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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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2016

Abstract

The Development of a Breastfeeding Educational Toolkit

by

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MS, George Mason University, 2010

BS, Virginia Commonwealth University, 2002

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Breastfeeding has been a key factor in protecting the health of mothers and babies in the United States. Although breastfeeding information may be available from many sources, that information may not represent best practices. New mothers who were patients in the mother/baby unit of a community hospital expressed the need for more education to support breastfeeding success. The nursing staff saw the need for a formal education program to serve as a learning tool to decrease the barriers that may hinder a mother's goal to breastfeed her baby. The goals for this project were to provide an educational toolkit aimed at providing and assessing breastfeeding knowledge for new mothers in the hospital environment and to validate the toolkit with stakeholders from the mother/baby unit. The benefits and best practices for breastfeeding education were established through an evidence-based search of peer-reviewed sources using the database CINAHL and the World Health, CDC and American Academy of Pediatrics websites. Ten stakeholders from the mother/baby unit reviewed the developed toolkit including; 1 physician, 3 lactation consultants, 5 nursing professionals, and 1 layperson of childbearing age. The Logic Model and the AGREE II Instrument were used to provide a framework for data analysis. The domain score for each AGREE II item was calculated by summarizing the scores and representing the total maximum score for each domain. Overall ratings indicated agreement among the stakeholders that the educational toolkit met its stated objectives. The final product was presented to the clinical practice committee and has been adopted by the mother/baby unit for inclusion in all new patient admission packets. The toolkit has the potential to support positive social change by improving the health of the mothers and babies through improved breast-feeding knowledge.

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Dedication

This project is dedicated to my husband, William Scott, who supported me through this journey. To Cassandra Wiley, my daughter, Richard Wiley, Sr., son-in-law, Richard Wiley, Jr, grandson, immediate family, and my church family for making this day possible.

I would also like to show my appreciation by giving a special thanks to my healthcare associates who encouraged me to complete the project.

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Section 1: Nature of the Project

Introduction

The Doctor of Nursing practice problem is as an educational project to develop a learning toolkit to support the breastfeeding mothers on the Mother/Baby unit in a community hospital that is located in the northern area of Virginia. The resources that are available in this toolkit provided valuable guidance and support to all mothers. Hospitals should provide accurate breastfeeding information and support by verifying that the nursing staff and lactation consultants are readily available to show mothers how to breastfeed and to maintain lactation (Kaiser Permanente [KP], 2013). Breastfeeding mothers are faced with challenges as they strive to practice exclusive breastfeeding (Agunbiade & Ogunleye, 2012). It was necessary to promote the mother's knowledge about the importance of breastfeeding for their well-being and their infants (Al-Hially, 2010). The breastfeeding toolkit was developed to improve the duration and exclusive breastfeeding during the entire period of hospitalization. It helped to identify the challenges that mothers face after giving birth to their babies.

Problem Statement

Mothers who have a good support system from family, support, health care system, and community can accomplish accurate breastfeeding information (World Health Organization [WHO], 2015). The problem statement for this proposal was the lack of meaningful education related to breastfeeding for mothers in the Mother/Baby unit of the participation site. The plan was to develop an educational toolkit for the mothers to help decrease the rate of babies being supplemented with formula.

Breastfeeding is an essential contributor to infant health (Massachusetts Department of Public Health [MDPH] 2008. The title of this project is The Development of a Breastfeeding Educational Toolkit. The toolkit (see Appendix A) addressed the problem while assisting the mothers by assessing their breastfeeding efforts upon entrance to the hospital and to identify opportunities for improvement.

Purpose Statement with Objectives

The purpose of the project was to develop an educational toolkit to serve as a learning tool to decrease the barriers that may hinder a mother's goal to breastfeed her baby. Healthcare practices of maternal-newborn care have been associated with successful development and continuation of breastfeeding (Willumsen, 2013).

The vital role in breastfeeding helps with child survival, growth, and development (Willumsen, 2013). The infants are protected from against the leading causes of childhood illnesses and death. Breastfeeding should to begin within one hour of birth. Through research, infants should be exclusively breastfed for the first six months of life and should continue until the age of two or beyond (Willumsen, 2013). Formal breastfeeding education that is led by health professionals should begin at the beginning of pregnancy.

Women who cease breastfeeding early are those with decreased high school education, smoking, and preterm births. Healthcare practice has a need to identify evaluations that support longer durations of breastfeeding who are at risk for early discontinuation (Quinlivan, Kua, Gibson, McPhee, & Makrides, 2015). The Quinlivan, et al. (2015) study on breastfeeding continues to confer that breastfeeding reduces

postpartum bleeding and increases weight loss. Postmenopausal breast cancer and ovarian cancer are long term benefits for the mother (Quinlivan et al., 2015). Mothers who encounter barriers during the initiation of breastfeeding, are at risk for enduring the benefits of early cessation of breastfeeding and its benefits (Quinlivan et al., 2015). Through education and support with the actual proficiency of breastfeeding can help to increase breastfeeding (Brand, Kothari, & Stark, 2014). According to Willumsen (2013), evidence suggests that effective education in breastfeeding helps in increasing the rate of breastfeeding from the start and the length of time it will last. Through evidence-based literature reviews there was a need to increase the breastfeeding rate in the mother/baby unit. The project of a development of an educational toolkit was addressed on the need of educational material to prepare the mothers in what to expect during their babies first days of life.

The project objectives provided consistency with the problem on the Mother/Baby unit to provide meaningful information to increase the rate of breastfeeding. The objectives are (a) to provide an educational toolkit aimed at supporting new mothers, and (b) to validate the toolkit with stakeholders from the Mother/Baby unit. After examining the developed toolkit for the future implementation, the objectives were measured and compared to the standard patient information and care. The outcome was providing a breastfeeding mother with a plan for continued support after she was discharged. Professional support through helpful resources in the area is to provide guidance from evidenced-based practice, influences breastfeeding initiation and duration (Association of Women's Health, Obstetric and Neonatal Nurses, 2014).

Significance to Practice

Breastfeeding corresponds with health benefits. First-time mothers have concerns about breastfeeding during the first days that follow childbirth. The most common problems are the proper latch in 52% of mothers, pain with breastfeeding in 44%, and concerns of milk quantity in 40% of the mothers (Jaslow, 2013). Eight percent of mothers without concerns were young and had prenatal breastfeeding education, and had no medications during vaginal births, had strong support from peers and family members which improved more self-confidence (Jaslow, 2013). Researchers have called for more hospitals to develop strategies to reach concerned mothers early in the postpartum phase (Jaslow, 2013). Concerns about breastfeeding were addressed to the mothers of our organization through education, peer support, and professional lactation support.

The toolkit was developed to serve as a resource for the mothers and their babies on the Mother/Baby unit to promote and support breastfeeding. There was a need to advocate for support and accommodation of breastfeeding in all racial and ethical groups (Massachusetts Department of Public Health (MDPH), 2008). The toolkit was a guide for the Mother/Baby unit through the implementation process (MDPH, 2008). The toolkit methods contained information from evidence-based practices that have shown an improvement of increased breastfeeding rates that will specify goals for breastfeeding support (KP, 2013). The goals and objectives that were unit specific were developed to be used to educate the staff and mothers in the hospital setting. The plan was to improve support of all breastfeeding mothers during their hospitalization.

