shown to be 66.5% for any BF at 2-months and of that percentage, 42% remained exclusive in America, a BF status variance of 24% [8]. Signifying that project participant exclusivity outcomes were 11% higher for any/partial BF and 32% higher in exclusivity rates at the 2-month interval when compared to national trends (CDC, 2012a). Moreover, the Tri-Core participants had a significantly higher percentage of 76.9% exclusive BF when compared to national trends of 41% at 2-months [8], significant gains compared to previous survey results.

Maternal self-efficacy scores: Confidence levels were initially gathered at the newborn visit. Mother’s typically are emotional and subjected to undue feelings of stress and anxiety, especially if BF efforts are not going well. A total of 36 participants out of the initial volume of 50 dyads completed the BSES-SF at the initial newborn visit, the remaining 14 participants were either formula feeding (10) and/or four participants declined to take the survey. Utilizing the BSES-SF survey, 75% of these participants were identified as low-risk and 25% were identified as high-risk for early BF cessation due to low levels of confidence. The average mean of the newborn BSES-SF score was 47.36 with a standard deviation of 12.822. The median score of the newborn BSES-SF score was 52.50.

Repeated one-month self-efficacy levels were only obtainable in a valid group of 14-participants. This was due to infant age parameters, for only 14 dyads reached the 2-month postpartum data gathering interval. The second survey showed an increase in volume in low-risk mothers, 78.6% felt strong in their confidence levels to BF their infant. The percentage of high-risk mothers decreased to 21.4%, indicating fewer mothers had low-levels of self-efficacy and confidence. Mother’s gained increased levels of confidence to successfully BF their infants.

Interestingly, examining the exclusivity status rates between the high risk and low risk group reveals the significance of providing enhanced lactation support to positive outcomes. The exclusivity percentage rate among the low risk participants at the initial interval was 59.5%, followed by 65.6% at 1-month and an exclusivity rate of 77.8% at the 2-month. Among high-risk participants, the initial exclusivity BF rate was 75%, followed by 62% at 1-month and a 2-month exclusivity rate of 75%. The initial exclusivity rate surprisingly was higher among the self-reported high-risk group; perhaps indicating this group has earlier feelings of apprehension for BF success when compared to the low-risk participant group. Further study into this clinical outcome is indicated to better understand the data analysis ramifications.

Improvement was seen collaboratively among the high and low-risk participants for the exclusivity BF rates throughout the postpartum time period, where often this decreases. Mothers’ may begin exclusively BF their baby, yet often will encounter obstacles that deter their effort and supplementation is started. The data demonstrates the opposite, supporting a mothers’ effort and identifying potential issues that may in the past cause supplementing reverses the trend, and the exclusivity and duration rates improve. Participants of the high-risk group reported higher levels of anxiousness regarding their ability to successfully BF their infant, yet their exclusivity rates were higher comparative to the low-risk group.

Project Conclusion and Practice Recommendations

Cultivating an inter-professional environment of early postpartum BF promotion can have a significant effect on improving existing BF rates and outcomes. Joint efforts shared among nurses, lactation consultants, physicians, nurse practitioners, midwife, and community leaders/business are intricate for the complete-circle of community-sponsored breastfeeding. The Tri-Core interventional program was able to demonstrate significant gains in achieved BF rates, durations and outcomes via this professional circle. Previously ineffective postpartum BF promotion at the identified PCP had shown to have an adverse effect towards poor BF outcomes and rates; similar to many primary care offices in the U.S. Experts recommend that at least 80%
Rates benefits all ages and it’s greatest impact will be improving the opportunity to breastfeed their infants and all infants should have the ability to breastfeed [1]. Paired with the incentive status rates. Often mothers express a desire to breastfeed yet fall short of their goals simply because of lack of resources and support; this needs to be reversed.

Utilizing multi-professional community-resources to formulate an evidence-based intervention plan is an effective strategy for all healthcare professionals and businesses alike. Collaboration is essential among all healthcare professionals and agencies that share the vision of eliminating infant mortality and improving outcomes for mothers and newborns. The Tri-Core program has proven to be an effective ERP breastfeeding promotion program. Global statistics show that 40% of hospitals did not meet target BF rates, which is below the exclusive status rates. A 25.5% drop in BF rates within the first twelve weeks at this PCP site postpartum period; as evidenced by National trends (CDC, 2013) and the 1-month postpartum interval. Among the identified postpartum intervals, significant gains and improvements in all BF rates were realized comparative to previously gathered rates. Indicating the project’s success in improving all BF rates and outcomes, especially in the exclusivity status rates. Often mothers express a desire to breastfeed yet fail to achieve their goals simply because of lack of resources and support; this need be reversed.

Human milk is an amazing and powerful all-natural nutritional substance—thus the nickname “liquid gold”. Breast milk’s health and economical value is unprecedented and currently undervalued; the immense benefits of a breastfed society are dramatic and cost-effective [4,37]. It is our obligation in health care to assist every mother in her efforts to successfully breastfeed her infant [1]. Paired with the renewed Baby-Friendly efforts among hospitals, the Tri-Core program has proven to be an effective ERP breastfeeding promotion program that can be implemented within the community setting. Noted by the U.S. Breastfeeding Committee, “all U.S. mothers should have the opportunity to breastfeed their infants and all infants should have the opportunity to be breastfed” (2012, para1). Improving breastfeeding rates benefits all ages and it’s greatest impact will be improving the economic, short and long term healthcare outcomes for all.

References


