Perceived Barriers to Promoting Breastfeeding Efforts and Support among Nurse Practitioners and Registered Nurses Practicing in Rural Hospital in New York

by

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DNP Project Approval Form

This is to certify that Marian Thompson
(Name of Student)

successfully disseminated their project entitled:

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on December 9 (Date), 2020.

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Abstract

Ineffective breastfeeding promotion and support for women choosing to breastfeed among healthcare providers (HCPs) has contributed to declining breastfeeding rates in the United States, especially in rural areas. The purpose of this Doctor of Nursing Practice (DNP) project was to explore perceived barriers to promoting breastfeeding efforts and support among registered nurses (RNs) and nurse practitioners (NPs) working in a rural hospital located in Oneida, New York. Project aims were to improve care and communication between registered nurses (RNs) and Nurse Practitioners (NPs) and the breastfeeding women they care for regarding the importance and benefits of breastfeeding and to promote breastfeeding efforts and support through the development of an evidence-based educational outline for RNs and NPs caring for women who are breastfeeding. A qualitative descriptive approach was utilized with individual semi-structured interviewing. Pender's Health Promotion Model guided the development of the semi-structed interview questionnaire. Institutional Review Board approval was obtained. Braun and Clarke's Thematic Analysis method was used to analyze data. The analysis of data generated one overarching theme, *Not Enough Help…Everybody Should be Educated*, and three key themes, *Breastfeeding benefits for Mom and Baby*, *Breastfeeding Barriers*, and *Breastfeeding Resources.* To help overcome breastfeeding barriers, all participants agreed that more breastfeeding education is needed for RNs, NPs, and providers, that more lactation consultants should be made readily available, and that better promotion and awareness of breastfeeding support resources is needed. Future research is needed exploring breastfeeding barriers among diverse populations of breastfeeding women to better support breastfeeding efforts and success.

Keywords: breastfeeding, nurse practitioners, registered nurses, barriers, promotion

Barriers to Promoting Breastfeeding Efforts and Support among Nurse Practitioners and Registered Nurses Practicing in Rural Hospital in New York

The American Academy of Family Physicians (AAFP), the American Academy of Pediatrics (AAP), the American College of Obstetricians and Gynecologists (ACOG), the World Health Organization (WHO), and the United States Breastfeeding Committee (USBC) recommend that healthy term infants exclusively receive breast milk for the first six months of life and then for the first year of life and beyond (AAFP, 2020a, para. 1; USBC, 2015). Human breast milk contains vital and protective nutrients that help infants grow and develop (HHS.gov, Office of the Surgeon General, 2020). Children who are breastfed have decreased rates of ear and respiratory infections, allergies, and obesity, have improved cognitive development, and are at lower risk for sudden infant death syndrome (SIDS) (AAFP, 2020a). Women who breastfeed are at lower risk for breast and ovarian cancer, type 2 diabetes, and hypertension (AAFP, 2020a). Furthermore, breastfeeding benefits businesses and institutions since breastfeeding results in "lower medical costs for employees and their infants, lower absenteeism, lower turner over rates, higher productivity, and increased employee satisfaction (AAFP, 2020a, para. 1).

Despite the many benefits to breastfeeding however, women often stop breastfeeding earlier than intended due to a lack of support, working outside the home, and workplace conditions contributing to breastfeeding barriers (AAFP, 2020a). It is estimated that 60% of mothers do not breastfeed for as long as they intended to due to issues with lactation and latching, concerns about infant nutrition and weight, concerns about taking medication while breastfeeding, unsupportive work policies and lack of parental leave, cultural norms and lack of family support, and unsupportive hospital practices and policies (Centers for Disease Control and Prevention [CDC], 2020a). According to the CDC (2020b), most infants born in 2017 started

breastfeeding (84.1%) but only 58.3% continued to be breastfed at six months. Furthermore, 19.2% of breastfed infants were supplemented with infant formula before 2 days of age which was an increase from 2016 where 16.9% of infants were supplemented with infant formula. Finally, breastfeeding disparities impact breastfeeding rates. The CDC (2020a) additionally reported that fewer non-Hispanic Black infants (73.7%) are breastfed compared to non-Hispanic White infants (86.7%) and Hispanic infants (84/1%), infants eligible for and receiving the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) are less likely to be breastfed than infants eligible but not receiving WIC (82.1%) and infants ineligible for WIC (92.1%), younger mothers aged 20–29 years are less likely to breastfed (82.4%) than mothers aged 30 years or older (85.2%), infants living in the southeast are less likely to be breastfed at six months of age than infants living in other areas of the country, and infants in rural areas are less likely to be breastfed than infants living in urban areas.

Background and Significance

Throughout history, breastfeeding was viewed as the norm with only a small number of infants not breastfed for variety of reasons (AAFP, 2020b). In the early 20th century, commercial supplemental infant formulas came on the market with widespread use and throughout the mid-20th century, most physicians did not advocate for breastfeeding with most women choosing not to breastfeed (AAFP, 2020b). This led to an entire generation of physicians and women not viewing breastfeeding as the normal and best way to feed infants (AAFP, 2020b). By the early 1970's, only one out of every five women were breastfeeding (Sriraman & Kellams, 2016).