Exclusive breastfeeding for the first 6 months may save the lives of many infants (Association of Women's Health, Obstetric and Neonatal Nurses [AWHONN], 2007). Extensive efforts have been made internationally through the WHO to advocate for the support of breastfeeding in a way of improving global health (AWHONN, 2007). The project was developed due to the concerns of those mothers in the organization who felt that they had failed at breastfeeding (Author). The idea came about to create an educational toolkit to be used for the improvement of care for the breastfeeding mothers. Health professionals who work with breastfeeding should be knowledgeable in breastfeeding to promote changes in the individual's behavior, attitudes, beliefs, and intentions.

Breastfeeding is different from formula feeding in a variety of ways. It affects the theoretical support during breastfeeding that will promote a mother-infant bond (Jansen, de Weerth, & Riksen-Walraven, 2008). Research has shown that the theoretical mechanism through endocrine and sensory factors has been shown to enhance the maternal bond or infant attachment (Jansen et al., 2008). Breastfeeding affects the endocrine system by the releasing oxytocin when the infant suckles and prolactin stimulates milk secretion and is released after sucking because the endocrine system supports milk production (Jansen et al., 2008).

Project Question

The question guiding this project is: Will the development of a breastfeeding education toolkit designed to serve as a learning tool to support the breastfeeding mothers be found to be useful and valid by the professional staff and lay members of the end-user

group? The need is to provide accurate information to all breastfeeding mothers and to be prepared to support them if the need arises. Breastfeeding provides better nutrients for the baby and is supported by health organizations (Clifford & McIntyre, 2008). The toolkit information has been researched on the breastfeeding websites such as, World Health Organization, American Academy of Pediatrics, Center for Disease Control and Prevention, and Healthy People 2020. These websites provide evidence-based information to assist health care organizations to promote breastfeeding and health benefits to all mothers and babies (KP, 2013). The process will include information from other breastfeeding resources such as Women's Health.gov, Breastfeeding Inc., and other organizations that offer online resources about how their support of breastfeeding has assisted in helping mothers to be successful while meeting their needs with basic breastfeeding. The proposed toolkit contained information from the problems noted from the daily rounds in patient care and from healthcare staff that assists in supporting the mothers while they remain hospitalized.

The stakeholders have an interest in the importance of breastfeeding for the mothers. The development of the education program assisted in providing a way to assist in the challenges of breastfeeding by including healthcare providers and women of childbearing age with feedback through unique opportunities support and promote breastfeeding. The implementation of the program assisted in the support of the target population (Loiselle, Semenic, & Cole, 2005).

The evidence regarding breastfeeding continues to grow demonstrating the value of breastfeeding. The American College of Obstetricians and Gynecologists shows

support in breastfeeding by inviting all employees of healthcare providers caring for women and their infants to support all women in their choice to breastfeed (American College of Obstetrics and Gynecologists [ACOG], 2007).

Evidence-based practice was used for the research in improving the practice problem. Nurses may not be able to solve the problems alone and may need the support of others such as physicians and clinicians (ACOG, 2007). The group can work together while measuring the objectives or answering research questions which are designed to develop, refine, and extend nursing knowledge (Beyea & Slattery, 2006).

Evidence-Based Significance of the Project

Research has increased on the many aspects of breastfeeding. The results of the latest and best results from observations and others who work with breastfeeding dyads are needed so health professionals can make better decisions when working with mothers and babies. There is a need to consider the circumstances, standards, and preferences of the mothers as health professionals share evidence-based information because without the best current research, practice and other information become outdated (Crase & Knorr, 2015). The ability to assist mothers and babies succeed with breastfeeding is to continue with current knowledge of the latest peer-reviewed research. Given that most women participate in some breastfeeding, whatever is effective should be replicated. Additional research is needed to find the best methods to support women to reach their breastfeeding goals (Feldman-Winter, 2013).

Implications for Social Change in Practice

The breastfeeding education toolkit has the potential to support positive social change by improving the health of the mothers and babies through improved breast feeding knowledge. The mothers were in need of learning the value of breastfeeding, the cues when the baby is ready to eat, and most importantly skin-to-skin contact. Mothers need to be advised of the various times the baby needs to eat in 24 hours, the importance of rest, and the essential resources for breastfeeding. The toolkit was given as a take home resource. Short hospital stays make it harder for nurses to prepare new mothers to breastfeed successfully (AWHONN, 2007).

New mothers have the right to have correct independent infant feeding information, guidance on safe, timely, and appropriate complimentary feeding, so that they can make informed decisions. Promotions depends on the implementation of polices and recommendations at all levels of health and social service systems (Cattaneo, 2008).

Definition of Terms

The following are defined terms used in the breastfeeding toolkit project:

Evidence-based practice: Applying the best research while making high quality decisions about the healthcare about an individual patient (Agency for Healthcare Research and Quality (AHRQ), 2015).

Exclusive breastfeeding: The infant receives only breast milk that is recommended for six months. (AWHONN, 2007).

Formula feeding: The use of breast milk substitutes to provide infant nutrition (AWHONN, 2007).

Support: Groups and programs to assist in the benefits of breastfeeding, providing space, and by providing the available resources for all mothers (AWOHNN, 2007).

Toolkit: A fact sheet that provides information to ensure knowledge to promote and support women about breastfeeding (National Women's Law Center, 2014).

Assumptions and Limitations

Assumptions are that the stakeholders will acknowledge that(a) the toolkit will assist mothers who are offered information will be more comfortable making a choice to breastfeed;(b) the project will not cause a financial constraint on the organization and; (c) the toolkit will be helpful to the staff through the interest and engagement in supporting the mothers. The limitations will be the amount of time the stakeholders will have to read the presented material in the toolkit and to give feedback on the information.

Summary

The Mother/Baby unit was in need of a project to improve the breastfeeding rate for the mothers and their babies. The purpose of the project was to develop a learning tool to decrease the barriers that may impede any mother's goal with the intention to breastfeed (WHO, 2013). Breastfeeding is known through evidence-based research that it protects infants against the major causes of childhood illnesses and mortality (WHO, 2013).

The project addressed the added material that prepared the mothers in what to expect from their babies during the first 3 days of life. The development of the educational toolkit will support the mothers by:

a. Complementing the guidelines from the "Ten Steps to Successful Breastfeeding".
b. Clarifying the need to breastfeed as soon as possible after birth.
c. Education of the mothers on the benefits of breastfeeding.
d. Showing infant cues when it is feeding time.
e. Explaining milk supply and milk production.
f. Explain the importance of rest periods.
g. Providing needed resources for support while breastfeeding.

The remainder of the project showed the development of the educational toolkit through a literature review of evidence-based articles and online databases. The concepts, models, and theories was introduced in the development of the educational toolkit.

Section 2: Review of Literature and Theoretical and Conceptual Framework

Introduction

Breastfeeding is recognized as the most important contributor to infant health (MDPH, 2008). Research has increased our understanding that the absence of breastfeeding is an important public health issue. It is associated with the excess risk of illnesses and deaths in infants, children, and women (MDPH, 2008). Feeding human milk to infants will assist in achieving the benefits of mortality in infants, children, and women (MDPH, 2008).

The practices in the organization for the mothers was changed to needed assistance from the staff to encourage early initiation of breastfeeding with in 1 hour of delivery. All new mothers needed assistance of the staff or a lactation consultant. The hospital is the critical environment for the establishment of breastfeeding (Shealy, Li, Benton-Davis, & Grummer-Strawn, 2005).