Findings from the CDC's 2018 Maternity Practices in Infant Nutrition and Care (mPINC) survey, a national hospital survey assessing maternity care practices and how infants are fed, found that institutional management is in need of improvement for supporting women who

breastfeed (CDC, 2020b). Furthermore, despite the known benefits of breastfeeding and the health risks of not breastfeeding, physicians and healthcare disciplines caring for women who breastfeed do not receive adequate education and training to support and promote breastfeeding efforts (AAFP, 2020b; Gavine, 2017). Currently, HealthyPeople 2020 includes in its objectives for Maternal, Infant, and Child Health, increasing the proportion of infants breastfed from 76.1% in 2009 to 81.9%, increasing the proportion infants breastfed at six months from 46.6% in 2009 to 60.6%, and the increasing number of infants breastfed at one year from 24.6% in 2009 to 34.1% (HealthyPeople.gov, 2020). To support improving breastfeeding rates for infants living in rural areas, research is needed exploring HCP barriers to promoting breastfeeding efforts among women living in rural areas. Identifying barriers to supporting breastfeeding efforts among HCPs practicing in rural areas may increase awareness regarding the importance and benefit of breastfeeding among HCPs, may help address the declining breastfeeding numbers, and may assist in providing additional support for breastfeeding among women living in rural areas.

Purpose, Aim, and Objectives

The purpose of this Doctor of Nursing Practice (DNP) project was to explore perceived barriers to promoting breastfeeding efforts and support among registered nurses (RNs) and nurse practitioners (NPs) working in a rural hospital located in Oneida, New York (NY). The aims of this DNP project were to improve care and communication between RNs and NPs and the women they care for who are breastfeeding regarding the importance and benefits of breastfeeding and to promote breastfeeding efforts and support through the development of an evidence-based educational workshop outline for RNs and NPs caring for women who are breastfeeding. Project objectives were to 1) conduct a review of the literature examining breastfeeding promotion and support barriers among healthcare providers caring for women who

are breastfeeding; 2) develop a semi-structured interview questionnaire based on findings resulting from the review of the literature and content expert review; 3) conduct individual interviews via phone or Zoom videoconferencing; 4) analyze the interview data; and 5) develop an evidence-based educational workshop outline for the project site RNs and NPs outlining identified barriers to promoting breastfeeding efforts and support as well as facilitators and strategies to promote breastfeeding efforts and support. Project site permissions were obtained prior to project implementation (Appendices B & C).

DNP Essentials Addressed

The American Association of Colleges of Nursing's (AACN, 2006) eight DNP Essentials outline the curricular elements and competencies that must be present in all DNP programs. This DNP project addressed Essentials I, II, III, and VIII. With regard to Essential I, *Scientific Underpinnings for Practice,* findings from this project may advance knowledge and skills among RNs and NPs caring for women who are breastfeeding. Regarding Essential II, *Organizational and Systems Leadership for Quality Improvement and Systems Thinking*, this DNP project focuses on improving effective and realistic nursing care for breastfeeding women. Essential III, *Clinical Scholarship and Analytical Methods for Evidence-Based Practice,* is addressed by the DNP project student being engaged in a scholarly project that has utilized analytic methods to critically appraise existing literature for best practice evidence and qualitatively explore an identified clinical gap regarding RN and NP knowledge and ability to promote breastfeeding efforts among their patients. Finally, with regard to Essential VIII, *Advanced Nursing Practice*, the planned outcome of this DNP project was an evidence-based educational workshop outline for the project site for the purpose of guiding and supporting RNs and NPs in delivering safe, effective, and quality nursing care to women who are breastfeeding.

Contribution to Advanced Practice Nursing and Scholarship

This DNP project focused on qualitatively addressing a clinical gap by exploring barriers to promoting breastfeeding efforts and support among RNs and NPs caring for breastfeeding women. By identifying barriers from the experiences and voices of RNs and NPs caring for women who are breastfeeding their infants, an evidence-based educational workshop outline can be provided to the project site for RNs and NPs to promote best nursing practice as well as quality of care for women choosing to breastfeed. Nurses and advanced practice nurses caring for breastfeeding women are in perfect position to advocate for best practice regarding breastfeeding efforts both inside and outside of the home and to teach, support, and educate women on the importance and health benefits of breastfeeding for both the infant and the mother.

Theoretical Framework

The Health Promotion Model (HPM) developed by Pender, Murdaugh, and Parsons (2011) is the theoretical framework for this project. The HPM is a model developed to assist nurses in "understanding the major determinates of health behaviors as a basis for behavioral counseling to promote healthy lifestyles" (Pender et al., 2011, p. 2). There are four key concepts in the HPM: *person, environment, nursing, health*, and *illness*. Person is defined as a "biopsychosocial organism that is partially shaped by the environment but also seeks to create an environment in which inherent and acquired human potential can be fully expressed" (Pender et al., 2011, p. 3). Environment is defined as the "social, cultural, and physical context in which the life course unfolds" which can be manipulated by the individual "to create a positive context of cues and facilitators for health-enhancing behaviors" (Pender et al., 2011, p. 3). Nursing is defined in the HPM as a "collaboration with individuals, families, and communities to create the most favorable conditions for the expression of optimal health and high-level well-being (Pender

et al., 2011, p. 3). Health is defined as "an evolving life experience" and "the actualization of inherent and acquired human potential through goal-directed behavior, competent self-care, and satisfying relationships with others" (Pender et al., 2011, p. 3). Finally, in the HPM, illness is defined as "discrete events throughout the lifespan of either short (acute) or long (chronic) duration that can hinder or facilitate one's continuing quest for health" (Pender et al., 2011, p. 3).

The HPM is based on the seven assumptions and 14 theoretical propositions. The seven assumptions are as follows: 1) Persons seek to create conditions of living through which they can express their unique human health potential; 2) Persons have the capacity for reflective self-awareness, including assessment of their own competencies; 3) Persons value growth in directions viewed as positive and attempt to achieve a personally acceptable balance between change and stability; 4) Individuals seek to actively regulate their own behavior; 5) Individuals in all their biopsychosocial complexity interact with the environment, progressively transforming the environment and being transformed over time; 6) Health professionals constitute a part of the interpersonal environment, which exerts influence on persons throughout their lifespan; and 7) Self-initiated reconfiguration of person-environment interactive patterns is essential to behavior change (Pender et al., 2011, p. 5). The seven assumptions support this DNP project by way of the semi-structured interview questionnaire that has been utilized for questioning RNs and NPs about their perceptions regarding barriers to promoting breastfeeding efforts and support for their patients who are breastfeeding.

The 14 theoretical propositions in the HPM were developed to provide a basis for exploring health behaviors (Pender et al., 2011) and include the following: 1) Prior behavior and inherited and acquired characteristics influence beliefs, affect, and enactment of health-promoting behavior; 2) Persons commit to engaging in behaviors from which they anticipate

deriving personally valued benefits; 3) Perceived barriers can constrain commitment to action, a mediator of behavior as well as actual behavior; 4) Perceived competence or self-efficacy to execute a given behavior increases the likelihood of commitment to action and actual performance of the behavior; 5) Greater perceived self-efficacy results in fewer perceived barriers to a specific health behavior; 6) Positive affect toward a behavior results in greater perceived self-efficacy; 7).When positive emotions or affect are associated with a behavior, the probability of commitment and action is increased; 8) Persons are more likely to commit to and engage in health-promoting behaviors when significant others model the behavior, expect the behavior to occur, and provide assistance and support to enable the behavior; 9) Families, peers, and health care providers are important sources of interpersonal influence that can increase or decrease commitment to and engagement in health-promoting behavior; 10) Situational influences in the external environment can increase or decrease commitment to or participation in health-promoting behavior; 11) The greater the commitment to a specific plan of action, the more likely health-promoting behaviors are to be maintained over time; 12) Commitment to a plan of action is less likely to result in the desired behavior when competing demands over which persons have little control require immediate attention; 13) Commitment to a plan of action is less likely to result in the desired behavior when other actions are more attractive and thus preferred over the target behavior; and 14) Persons can modify cognitions, affect, interpersonal influences, and situational influences to create incentives for health promoting behavior. These 14 theoretical assumptions were utilized to support the development of the semi-structured interview questionnaire for questioning RNs and NPs about their perceptions regarding barriers to promoting breastfeeding efforts and support for their patients who are breastfeeding.

The HPM provided a structure for the implementation of this project. Utilizing this framework allowed the characteristics and behaviors of the RNs and NPs to be explored regarding their perceptions on barriers to promoting breastfeeding among their breastfeeding patients. This knowledge was then utilized to create an evidence-based educational workshop outline presenting the barriers and facilitators to promoting breastfeeding among RNs and NPs as well as current professional organization breastfeeding guidelines and recommendations. The HPM is an appropriate fit for this DNP project as it provided a framework for exploring self-assessment of competence and behavioral change among the RNs and NPs. Using this model to enable RNs and NPs to better promote breastfeeding allowed barriers to be worked through by understanding their perception and educational needs on this topic.

Literature Review

A review of the literature for this DNP project was completed using the following key word combinations: healthcare provider, registered nurse, nurse practitioner, midwife, nurse, breastfeeding, education, knowledge, barriers, disparity, rural areas, guidelines, recommendations, and complexities. The following databases were explored for the purpose of the literature review: EBSCO, PubMed, CINAHL, ProQuest, Sage, and Science Direct. The search was limited to the years 2015-2020 to obtain the most current research. Eleven articles were found and are summarized for the purpose of this DNP project.

Breastfeeding Legislation

Hawkins et al. (2015) documented changes in national breastfeeding legislation related to the Affordable Care Act (ACA). The authors reviewed the benefits of breastfeeding for both mother and child which included for the child reduced risk for sudden infant death syndrome (SIDS), ear infections, gastrointestinal infections, respiratory infections, and reduced risk for

chronic illnesses. Breastfeeding benefits for mothers included reduced risk for Type II Diabetes and breast and ovarian cancers. The authors also noted disparities in breastfeeding which included low socioeconomic status, utilization of government assistance programs such as Women, Infants, and Children (WIC) minimal education, and returning to work. Though WIC is a benefit to women, women receiving government assistance are of lower socioeconomic status which is a disparity for breastfeeding. Returning to work was found as a disparity due to women not being empowered to take breaks and not being allowed time for pumping breast milk. Economic benefits noted by the authors included an approximate 13-billion-dollar savings in the U.S. annually if 90 percent of mothers breastfed. In addition, the authors discussed how the federal government has tried to reduce breastfeeding barriers to reduce SIDS deaths by just under 1000 annually. According to the authors, the ACA attempts to address breastfeeding disparities by making legislative provisions that require employers to provide time for employees to express breast milk. The ACA also requires that breastfeeding supplies and therapies are provided with some exceptions without cost to the mother. A pitfall to the legislation noted by the authors is that not all Medicaid insurance plans have this supply coverage, although coverage may be offered via WIC another government service in some states. Additional breastfeeding provisions provided by the ACA that was noted by the authors included breastfeeding Web resources for some states. The authors discovered five states that were without any Web based services. Hawkins et al. also reviewed benefits and disparities and discussed legislation to reduce some of the inequity. The authors stated that HCPs need to be familiar with legislation and resources available. Finally, the authors stated that additional research is needed and more initiatives from state and federal governments to further address breastfeeding disparities.