Specific Literature

During the development of an educational toolkit, evidence-based, peer-reviewed journals were reviewed to implement a successful and effective plan to increase breastfeeding in the participant organization. The objectives were to find reviews and information on breastfeeding from national and community organizations. The CINAHL database was searched using the key words breastfeeding and breastfeeding toolkits.

Many of the breastfeeding practices have been established from World Health Organizations, Centers for Disease Control, Healthy People 2010, and the American Academy of Pediatrics. These were among many of the organizations recommendations

that were used to implement the breastfeeding toolkit. These organizations regularly update protocols to help to provide issues on breastfeeding.

The guidelines are used as breastfeeding resources for new mothers and their infants. The information may need to be supplemented for families with special needs. Special attention needs to be paid to practices that may cause breastfeeding difficulty and early termination. The educational breastfeeding toolkit is supported by the use of evidence-based practice that was to assist in the busy work environment of the organization. All families are encouraged to breastfeed with the consideration of cultural values and beliefs that may be related to breastfeeding.

General Literature

The Perinatal Care core measure set became mandatory for all hospitals with 1,100 or more births per year was made effective January 1, 2014 (United States Breastfeeding Committee, 2013). Hospitals are to implement practices that improve exclusive breast milk feeding by using the most updated practices, which will reflect in the rates of breast milk feeding. This toolkit from the Joint Commission was revised in 2013 and is to be used as a resource for hospitals and maternity centers (United States Breastfeeding Committee, 2013).

There are key highlights to influence mothers who have the intent to breastfeed. To promote a breastfeeding friendly environment, hospitals should display posters and patient education and avoid promotional items that promote formula feeding. All families should be encouraged to breastfeed before the delivery of their baby with the consideration of cultural values and beliefs. Accurate information about not breastfeeding

will assist in the success of initiating breastfeeding in other cultures (MDHD, 2008). Mothers with the following illnesses are advised not to breastfeed; maternal human immunodeficiency virus (HIV), active tuberculosis, herpetic breast lesions, and those receiving radiation isotopes or have come in contact with radioactive material (MDHD, 2008).

The California Department of Public Health [CDPH] (2010), states "hospital practices influence infant feeding behaviors during a period critical for successful breastfeeding" (CDPH, 2010). By using the "Ten Steps to Successful Breastfeeding", the organization has the opportunity to promote breastfeeding during its entirety (CDPH, 2010). Through evidenced-based maternity care, hospitals have the chance to protect, encourage and support breastfeeding women and infants (CDPH, 2010).

Research shows that one million infants will expire each year because they are not breastfed or are given other foods too early. The extent of death is much greater in the developing world due to the large amount of infants that suffer from the ill effects of being formula fed. These conditions of illness can cost the United States millions of dollars through increased hospitalizations and pediatric clinic visits. There are rare exceptions when a mother cannot breastfeed her baby for physical or medical conditions. The woman's ability to feel confident and secure about breastfeeding may have a challenging decision because of family, friends, the media, and health care providers (Baby Friendly, USA, 2004).

Through instituting evidence-based practices, this project provided education, discussion, and integration to support change in the organization. Through the

development of the toolkit, there has been discussions and communications shared with others before the implementation of the project. The importance of breastfeeding was considered in the implementation of the toolkit (Baby-Friendly USA, 2004).

According to the Centers for Disease Control [CDC] (2013), in Virginia the Maternity Practice in Nutrition and Infant Care (mPINC), participates in a report that summarizes that the facilities provide opportunities to improve health outcomes in mother-baby care on a 2-year basis. Within the last 2 years, only 73% of the 62 facilities participated in the survey (CDC, 2013). The majority of hospitals have provided prenatal breastfeeding instructions and breastfeeding advice and counseling (CDC, 2013). There is a low percentage of hospitals that initiate bonding for 30 minutes after delivery, have breastfeeding policies that are recommended by the Academy of Breastfeeding Medicine (ABM), or provide follow-up phone calls and home visits after discharge (CDC, 2013). According to the CDC, all hospitals should inform mothers about the importance of community support at discharge (CDC, 2013). Another improvement shows that 25% of hospitals adhered to guidelines to decrease supplementation of formula, glucose water, and water (CDC, 2013).

Women who are breastfeeding and return to work should be allowed to express breast milk in the workplace. They should be given a reasonable time and private accommodations in a supportive environment as required by law in 2009. During this period, 40 states enacted a breastfeeding-relative legislation. Twenty-one states, plus the District of Columbia and Puerto Rico, have laws specifying the right in the support in breastfeeding. Women who do not express breast milk will experience a decreased milk

supply that will in turn lead to early weaning (National Business Group on Health [NBGH], 2008).

When women do not breastfeed physician visits may double, have a higher risk for hospitalization, and an increase in medications per 1,000 babies. Breastfeeding can reduce medical expenses for the mother and child. After delivery, about 70% of new mothers follow instructions to breastfeed but only 25% whose children are less than 1 month of age will combine employment and breastfeeding. Full-time employment decreases the continuation to breastfeed (NBGH, 2008).

Mothers with lower incomes have difficulties in combining breastfeeding and having low paying jobs. Evidence has shown that mothers who have an access to a high quality breast pump in a workplace will feel more confident in the continuation to breastfeed (NBGH, 2008). KP (2013) has implemented a toolkit that states "Breastfeeding helps the infant's immune system to help reduce the risks of common infant illnesses such as stomach complications, ear infections, breathing problems, diabetes, pneumonia, and sudden infant death syndrome" (p. 6). Research suggests that breastfeeding decreases the risk of childhood obesity (KP, 2013).

Hospitals can be very instrumental in helping mothers and families with the instructions on maintaining exclusive breastfeeding (KP, 2013). The ideal reason to stimulate lactation immediately after delivery is to support the breastfeeding mothers in experiencing a beneficial role for them and their infant's breastfeeding while they receive patient-centered care in the hospital setting (KP, 2013). The clinical staff should have an

opportunity to solve serious issues and celebrate early success. The first days can help breastfeeding success with results of positive experience (KP, 2013).

Conceptual Methods/Theoretical Framework

Hector, King and Webb (2005) state, "The conceptual framework proposes three levels of factors that influence breastfeeding practices: individual, group and society. Individual level factors relate to the mother, child, and the mother-child dyad." (p. 54). The following factors have influences during the start and duration of breastfeeding: (a) the mother's intent to breastfeed, (b) knowledge, (c) abilities and parenting experience, (d) birth experience, (e) health and risk status of the mothers and infants, (f) and the nature of early interaction between mother and baby (Hector et al., 2005). The community should design programs that will assist in the effectiveness of breastfeeding that will attribute to success of the mothers and infants through groups such as hospitals, home and peer environments, and the work environment (Hector, et al., 2005). See Figure 1.