Theurich et al. (2019) discussed breastfeeding rates in Europe and suggested that six of eleven European countries have national legislation enacted to promote breastfeeding efforts. The study team submitted a standardized survey to National Breastfeeding Committees (NBC) by email at a nutritional conference held in 2015 regarding breastfeeding rates and monitoring. Eleven countries responded. Results revealed none of the respondent counties had a standardized monitoring system ranging from breastfeeding evaluations at three months or six months. Breastfeeding rates for overall respondents declined after six months and Norway, Germany and Sweden had the highest rates of exclusive breastfeeding. All of the countries except two have national breastfeeding committees, seven of the eleven surveyed countries have national efforts in action for promotion, support, and protection of breastfeeding behavior and safe spaces. One of those efforts is the global baby friendly hospital initiative started by the World Health Organization and UNICEF. This is an effort to support breastfeeding in health facilities, though not all facilities are on board. The surveys revealed a varying range of inconsistency with only 36 percent of births occurring in baby friendly facilities, and one third of the countries not having a baby friendly facility. Breastfeeding support varies amongst the countries as well, though most surveys reported support was pervasive, demographics prove otherwise. Cost-related barriers, such as lack of investment for breastfeeding support and promotion, is also affected by the distribution of HCPs in certain areas. Overall, results concluded that national efforts need to be taken to standardize breastfeeding monitoring via evidenced based research. Furthermore, governments need to increase political and financial support to increase breastfeeding rates in Europe.

These two papers suggest a need for increased government response to a wide-ranging problem. Though the ACA has supported breastfeeding by enforcing breaks, and increasing

medical equipment availability, it falls short in its disbursement throughout all insurance providers. Decreased breastfeeding rates in Europe are only being addressed by worldly organizations thus highlighting their national inconsistencies and lack of national leadership. It is apparent that both the U.S. and Europe require a stronger national response in order to help reduce the breastfeeding disparity.

General Breastfeeding Barriers

Sayres and Visentin (2018) presented barriers to breastfeeding as well as recommendations. Barriers included cesarean delivery, low socioeconomic status, inadequate education regarding breastfeeding, and the need to return to work. This authors described returning to work as a significant breastfeeding barrier and proposed pediatricians to empower women to know their rights. A potential remedy to weaken this barrier would be for pediatricians to encourage women by reminding them of their rights and reminding them to ask for break time to allow for milk expression. The authors revealed that income level can either be a barrier or can promote breastfeeding. Sayres and Visentin uncovered a positive association between wealth and breastfeeding and the opposite for those of low income. Another issue pointed out by Sayres and Visentin is the transition time from hospital to home. The final days prior to birth and the three days that the child stays in the hospital play a pivotal role in whether or not a child goes home breastfeeding.

Another potential barrier to breastfeeding is the loneliness mothers can feel in their families if there is not someone within the family that understands what they are going through. Sayres and Visentin also discussed family centered breastfeeding education that includes the father of the baby as well as others in the immediate family to combat this barrier. Peer support groups and mobile programs for tech savvy breast feeders provide additional education,

telemedicine conferences, and rate tracking. The authors concluded by reiterating the vital role pediatricians play in empowering women and the responsibility of HCPs to provide education directed at the breastfeeding family and not centered solely on the mother.

Kimura et al. (2015) conducted a survey study in Hawaii that sought to identify awareness of breastfeeding and postpartum depression (PPD) resources based on the perceptions of parents and HCPs. The authors noted that women who are suffering from PPD are less likely to bond with their baby or breastfeed. The study also surveyed how care was assessed and if mothers perceived they had adequate support. Surveys were sent out via email to two groups parents and HCPs. The participants were obtained from the Healthy Mother Healthy Baby Coalition database and approximately 3,000 parents and 450 providers were surveyed. The results uncovered many inconsistencies from both groups. Parental participant results concluded that parents attributed six-month exclusive breastfeeding success to a strong will to breastfeed, family and spousal support, knowing what to expect, and available lactation support. Sustaining breastfeeding longer than six months, concerns over milk supply, and proper fetal weight gain were the main factors assessed as to why sustaining breast feeding was not successful. The parents had an array of awareness of recourses and a majority of parental participants stated they had lactation consultants at their birthing facilities. Less than half of participants knew that their HCP's provided breastfeeding support and less than half of the parental participants were aware of other breastfeeding resources such as classes, pediatricians, and websites.

Kimura et al. (2015) stated that the health care provider participants had an assortment of responses for their assessment survey as well. A majority of HCPs reported speaking to their patients regarding breastfeeding. When assessing the reasons a patient might be recommended to supplement with formula, the HCP's reported low milk supply, the infant not gaining weight, the

lack of breastfeeding interest, minimal workplace support, and lack of family support. These answers were similar to the answers submitted by the parents. Providers reported their perception of barriers to patient utilization of resources as patients waiting too long to ask for help, lack of education and training to the HCP on breastfeeding, and lack of insurance coverage for breastfeeding equipment. Providers also reported a desire for more lactation consultants to be sent to patients to for help, home lactation visits, support groups, and culturally appropriate information to assist with breastfeeding success.

Finally, Kimura et al. (2015) stated that the PPD mother survey reported that half of the participants stated that PPD was brought up to them by their HCP. This was only reported as being discussed by 26 percent of respondents directly after birth with less than ten percent of responders reporting the topic of PPD being brought up at the baby's first well check appointment and at the postpartum visit. Inadequate training was what HCPs responded as a reason for not addressing PPD. Only forty percent of provider respondents reported screening for PPD at all.