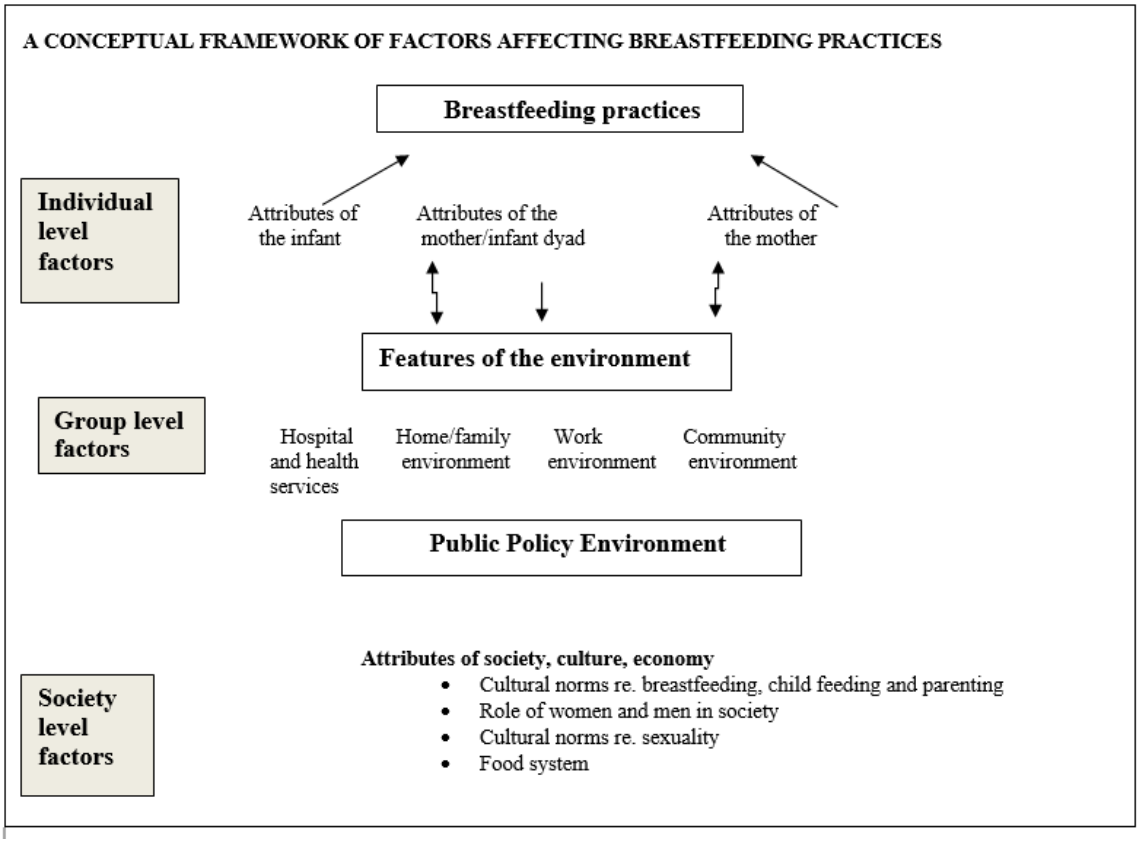

Figure 1. Factors affecting breastfeeding practices applying conceptual framework. *NSW Public Health Bulletin, 16*(3-4), 52-55.

Logic Model

The conceptual framework that will be used will be the Logic Model (see Appendix B) that will identify the inputs, activities, outputs, and outcomes. The basis for the expectations of this model is that it associates program inputs and activities to program outputs and outcomes (Sundra, Scherer, & Anderson, 2003). Using the Logic Model ensures that all stakeholders understand the program's purpose, the needed resources, the conduction of activities, and the capacity to effect change. It helps to monitor the progress while making minor adjustments and improvements in the project. The logic model (see Table 1) assists in summarizing how the project is presumed to work (Sundra et al., 2003).

Table 1

Logic Model for Data Analysis of the Educational Toolkit

Steps	Definition
1. Objectives	1. To provide an educational toolkit aimed at supporting new mothers. 2. To validate the toolkit with stakeholders from the Mother/Baby Unit
2. Project Management	Project timeline of the toolkit was developed To identify and create the needed material for the mothers in one month.
3.Identify the Strategy	The outcomes approach will guide the development, implementation, and the evaluation of the toolkit.
4. Audience Analysis	The target audience is the mothers who may have concerns about breastfeeding.
5. Communication Inventory	Communication with the stakeholders will assist the evaluation of the toolkit.
6. Identify Channels and Vehicles	The toolkit will be given to the nurse manager, staff, lactation consultants, and mothers for review.
7. Message Development	The toolkit's message will be fully developed to provide the basic knowledge to the mothers.
8. Identify	The toolkit will easily be identified by the use of evidence-based material and references from breastfeeding websites and organizations.
9. Implementation	The toolkit will be implemented after review6 of the stakeholders and the organizational review board.
10. Evaluation	The evaluation of the project will be that 85% of the mothers will be discharged breastfeeding. The impact will be better health outcomes for the babies.

Table 2

Logic Model Components

Inputs	• Stakeholders of the Mother/Baby Unit • Follow guidelines of the American Academy of Pediatrics
Activities	• Development of a breastfeeding educational toolkit
Outputs	• Education by use of toolkit • Information verified by stakeholders • Using AGREE II Instrument
Outcomes	• Stakeholders to validate breastfeeding toolkit
Impact	• Better health outcomes for the babies.

Communication with the critical stakeholders assisted in the evaluation of the toolkit before the project could be introduced. The Logic Model was used to help in identifying the activities, outputs, and outcomes in the future for the evaluation. The logic model was used as a plan to show how the project would work. The organization worked as a team to implement the toolkit (Australian Government, 2012). Information was available to them with an invitation for their involvement in the project.

The toolkit for breastfeeding was developed and then validated by key stakeholders. The Ten Steps to Successful Breastfeeding was the resource that was used to inform pregnant women about the benefits of breastfeeding. The mothers were encouraged to breastfeed early after delivery and were taught to only give breast milk to their infants (World Health Organization [WHO], 1989). Mothers are allowed to room in for twenty-four hours to encourage breastfeeding on demand. Before discharge from the hospital, mothers should be referred to support groups (WHO, 1989).

Summary

It is very important to know about the numerous health benefits of breastfeed and mothers who are more knowledgeable about the benefits are more likely to breastfeed. Research has shown that mothers believe that breastfeeding is best, but there is not enough knowledge about the reductions in health risks that can happen with breastfeeding. It is very important for the mothers to have the information made available to them, but it is crucial to have the knowledge in knowing how to breastfeed. Even with the best planning, challenges may arise, but our mothers deserve assistance in solving these challenges (United States Department of Health and Human Services, 2011). Breastfeeding has been the key factor in protecting the health of mothers and babies in the United States (Mass, 2011).

Section 3: Methodology

Purpose Statement

The purpose of this project was the development of an educational learning toolkit to present the basic knowledge on how to support breastfeeding. The main work of the project was to develop, assess for content validity and present the education toolkit to the nurse manager and clinical practice committee. Stakeholders of the organization received evidence-based information about the project. It is hoped that the establishment of the educational toolkit will assist in the better outcomes of breastfeeding. The mothers are in need of a basic understanding of feeding expectations over the first few days until full production of their breast milk.

Population and Sampling

The identified target populations were key stakeholders from the organization who were the support of the project through their input of the project. The focus of the development of the toolkit was communication with the stakeholders through all resources and each step of the project. The group of stakeholders included the Director of Pediatricians, the nurse manager, a nursing professor, a nurse practitioner, a nurse educator, three lactation consultants, a staff nurse and a lay person of childbearing age. All were included in the sample criteria of the project. The 10 stakeholders were interested in the success of the development of this toolkit. The Logic Model provided the framework for the toolkit. The AGREE II Instrument was used in the collection of the evaluation data with permission (Kerkvliet, 2015). Permission to use the AGREE II instrument was received from the Agree Enterprise Project Office. (See Appendix C.)

Data Collection/Instruments

The stakeholders of the organization used the AGREE II Instrument to undertake their own assessment before implementing the education toolkit into practice (Bouwers et al., 2010). The collection of data through the instrument was used to assist in making decisions in clinical practice. The 10 stakeholders used the AGREE II Instrument to assess the toolkit for reliability (Bouwers et al., 2010). The stakeholders had 1 week to critique the educational toolkit. Upon completion of the review, revisions were made and the stakeholders again were asked to review the educational toolkit using the same AGREE II Instrument. They had an additional week to complete the second review due to the need for a few changes. The AGREE II Instrument was used as a tool for data collection to provide clear instructions of the evaluation of the educational toolkit. The instrument assisted in the overall assessment of the recommended use. The data was obtained from 10 stakeholders of the Mother/Baby unit. Bouwers et al. (2010) states,

> The AGREE II Instrument involves six domains, but only four domains, in which the quality project will be adopted through will be used. 1) Scope and purpose of the target group, 2) Stakeholders involvement, which represents their views, 3) Rigour of development, which involves evidence-based methods, 4) Clarity of presentation through the overall format and structure of the project. (p. 2)

The AGREE II Instrument was submitted to the stakeholders for assessing the quality of the education toolkit (Bouwers et al., 2010). The stakeholders rated each domain on a 7-point scale, which meant that a score of 1, suggested that they strongly disagreed and a score of 7, meant that they strongly agreed with the education toolkit

(Bouwers et al., 2010). They provided ratings for objectives, health questions and population. The assessment from the AGREE II tool provided the final analysis of the education toolkit (Bouwers et al., 2010).

Data Analysis

The scoring method of the AGREE II Instrument was used to analyze the educational toolkit for the Mother/Baby unit. Data was analyzed for the purpose of the implementation of the project by the use of objectives to guide the intended outcomes of the project. The assurance of evidence-based underpinnings were used to benefit the project (Australian Government, 2012). The findings were analyzed within the framework of the Logic Model that was used for the evaluation of the practice-based project by the stakeholders. Data analysis was used to improve the reliability of healthcare practice and outcomes from the data that was obtained from the toolkit (Terry, 2012). The Logic Model was used to provide direction and clarity in presenting a change to support breastfeeding.

The need was to develop a positive atmosphere in the Mother/Baby unit. The guidelines from the Academy of Pediatrics were used as the resource in providing interventions for change in the initiation of breastfeeding to the stakeholders and the mothers. The analysis of the toolkit was to show the evidence of an increase rate of mothers having more knowledge about breastfeeding. A good model represented the attributes of understanding how stakeholders viewed how the project worked (Community Tool Box, 2014). Active data or a higher score obtained from the use of AGREE II Instrument indicated a successful change. The use of the toolkit was a guide to

improve health care issues. A score of 1 to 7 from the rating scale of the tool was given according to meeting the criteria of the project (Bouwers et. al., 2010). The instrument assisted in analyzing the data on issues that needed attention to advocate for the support of breastfeeding. A copy of the rating scale of the AGREE II Instrument was given to the stakeholders after the permission was given by the IRB of the organization. Permission was granted by the AGREE Project Office to use this tool (Kerkvliet, 2015).

The data analysis from the AGREE II Instrument was used by the stakeholders to undertake the assessment of the education toolkit before adopting the toolkit into practice. The toolkit was evaluated by its progress on the ratings of the four domains that secured the unique aspect of the quality of the education toolkit (Bouwers et. al., 2010). The data that was obtained in phase 1 of the toolkit will prove to be information that will benefit the mothers. The criteria of the AGREE II Instrument will be used to reflect the definition of each item. Judgments by the stakeholders are required as in any evaluation. The domain scores of each item was calculated by summarizing of the scores by the stakeholders and by scaling the totals as the maximum score for that domain (Bouwers et. al. 2010). The stakeholders rated the appropriate toolkit and the overall quality taking into account the recommendation of the entitled education toolkit for use (Bouwers et. al., 2010).

Each stakeholder rated the four domains by using the AGREE II Instrument to appraise the toolkit. Domain 1: Scope and practice consists of three items. Domain 2: Stakeholder involvement consists of three items. Domain 3: Rigour and development consists of eight items, and Domain 4: Clarity of presentation consists of one item. The

stakeholders were required to give comments to justify their ratings on why they would or not recommend the education toolkit. All appraiser scores were averaged with scaled percentages for each domain and scaled by maximum or minimum scores and converted to a percentage (Polus et al., 2012).

Table 3

Percentage of Appraiser Scores

Score Name	Score Description
Obtained score =	Sum of all items scores for all appraisers in a single domain
Maximum possible score =	7 (strongly agree) x y (items within domain x 10 (appraisers)
Minimum possible score =	1 (strongly disagree) x y (items within domain) x 10 (appraisers)
Scaled domain score =	(Obtained score – Minimum possible score) x 100 (Maximum possible score – Minimum possible score)

7 x 11 x 10 = 770
770 – 110 = 600

Maximum possible score – 770

Minimum possible score – 110

770 – 110) / (770 – 110) x 100

600/670 x 100 = 98.5 x 100 - 99%

Table 4.

AGREE II Data

AGREE II Domains	Score by Percent
Domain 1: Scope and Purpose	100%
Domain 2: Stakeholder Involvement	100%
Domain 3: Rigour and Development	100%
Domain 4: Clarity of Presentation	100%

Recommend this Education Toolkit for Use	100% (Agreement of Everyone)

Project Evaluation Plan

Through evidence-based materials in developing an educational toolkit with the assistance of the "Ten Steps to Successful Breastfeeding" resource will assist in the safety, advancement, and support of the mothers and babies. The plan was to approach the project stakeholders for an initial formative review and a second summative review. Revisions were made and the final product was presented to the clinical practice committee via a power point presentation.

Summary

Evidenced-based practice has been reviewed on the results of breastfeeding on short and long term infant and maternal outcomes in developed countries (Ip et al., 2007). Through the history, it has been found that breastfeeding has been associated with reductions in the risk of ear and stomach infections, severe lower respiratory tract infections, obesity, skin problems, asthma, type 1 and 2 diabetes, childhood leukemia, sudden infant death syndrome, necrotizing enterocolitis, and cognitive development. Studies have been performed through research with associations of chronic illness among adults who were breastfed as compared to those who were given formula at birth (Ip et al., 2007).

The development of the educational toolkit will hopefully be effective in supporting the mothers of the Mother/Baby unit. The objectives that were developed which are: (a) to provide an educational toolkit aimed at supporting the mothers, and (b) to validate the educational toolkit with the stakeholders.

The project was evaluated by the stakeholders after the evidence-based project had been presented. In order to change nursing practice through the data collection of the toolkit, the problem must be linked with nursing interventions and patient care outcomes through the best proof. With the assistance of the stakeholders, the toolkit will be used as an integrated change in nursing practice to support the mothers (Terry, 2012).

The toolkit contained pertinent information about support of breastfeeding from evidence-based peer-reviewed data. The material was processed in a concise manner so that the stakeholders gained an understanding of the need for the educational toolkit. The nurse manager was used as the main focus due to the influence of a successful project. The nurse manager has high power, influence, and high interest over projects (Thompson, 2007). The Mother/Baby unit will move forward after implementing a successful project.

The development of the toolkit and its validation will assist in simplifying the breastfeeding support that has been needed for the success in breastfeeding for the mothers on the unit. The changes that might improve the situation should be reflected through the development of the toolkit through the participation of the involved project. Through the validity of the education toolkit, the project has been established as a best practice project.