These two articles identified general breastfeeding barriers among mothers as well as HCP's. Low income status, mode of delivery, inadequate resources, the need to return to work, and the perception of low milk supply were general barriers faced by breast-feeders. HCPs reported a lack of breast-feeding knowledge along with a myriad of barriers mostly surrounding topic, time, and resources. Kimura et al. (2015) reported that provider education may also be needed in the area of PPD. Both studies indicated a need for better education for the breast-feeding mother as well as the HCP.

Gender Identity

Rippey and Falconi (2017) discussed gender identity as a barrier breast-feeders face.

This qualitative research study explored the lives of six lesbian families both in the U.S. and Canada via interview and survey. The objective of this research was to uncover ways in which breastfeeding encompasses identity, challenges, and stereotypes. The authors presented an array of literature and organizations that gear their breastfeeding materials toward people who identify as women and mother. These authors discussed the nuclear family, a male bread winner, wife and mother, and gender roles that can be considered non inclusive currently. In lesbian families, the typical nuclear family stereotype is in conflict with the idea of two mothers. The authors further discussed how in the 1950's, feminists advocated for breastfeeding and rejected the idea of formula as part of the male medical model. The sample for the survey and interviews were obtained primarily from word of mouth, posters, and emails to recruit participants. All participants identified as lesbians and the majority were in 8-10 yearlong partnerships or married. Six families participated with two partners declining allotting for a total of ten individual participants. Responses indicated that all families planned on breastfeeding and were aware of the benefits of breastfeeding. Overall the family's breastfeeding experiences were tainted by stereotypical norms and heterosexual idealism, with gender identity viewed as not being cause for disparity. A masculine appearing female mother who chooses to identify this way should not be treated differently than a woman in a heterosexual couple. For example, in one lesbian couple's experience with breastfeeding, the HCP would not even acknowledge the partner in the room with the mother because the partner had a more gender fluid appearance. This situation demonstrates disparities in the treatment and education of parents based on gender roles and sexual orientation.

Bucher and Spatz (2019), in their literature review of over 100 articles, also suggested gender disparities in breastfeeding. The focus of the study was on people who identify as non-

binary and transgendered individuals. The review identified disparities regarding sexuality and gender identity as well as the personal denial of breastfeeding related to the reaction of the male sexual partner in heterosexual relationships. Additional barriers included personal skepticism and feeding the child directly from breast. It was noted that African American's (AA) fall disproportionately short of breastfeeding goals related to some of these barriers. AA women have the lowest rates of breastfeeding related to the aforementioned barriers. This situation suggests that women have a hard time identifying their breasts as sex symbols and feeding essentials for their infant. This disconnect leads many women to choose one or the other, and women choose to not breastfeed. The authors encouraged healthcare professionals to challenge social norms during breastfeeding education, as well as dispelling falsehoods such as breastfeeding causes sagging, or that breasts can only be sexual or for feeding. The authors also encouraged HCP's to cultivate relationships with their breastfeeding mothers and to educate them in a sex positive manner. Providers need to acknowledge sexuality concerns as well as promote breastfeeding. The authors encouraged providers to have the uncomfortable sexual conversations in order to begin breaking down barriers related to sexuality and breastfeeding.

These two articles revealed some underreported barriers women face with regard to breastfeeding sexual identity and sexuality. Gender identity, identifying oneself by the type of clothing they wear or pronoun they chose to be associated with, can be an issue of healthcare disparity. Women are faced with a difficult situation when it comes to the role breasts play in sexuality and also the role of mother. AA women suffer most from this disparity, as they have the lowest rates of breastfeeding related to this barrier. The two should be interchangeable, yet a male dominated society has made that arduous. Both articles recommend having a strong HCP that is aware of gender roles, gender fluidity, and sexuality and having all-inclusive

conversations surrounding these roles in an effort to encourage women to understand that gender roles, and sexuality can be non-issues in the world of breastfeeding.

Healthcare Provider Barriers

Sriraman and Kellams (2016) described barriers that prevent women from breastfeeding as well as historical facts that also play a role in the lack of breastfeeding in current day society. The authors reported that due to the decline in breastfeeding beginning as early as the 1950's, there is now an entire generation of HCPs that are unfamiliar with the support and counsel needed to assist breast-feeders. Their review revealed that over 70 percent of practicing obstetricians and pediatricians received minimal breastfeeding education or training. Another study noted that over 90 percent of pediatricians let their personal experiences play a role in the clinical advice they provide to breastfeeding parents. Social cultural influences also play a role in decreasing breastfeeding rates with social media and misinformation being among the main culprits. Marketing as noted as another barrier as babies are frequently depicted with bottles in their mouths or in formula advertisements. The authors also discussed the importance of baby friendly facilities and discussed the barrier that mode of delivery can play in breastfeeding such as a cesarean delivery. Cesarean delivery is a barrier to breastfeeding because the anesthesia the mother is under delays milk production and skin to skin contact. The authors concluded by encouraging those involved in breastfeeding care planning to provide factual, evidenced-based information. The authors also encouraged HCPs to work in their communities to help to dispel rumors and limit misinformation as well as assist with provider education.

Goodman et al. (2016) reviewed breastfeeding barriers and support options in the rural area. A community needs assessment was completed including HCPs and breastfeeding mothers receiving government assistance in a rural area in Missouri. Qualitative interviews were

conducted. Responses from HCP revealed that 88 percent of current staff did not receive adequate breastfeeding education and that 76 percent of staff did not provide adequate discharge planning for breastfeeding assistance. Results from both groups concluded that there is limited realistic information provided about breastfeeding, that there are time constraints involved, and that a lack of continued resources exists. These barriers contribute to decreased breastfeeding rates. Improvements recommended by the authors to increase breast feeding numbers included having a baby friendly hospital, incorporating a breastfeeding café where other moms and breastfeeding families gather and share information and experiences, encouraging employers in the community to have breastfeeding provisions and areas for their employees, providing the most up to date information to mother regarding breastfeeding, and encouraging HCPs to have realistic conversations about breastfeeding with parents.

Shaw and Devgan (2016) conducted a survey evaluating knowledge of breastfeeding practices among doctors and nurses. A ten-question questionnaire was distributed between August 2016 and September 2016 to 34 breast feeding specialists and non-specialty doctors and 97 general nurses. Results concluded that 100 percent of the respondents agreed that breastfeeding should occur within an hour of birth. Less than ten percent of the doctors and nurses believed that babies delivered via cesarean section should be supplemented with formula. About half of the doctors and 40 percent of the nurses believed breastfeeding should continue up to two years. A majority of nurses believed in on demand feeds and just under 70 percent of doctors believed in on demand feeds. Less than five percent of doctors believed it was ok to avoid middle of the night feedings and supplement with bottle. Overall, the article presented many disparities regarding the knowledge of the professionals entrusted to educate the

population on breastfeeding. The authors concluded by stating that further education is needed to HCPs regarding breastfeeding practices.

One study conducted via questionnaire in Norway evaluated knowledge and beliefs about breastfeeding. This study, conducted by Svendby et al. (2016), surveyed 122 general practitioners. The questionnaire contained four sections that included significance, social, cosmetics, and relationships regarding breastfeeding. Each section had 2-4 true false questions for a total of 12 questions. The general practitioners, on average, answered 49 percent of the breastfeeding knowledge questions correctly. Only half of those questioned knew of the Norwegian recommendations for breastfeeding. These recommendations included exclusive breastfeeding for the first six months and total duration of breastfeeding of 1-2 years. The majority of benefits to breastfeeding were well known to providers and female providers had a greater knowledge of breastfeeding practices than men. Overall, the practitioners agreed that breastfeeding education should be taught in medical school. Most practitioners did not believe that breast milk was superior to formula. The authors suggested that this may be due to most children in Norway being breastfed initially. This high number of initially breastfed infants suggests that due to the lack of formula use, education on formula is limited. The practitioners also believed that breastfeeding education is better to be completed after delivery instead of before. The authors noted that the time just prior to birth and the time spent in the hospital are vital in continuation of breastfeeding. Reserving breastfeeding education for the postpartum period may be too late to encourage breastfeeding success. Overall, the authors suggested that the practitioners lacked breastfeeding education and that it should be taught in medical schools.

These four articles presented details surrounding HCP's and their lack of knowledge regarding breastfeeding. A generation gap in education, no formal education during medical

school, time constraints, and misinformation altogether inhibit HCP's ability to provide evidence based, coherent information to their breastfeeding mothers and families. These studies also provided recommendations to include more breast-feeding education for HCP's.

In conclusion, it is apparent that though there are various barriers to breastfeeding, having a strong healthcare leader in the breastfeeding world may help to alleviate some of these barriers. A HCP can advocate for, empower and educate breast-feeders, but this cannot be initiated without a fully educated healthcare provider. Understanding HCP's shortcomings with breastfeeding, their baseline knowledge of the task, and their knowledge of the resources in their communities can help to overcome these barriers.

Project Methods and Design

Project Design

This DNP project was designed as a qualitative descriptive pilot study utilizing semi-structured individuals interviews to explore perceived barriers to promoting breastfeeding efforts and support among RNs and NPs working in a rural hospital located in Oneida, NY. The aims of this DNP project were to improve care and communication between RNs and NPs and the women they care for who are breastfeeding regarding the importance and benefits of breastfeeding and to promote breastfeeding efforts and support through an evidence-based educational workshop outline for RNs and NPs caring for women who are breastfeeding. The project was designed based on an extensive review of the literature and identification of gaps in literature addressing the lack of knowledge that HCP's have with regard to breastfeeding. The hospital in this study was a stakeholder since part of their Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) criteria for reimbursement depends on meeting a particular breastfeeding goal.

Project Setting and Participants

The project setting was a rural hospital located in Oneida, NY. Participants were RNs and NPs working at the project site. Eligibility for study participation included that the participants must speak English and must be RNs and NPs who have worked at the hospital site for more than 6 months caring for new mothers and their infants. Exclusion criteria included non-English speaking RNs and NPs who have worked in their role at the hospital for less than six months.

A sample size of six RN and NP participants were recruited. Braun et al. (2019) stated that for a small research study, a sample of at least five or six participants is adequate to produce quality and informative data. Recruitment was voluntary and took place via email invitation. To recruit participants, a standardized recruitment email was sent out via hospital email to RNs and NPs meeting study eligibility criteria (Appendix C). The recruitment email outlined the purpose, aims, and objectives for the NP project and how to contact the DNP project student (the principal investigator or PI) to schedule an interview session if interested in study participation. Another recruitment email was sent after a two-week period due to low level recruitment; this was in effort to obtain minimal sample size.

Protection of Human Rights and Ethical Considerations

Participants were informed that their participation in the interview session was completely voluntary, that the interview session would take approximately one hour of their time, that the interview session was video and/or audio recorded, that the recording was destroyed once the interview was transcribed onto paper and checked for accuracy, thoroughness, and quality, that if at any time they felt uncomfortable for any reason, they were free to withdraw from the interview session without fear of reprisal or penalty, that there were no right or wrong answers to any question asked of them, and that they could refuse to answer any

question asked of them. Participants were also notified that no information regarding their participation in this study or responses would be shared with the hospital they are employed in.