Section 4: Findings, Discussion, and Implications

Discussion and Implication

This section will reveal data that was gathered by using the AGREE II Instrument where four domains were used to summarize the findings of the breastfeeding toolkit. Approval of the project has been obtained from the Internal Review Board of Walden University. The purpose of the project was to introduce the information of the toolkit results to 10 stakeholders for their evaluation before introducing it to the intended population of the 30 bed Mother/Baby unit. The information was developed through the peer-reviewed evidence-based material to support the breastfeeding mothers. A power point presentation was made accessible to the stakeholders.

Summary and Evaluation of Findings

The research question for this study was, "Will the development of an educational breastfeeding toolkit designed to serve as a learning tool to support the breastfeeding mothers be found to be useful and valid by the professional staff and lay members of the end-user group?" Ten stakeholders appraised the project and extracted the data by using the AGREE II Instrument and rating scale.

Domain 1: Scope and Purpose

The overall objectives of the toolkit were described. The health questions in each domain were covered. The populations were the patients or the public to whom the toolkit was meant to apply. The objectives are (a) to provide an educational toolkit aimed at supporting the new breastfeeding mothers, and (b) to validate the toolkit with the stakeholders from the Mother/ Baby unit.

The health questions were covered by the explanations from the evidenced-based reviewed articles and national breastfeeding sites that it does help with child survival, growth, and development. It protects infants from childhood morbidity. The populations of concern are the mothers and babies of the Mother/Baby unit.

Domain 2: Stakeholders Involvement

1. The stakeholder group includes one physician, nurse manager, nurse practitioner, nurse educator, a professor, staff nurse, three lactation consultants, and a layperson. The target users are the breastfeeding mothers of the Mother/Baby unit. The toolkit development group included participants from all relevant professionals.
2. The views and items preferred of the target population are required. The views of the population are from the problems noted by the new mothers and other breastfeeding mothers.
3. The target users are clearly defined.

The general objectives of the toolkit are precisely described. All health questions are described. The audience for this education toolkit are the patients and public with a specific interest in breastfeeding education.

Domain 3: Rigor and Development

The updated research for the project is the use of evidence-based journals. The strengths of the project was providing the mothers with the knowledgeable resource to assist in breastfeeding. The limitations were defined upon the gathering of the evaluation phase of the project by the stakeholders. The project was used to support the breastfeeding mothers.

1. Organized methods were used to research evidence.
2. The standards for seeking content validity of the education toolkit were clear.
3. The recommendations of the project were clear.
4. The health benefits, side effects, and risks were taken into consideration while formulating the recommendations.
5. There was a clear link between the references and the supporting evidence. The link is for better health of the newborns with supporting evidence from evidence-based and peer-reviewed journals.
6. The stakeholders reviewed the education toolkit prior to its adoption.
7. A planned procedure was used to update the education toolkit. All suggestions by the stakeholders were reviewed and revised accordingly.

The methods that were used are from evidence-based literature to show support of the mothers and babies of the organization. The use of the Logic Model was best for the development of the project. The AGREE II Instrument was used to evaluate the project. Four domains out of six domains were used to assist the appraisers. All breastfeeding mothers should have access to skilled breastfeeding support.

Domain 4: Clarity of Presentation

1. The key recommendations are listed in the project. Breastfeeding protects the baby's immune system due to the fact that the breast milk contains antibodies that help to fight off viruses and bacteria and it provides the ideal nutrition for infants. The benefits of breastfeeding are documented in literature and emerging research confirms stronger associations for longer durations of breastfeeding and enhanced maternal and newborn benefits (AWHONN, 2014). Are the references specific to the users of the project? The Breastfeeding Toolkit was written for the breastfeeding mothers to use for support in breastfeeding when the lactation consultants are off duty.
2. The options for management of the condition or health issues was clearly presented. The language, structure, and format of the education toolkit were clear.
3. Are the health issues clearly presented?

The overall structure of the project was geared toward the support of the mothers.

Overall Toolkit Assessment

1. Rate the quality of the education toolkit using the AGREE II Instrument.
2. Recommend the education toolkit using the AGREE II Instrument for use.

Table 5.

Stakeholder Questionnaire

Domain Number	Response	Question Text
Domain #1	Yes –10, No - 0 No response – 1 (due to a busy schedule)	Do you understand the overall objective for the toolkit?
#2	Yes –10, No - 0 No response - 1	Are the health questions presented well?
#3	Yes -10, No - 0 No response - 1	Do you understand what population this project was written for?
Domain #2		
#1	Yes -10, No – 0 No response - 1	Does this group contain pertinent individuals from all professions?
#2	Yes -10, No – 0 No response –1	Have the views of the target population been sought?
#3	Yes -10, No – 0 No response - 1	Are the target users defined?
Domain #3 #1	Yes -10, No – 0 No response – 1	Were systematic methods used for the research?
#2	Yes -10, No – 0 No response – 1	Is the correct criteria used in selecting the evidence?
#3	Yes -10, No – 0 No response – 1	Are the strengths and limitations described?
#4	Yes -10, No – 0 No response – 1	Are the methods for formulating the recommendation clear?
#5	Yes -10, No – 0 No response – 1	Have the health benefits, side effects, and risks been considered?
#6	Yes - 10, No - 0 No response – 1	Is there a link between the recommendations and the supporting evidence?
#7	Yes -10, No – 0 No response – 1	Has the education toolkit been reviewed by experts prior to publication?
#8	Yes - 10, No – 0 No response – 1	Is there a procedure for updating the project?
Domain #4 #9	Yes - 10, No- 0 No response - 1	Are the recommendations specific to the users of the project?
#10	Yes - 10, No - 0 No response – 1	Are the health issues clearly presented?
#11	Yes - 10, No - 0 No response – 1	Are key recommendations identified?

The breastfeeding toolkit was explained to each stakeholder for scoring purposes. Each individual liked the idea of the educational toolkit to be used as a supporting tool for the mothers on the Mother/Baby unit. The physician, nurse educator, layperson, and a lactation consultant accepted the breastfeeding toolkit as it was. There is a need for the use of a breastfeeding toolkit on the unit. The group acknowledged that the breastfeeding toolkit had good information and should be made available to the patients of the Mother/Baby unit. The nurse practitioner and the lactation consultants made a few minor changes in its development. All changes were made as the nurse practitioner and lactation consultants identified. The professor, a nurse educator, saw a need to change a few that the public may not understand, like "cluster feed" which means that the baby will feed constantly or will have feedings close together during the day. The use of the educational toolkit was a consensus by everyone. It was a needed tool for the mothers of the organization. It was a suggestion that the education toolkit would improve the quality of care and that it was needed for maternal and perinatal health.

Implications for Practice/Social Change

The breastfeeding toolkit provided an educational project that will be useful to the mothers on the unit to assist in early initiation and continued breastfeeding support while breastfeeding their newborn infants. It is a useful tool for the nursing staff and other health professionals of the organization when involved with the increased volume of patient care. This toolkit had an impact on social change by guiding the mothers to successful breastfeeding.

Project Strengths and Limitations

The strengths of the toolkit are that breastfeeding is the best nutrition for all infants. The ten stakeholders who reviewed the educational breastfeeding toolkit all commented that it would be useful for out Mother/Baby unit. There has always been a need to increase breastfeeding through clinical practices to discharge mothers home exclusively breastfeeding. The health professionals encourage breastfeeding in all mothers to begin within the first hour after delivery. The limitations are that two stakeholders could not return an evaluation due to a busy schedule. An average of two extra stakeholders were asked for their evaluations due to barriers of having busy schedule.

Analysis of Self

I did well with much support from the staff, lactation consultants, management, physicians, preceptor, and laypersons of the organization. I am appreciative of the support and feedback. I have enjoyed learning the development of a project through this DNP journey. I was willing to revise the formatting and questions of the researched peer-reviewed evidence-based material that was used in the project that will be used for the mothers of our organization.

Summary

The breastfeeding educational toolkit addressed the content that was needed for all breastfeeding mothers. The education toolkit met the clear and consistent stated objectives for the breastfeeding mothers. It addressed the current issues and problems that mothers have when breastfeeding their newborns. It is important to do skin to skin, bond, and watch for cues when the baby is ready to breastfeed. The education toolkit improved the confidence among our mothers.

Section 5: Scholarly Product

The Development of an Educational Breastfeeding Toolkit

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Abstract

This paper will provide a brief summary of assistance to all breastfeeding mothers who may have barriers that may hinder them from breastfeeding their infant within the first few hours of birth. The barriers may include lack of confidence, poor latch assistance, sleepy infants, misperceptions about milk supply, influence of family and friends who may have a significant impact in support (Clifford & McIntyre, 2008), lack of workplace support, embarrassment of breastfeeding in public, and women and infants with health issues. This will allow the nursing staff to be able to support the new mothers with breastfeeding while in the absence of the lactation consultants especially during the night shift. There are numerous society barriers that may prevent mothers from continuing to breastfeed. Health care providers may not be prepared to assist mothers in their practice to breastfeed. The plan is to submit the manuscript to the *Journal of Human Lactation*.

Objective: To have more new mothers to be discharged home through support with decreased barriers to breastfeed their infants.
Background: This project was focused on the need to increase the breastfeeding rate of discharged mothers by decreasing the barriers. This project was carried out in a community hospital that is located in the northern area of Virginia.
Methods: The stakeholders of the organization that serves all community populations assessed the quality of the project by using the AGREE II Instrument.
Participants: The stakeholders included 10 participants. The group consisted of the Director of the Hospitalist Department (MD), nurse manager, nurse practitioner, nurse professor, 3 lactation consultants, nurse educator, staff nurse, and a layperson.
Results: The stakeholders scored the quality of the instrument for recommendation. All of the stakeholders recommended the breastfeeding toolkit for use in the organization.
Conclusions: The education toolkit will be used to support all breastfeeding mothers of the organization.
Keywords: Breastfeeding, stakeholders, AGREE II Instrument

Introduction

The purpose of this project was to show support to all breastfeeding mothers. Many mothers become discouraged while breastfeeding. Lactation consultants have dynamic skills in assisting the mothers. But what happens when the lactation consultants are not there? The improvement of breastfeeding is very important to increase

breastfeeding rates and to contribute better infant health. This project was instituted to assist the mothers with support of breastfeeding through skin-to-skin contact, early initiation, latch techniques, feeding cues, rooming-in, and to limit the use of formula. Support is needed for all breastfeeding mothers through the assistance of doctors, nurses, lactations consultants, families, organizations, and communities. This project was written to show the breastfeeding mothers the importance of the health benefits in breastfeeding and to show support from the entire staff.

Background and Objectives

Working with new mothers who want to breastfeed can be very challenging. There is the need for protection, promotion, and support for decreasing disparities while initiating and increasing the duration in all populations. Researched evidence-based information is needed to inform and support those mothers who are in need of effective care. The project will need to be evaluated for its effectiveness before it is to be implemented.

The objectives of the article are to provide an educational toolkit aimed at supporting the new mothers and to validate the toolkit with the stakeholders from the Mother/Baby unit. These objectives are of utmost importance for the mothers to decrease the barriers while supporting mothers to breastfeed before discharge from the hospital.

Due to short hospital stays, it is critical that all staff will need to educate the mothers about breastfeeding within the first hours after birth and show support during the entire hospital stay. The staff will need to implement skills in effective breastfeeding in order to show mothers how to breastfeed and to maintain lactation. Through evidence-based information this project will allow the staff to give the mothers more supportive care while breastfeeding during hospitalization. This process will have a great impact on successful breastfeeding.

Education Toolkit Evaluation

Project Method

A review with the stakeholders of the organization assured rigor and measure of the success of the evidence-based breastfeeding project. The findings through the review and analysis of the clinical questions have been reviewed to assist in the change to improve quality of practice. A change was needed for the improvement of patient and provider satisfaction. The key end-users had a very important impact on the success of the project that proved validity of the developed breastfeeding toolkit.

Method for Stakeholders

A questionnaire was developed for the ten stakeholders: nurse manager, nurse practitioner, physician, nursing professor, nurse educator, lactation consultants (3), a staff nurse, and a layperson answered seventeen questions about the project. The stakeholders scored the recommended education toolkit on the quality of the project by using the AGREE II Tool. Each member responded to the questionnaire except the nurse manager who did not respond due to a busy schedule. Each member supports the breastfeeding

toolkit after minimal corrections were made. See Appendix D for questions and responses from the stakeholders.

Wording in the breastfeeding toolkit was changed by the nurse practitioner and the lactation consultants. Some did not understand the domains that were used in the project. A power point presentation was made for the explanation of the domains.

Data Analysis

The data analysis that was developed from the education toolkit was presented to the stakeholders of the unit in person or via email. The questionnaire was developed from the AGREE II Instrument to be used as the framework in the development of a quality project (Bouwers et al., 2009). The education toolkit was chosen to address the issue of variability to show the use of the quality of the toolkit for the intended users (Bouwers et al., 2009). The systematic development statements are aimed at helping educators, healthcare providers, policy makers, and guideline developers who can use the AGREE II Instrument to make clinical, policy-related and system related quality decisions (Zitzelsberger, 2010).

The AGREE Instrument used six domains, but only four domains applied to the educational breastfeeding toolkit. The four domains were: (a) scope and purpose, (b) stakeholder involvement, (c) rigor and development, and (d) clarity of presentation (Bouwers et al., 2009). The stakeholders used those four domains of which seventeen questions were used in the evaluation, recommendation, and scoring of the developed objectives for the quality project.

Results

Each domain was addressed as used in the project. Domain 1 addressed the scope and purpose of the toolkit that included three statements in which all participants scored 100%. The score for domain 2 which addressed the stakeholder involvement that included three statements which each participant scored 100%. The score for domain 3 addressed rigor and development that included eight statements. The two lactation consultants did not understand the questions, but with an explanation via a power point presentation, each question was under stood.

The score for this domain was adjusted accordingly from 97% to 100%. Domain 4 addressed clarity of presentation that included three statements. The wording needed to be changed to the understanding of three participants and the score was adjusted from 97% to 100%. The nurse manager did not score the project, but did support the educational breastfeeding project. The nurse manager gives the final answer in the need for changes. The last toolkit statements: (a) Overall toolkit assessment. (b) Recommend this toolkit for use. The overall rating for the toolkit use was 97-98% in the beginning, but was recommended by 100% of all participants. Please refer to Table 2.