All project data and materials were transcribed as de-identified, assigned a participant number, and stored on the PI's personal password protected laptop computer that only the PI had access to throughout the duration of the project. Following the conclusion of the project, all de-identified data and data analysis documents were given to the PI's DNP Project Advisor to be stored as per the approved UB IRB protocol. No other individual other than the PI's DNP Project Advisor will have access to the de-identified data and data analysis documents. All interview recordings, de-identified data, and data analysis documents stored on the PI's personal password protected laptop computer were erased and destroyed. Findings resulting from the study were disseminated via a traditional DNP project virtual defense and an evidence-based educational workshop outline for RNs and NPs provided to the hospital.

Data Collection

Interviews were conducted by the PI using a semi-structured interview questionnaire after obtaining Institutional Review Board (IRB) approval for the University at Buffalo's (UBs) IRB. The semi-structured interview questionnaire was developed by the PI based on findings resulting from a review of evidence-based literature and guided by Pender et al.'s (2011) HPM. The questionnaire was content expert reviewed by a UB School of Nursing faculty member who is a doctorally prepared nurse midwife. A brief demographic survey including age, sex, practice type, specialty, years in practice, and personal and/or partner experience with breastfeeding was asked of each participant prior to asking the interview questions.

All interviews were recorded and held in quiet and private location of the participant's choice. To ensure participant privacy and confidentiality, all interviews conducted by the PI took place in the PI's personal residence in a quiet and private location. All interview sessions were stored on the PI's password protected laptop computer that only the PI had access to for the duration of the study. The interview sessions were transcribed by the PI verbatim and as de-identified onto paper for data analysis purposes by the DNP project team. The PI assigned each interview transcript a number to protect participant confidentiality. All transcriptions were read and re-read by the PI while listening to the recorded interview session to ensure accuracy, thoroughness, and quality (Braun et al., 2019). All interview session recordings were destroyed by the PI after checking transcription accuracy, thoroughness, and quality.

Data Analysis

Braun and Clarke's six phased Reflexive Thematic Analysis method was used to analyze data guided by an essentialist/realist framework (Braun & Clarke, 2013; Braun et al., 2019). An inductive approach using data driven codes, or semantic codes, was used. Data analysis was done by the PI in collaboration with the PI's DNP Project Advisor and a UB School of Nursing faculty member who is an experienced qualitative nurse researcher. Braun and Clarke's (2013; Braun et al., 2019) Reflexive Thematic Analysis consists of the following six phases: 1) data immersion and familiarization; 2) generating initial noticings and codes; 3) constructing candidate themes, subthemes, and overarching themes and creating a draft thematic map; 4) revising candidate themes; 5) refining, defining, and naming final themes by going back to the data set to ensure that the themes tell the data set story and answer the research question and study purpose; and 6) producing final report and finalizing the thematic map.

Reflexivity, a critical process and practice in Braun and Clarke's Reflexive Thematic Analysis method, was practiced by the PI, the PI's DNP Project Advisor, and the qualitative methods consultant throughout the data collection and analysis process. Reflexivity, according to Braun and Clarke (2013), requires reflecting how one's knowledge and various positionings may influence and shape data collection and analysis. Descriptive statistics were utilized to analyze and report demographic data.

Findings

The analysis of data generated one overarching theme, *Not Enough Help...Everyone Should be Educated*, and three key themes, *Breastfeeding Benefits*, *Breastfeeding Barriers*, and *Breastfeeding Resources*. A thematic map of these findings is found in figure 1. The findings are presented in detail below.

Overarching Theme: Not Enough Help...Everyone Should be Educated

The main idea of the overarching theme captured the participants overall perception of breastfeeding and was embedded across all the three key themes. Participant 3 clearly stated, "Not enough help…everybody should be educated." The RN and NP participants discussed how breastfeeding is not a priority on their floor, that here is not enough help or time for breastfeeding, that pediatricians are laxed on their approach to breastfeeding, that there is a lack of lactation consultants, that there is a lack of staff motivation, that staff do not know which direction to point moms in, and that there is no family support. When asked what the single most important barrier preventing breastfeeding promotion in their health care setting was, Participant 2 replied, "I don't feel like it's a priority on the floor…I think that the nurses being not only educated, but on board with it…and feel like it's important, would probably help." Other participants commented, "Time. I don't think there is enough time to answer questions in the

setting, other than passing by and saying 'you oughta'" (P1) and, "Time…there's just no time anymore" (P6).

Pediatricians and their role in breastfeeding also was captured by the RNs and NPs. When asked about the pediatrician's role in breastfeeding, Participant 6 replied,

> I think the pediatricians are pretty laxed on breastfeeding because I don't think they get very much in medical school, they don't seem to know anything…breastfeeding recommendations. And the pediatricians are saying 'the baby needs formula, the baby needs formula.' It's a battle we go through all the time as far as pediatricians. So, I think more training things might go a little smoother.

Participant 3 noted, "I honestly don't know what their role is. I feel like the patient…they're not that helpful to the patient because the patient comes from seeing the pediatrician with their babies and they come still with the same problem and the same questions." Participant 1 commented, "I would like to see pediatricians push it [breastfeeding] more…I think they have better input as to what's best for the baby and with the mom than we do."