Conclusion

The stakeholders used valuable time from their jobs to assist in reviewing the breastfeeding toolkit so that the organization will have a quality support project for the support of the mothers on the Mother/Baby unit of the organization. The physician, nursing professor, nurse practitioner, nurse educator, lactation consultants (3), staff nurse,

and the layperson's (certified nursing assistant) assistance was very much appreciated for the implementation of the toolkit. The nurse manager gave support through the entire project. The end-users approved the toolkit 100% to implement the project.

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Appendix A: Breastfeeding Educational Toolkit

Breast is Best!

Breastfeeding Education Toolkit
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Day 1: Adjustment Day
Your baby may be very alert and want to feed or, your baby may need encouragement to begin feeding. Both behaviors are normal.
Be attentive to CUES: Lip smacking, pushing tongue out, hands to mouth, turning head toward side or breast. This means it is a good time to offer the breast.
Your baby's stomach is only the size of a small marble. The colostrum that you have is all the milk that your baby needs at first. It is about a teaspoon to a tablespoon per feeding.
Your baby does not need formula unless there is a medical reason.
If your baby feeds at least 6 times in the first day, that is AWESOME!

Day 2: Time to Cluster Feed
The day your baby realizes the food is no longer free!
Your baby today may want to feed more frequently and for longer periods of time.
Take time to rest between these feedings.
Latch on tenderness is common, but pain through the whole feeding is not normal. Call your nurse or the lactation consultant to check your baby's latch if you are sore.
Today your baby may want to cluster feed throughout the day and or night. Aim for at least 6 feedings.
You are making colostrum that will meet your baby's needs for the first 3 to 5 days.
There is no need to give your baby formula unless it is medically indicated.

Day 3: Breastfeeding at Home
You are probably home or about to go home with your baby. Your breasts may be feeling heavier or fuller. They are beginning to fill with mature milk.
Your baby will likely feed 8 – 12 times in 24 hours.

- Offer your breast every 1 1/2 – 3 hours during the day, maybe a little less at night.
- Baby should have a rhythmic suck-swallow pattern with occasional pauses.
- You may hear your baby swallowing while breastfeeding.

The First Feeding

- Feed your baby as soon as possible after birth.
- Putting baby skin-to-skin encourages baby to breastfeed.
- Most babies will be ready to breastfeed within the first hours after birth.
- This is a very important time to bond with your new baby.
- It is ok to ask visitors to step out of the room at this time.

Latch and Positioning

- First get yourself comfortable
- Turn baby toward you.
- Bring baby to breast with a wide-open mouth.
- Lips curled out and cheeks and chin touching breast.
- Baby's nose is almost touching breast.

When to Know that Baby is Getting Enough

Your baby should have at least 1wet diaper for each day of life. So by day 3 your baby should have at least 3 wet diapers, and more is even better. Day 1-2, your baby's stool should be black, thick, and sticky.

- Day 3-4, it turns to greenish and/or yellow, and is less thick.
- By day 6, your baby's stool changes and looks looser yellow and seedy. Your baby should have 5-6 wet diapers in a day by day 6 and beyond.
- Let your baby show you how long to breastfeed, usually 15-20 minutes per side. When finished on one side, burp the baby, and start on the second side. Some babies may take one side each feeding.

For Mother

- Your first milk (colostrum) is thick and yellowish. Even a small amount has everything your baby needs for the first day or two.
- Newborn babies have a small stomach and may want to breastfeed often, about 8 to 12 times in 24 hours.
- Your breasts will feel more full around days 2-5, this is called engorgement. Breasts soften during feeding and you should hear your baby swallowing.
- You will feel a gentle tug while the baby is nursing at the breast, which should not be uncomfortable beyond the first minute.
- Nipple damage or pain should be evaluated as soon as possible.
- Breastfeeding takes time and practice. It will get easier over the next few days to weeks. By the time your baby is 6 weeks old, you will both be experts!
- Sleep near your baby to be aware of hunger cues. Feed your baby when you see them.
- Avoid bottles unless medically necessary for the first few weeks.
- Avoid using pacifiers for the first 3 weeks until breastfeeding is well established. Unnecessarily feeding your baby formula may cause you to produce less milk. After a few weeks' occasional bottles of expressed milk will not confuse the baby.

- It is normal for your baby to lose some weight after birth. Your doctor, nurses, and lactation consultants will monitor this and will make a feeding plan if needed.
- Your baby's weight will be back to its birth weight by 2 weeks of life.
- It is important to follow up within 2 days with your pediatrician after you are discharged home.
- All babies have growth spurts when they want to eat more often. This may occur for a day or so at 2 weeks, 6 weeks, and at 4 months. Breastfeed more often during these times and your milk supply will increase.
- Call or set up an appointment with a lactation consultant if you are having any feeding problems. Enjoy this special time!

AAP: The American Academy of Pediatrics (2012) recommends breastfeeding for a year with babies receiving only breast milk for the first six months before the addition of solid food.

At the completion of the toolkit the mothers will learn that breastfeeding is best for their infants. The educational toolkit will assist in helping the mothers to overcome the barriers that new mothers face during the first few days of giving birth.

Appendix B: Logic Model

Inputs	Activities	Outputs	Outcomes	Impact
1. The stakeholders of the Mother/Baby Unit. 2. Follow guidelines of American Academy of Pediatrics.	Development of a breastfeeding toolkit.	1. Education by use of toolkit. 2. Information verified by stakeholders. 3. Using AGREE II Instrument.	To have stakeholders validate toolkit.	Better health outcomes for babies.

Appendix C: Permission to use AGREE II Instrument

AGREE Enterprise website > Copyright

Permission was received from the AGREE II website.

Kerkvliet, K. (2015). Agree Enterprise Project Office. Retrieved on 5/9/2015, from (www.agreetrust.org).

Appendix D: AGREE II Instrument and Rating Scale

Scope and Purpose

1. The overall objectives of the toolkit guidelines are specifically described.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

2. The health questions covered by the guidelines are specifically described.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

3. The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.

Stakeholder Involvement

4. The guideline development group includes individuals from all relevant professional groups.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

5. The views and preferences of the target population (patients, public, etc.) have been sought.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

6. The target users of the guideline are clearly defined.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

Rigour of Development

7. Systematic methods were used to search for evidence

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

8. The criteria for selecting the evidence are clearly described.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

9. The strengths and limitations of the body of evidence are clearly described.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

10. The methods for formulating the recommendations are clearly described.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

11. The health benefits, side effects, and risks have been considered in formulating recommendations.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

12. There is an explicit link between the recommendations and the supporting evidence.

1 2 3 4 5 6 7

Strongly Disagree — Strongly Agree

13. The guidelines have been extremely reviewed by the experts prior to its publication.

1 2 3 4 5 6 7

Strongly Disagree — Strongly Agree

14. Procedures for updating the guidelines are provided.

1 2 3 4 5 6 7

Strongly Disagree — Strongly Agree

Clarity of Presentation

15. The recommendations are specific and definite.

1 2 3 4 5 6 7

Strongly Disagree — Strongly Agree

16. The different options for management of the health issues are clearly presented.

1 2 3 4 5 6 7

Strongly Disagree — Strongly Agree

17. Key recommendations are easily identifiable.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

Overall Toolkit Assessment

For each question please choose the response that best characterizes the guideline

Assessed.

Rate the overall quality of the guideline.

1	2	3	4	5	6	7
Lowest possible quality						Highest possible quality

*Adapted from www.agreetrust.org with permission

I would recommend this guideline for use.

Yes - 10

Yes, with modification

No - 0

No response - 1