Further supporting the overarching theme was the lack of lactation consultants, lack of staff motivation, staff not knowing which direction to point moms in, and no family support. With regard to the lack of lactation consultants, Participant 1 stated, "There's not a whole lot of lactation consultants, more availability would be nice, and I think a lactation consultant in the pediatrician's office would be a wonderful thing." When asked what education would encourage breastfeeding promotion on their floor, Participant 2 stated, "…motivating staff to buy in to the importance of it [breastfeeding]…" When asked what was perceived as the single most important barrier preventing breastfeeding promotion in their healthcare setting, Participant 5 responded, "I don't really know…just maybe not knowing exactly what direction to point them in as far as

where else they can look to for further, you know, breastfeeding information and education." Finally, lack of family support was vividly and clearly captured by Participant 6 who reflected,

> I think the big thing is if they have no family support for breastfeeding, if the mother bottle fed, the grandmother bottle fed, then they seem to want to bottle feed too. So, if there's any glitch in the process {breastfeeding} they just want to give the baby a bottle because that's what my mother did, that's what my grandmother did…and my mother says that's probably the best thing to do. So, I think the support that she does not get for breastfeeding…I think she needs all the support she can get. A supportive significant other, mother and father, and anybody else, her friends that could be, ya know, what she needs to be successful.

Theme 1: Breastfeeding Benefits

Theme 1, *Breastfeeding Benefits*, reflected the participant's perception of breastfeeding benefits for both mother and baby. Breastfeeding benefits for mothers included losing baby weight, stopping menses, promoting bonding with the baby, and being a cheaper alternative to formula. Participant 5 stated,

> Loosing that baby weight…my menses never came until like a month or two after I finished breastfeeding…And I think just overall, I mean, I felt really good. And I don't know if it was because I was really watching what I was eating when I was breastfeeding and I was making sure I was drinking tons of water, but I, I felt great doing it.

Participant 2 commented, "It's free. Helps mom bond better with her baby. It helps the mom lose weight." Participant 4 replied, "It's a cheaper alternative than formula feeding." Participant 6 perfectly stated,

> She has the bonding usually going on as well, so she feels more bonded with her baby.

> Depressed mothers fair better when they are breastfeeding. They have that little baby there looking up at them, and they feel the need and the bond. They have less instances of breast and ovarian cancer. So, ya, I think it's great for moms too.

When participants were asked what specific benefits breastfeeding provided to the baby, their responses were similar to what were perceived as benefits to the mothers. Participants commented, "Helps them to grow, they are smarter, it helps their immune system…helps with their development" (P3); "…Healthier, decreases the amount of ear infections, supposed to make them smarter, increases their immune system, decreases risk of colic" (P1); "The baby bonds better with the mother, less sick, increases immunity, just be a happier baby when they breastfeed because they are with mom more often. But the health reasons and the bonding are the big things here" (P6); and, "Will keep them from getting things like asthma and frequent ear infections as they get a little older" (P2).

Theme 2: Breastfeeding Barriers

Theme 2, *Breastfeeding Barriers,* were described by participants as barriers for both mothers as well as nurses. The participants identified, time, stress, lack of knowledge, insecurity, guilt, pressure, exhaustion, generational gaps, going back to work, pediatricians, drugs, and medication as breastfeeding barriers for mothers. With regard to time, Participant 6 simply stated, "Time. I think it's the time. The mothers are very stressed out when they deliver and it's impossible to do once they deliver, um, there's no time anymore." When asked about patient barriers that the participants may have come across in practice, Participant 5 replied, "One of the bigger barriers I've noticed people are more or less inclined to do it, because of judgment I guess." In response to the same question, Participant 1 commented, "I guess there's some blame you could place on the grandparents, that generation maybe 50-70, 80 yar old range

breastfeeding really wasn't a very popular thing it was more for poor women to do because they couldn't afford formula…" Regarding pediatrician barriers to breastfeeding, Participant 2 remarked, "I think they [pediatricians] tend to promote supplementation too easy." Mother stress to breastfeeding was identified by Participant 3 who noted, "Maybe they had a hard time with their first baby, and then they don't want to continue on, because it's it was too stressful." Participant 6 described exhaustion as a breastfeeding barrier among mothers as,

> A lot of times the mothers are exhausted also, from being up all day and night with the babies and they tell me they gave the baby a bottle of formula to hold the baby over so they can sleep through the night.

With regard to a lack of breastfeeding knowledge among mothers, Participant 5 responded,

> Lack of knowledge. What's the benefits of breastfeeding, why do I have to breastfeed, how does it help my baby…there's a lot of people in the community who are kind of just like, I don't want to see that cover up…so I think maybe insecure about going out in public…

Medication as a breastfeeding barrier was identified by Participant 6 as, "If they are on medication that can impede the breastfeeding, or like radioactive medications, and newer medications we're just not sure of. So, I think medications might be one barrier" and by Participant 4 as, "If there's like a drug problem or something like that."

Mother guilt and pressure to breastfeed was captured by Participant 5 who reflected,

> My first go around I had a really hard time but I felt guilty and I think from that because I was so adamant and felt pressure to keep breastfeeding that…I was kind of putting myself in a postpartum depression kind of… I had a patient today…that had a similar

> experience with her first she just felt really all this pressure from family and friends to breastfeed…"

Finally, when asked if there was anything missed that the participant would like touch on regarding breastfeeding barriers, Participant 1 stated, "I think a lot of women stop breastfeeding at six weeks when they go back to work, that may be a barrier to continuing."

Nurses were also identified as a barrier to breastfeeding for mothers related to the lack of breastfeeding promotion and lack of breastfeeding knowledge. Participant 6 commented, "In our particular hospital, there are nurses working in there that do not promote breastfeeding. And that, that can be a barrier. So I think nurses can be a barrier." When asked about the length of time an infant should be breastfed, participant responses varied. Participants voiced, "Twelve months is what I know it is it's recommended…" (P5) and "I think like two or three. I think that's a reasonable age" (P3). When asked how often an infant should be breastfed, their answers varied as well. Participants commented, "An infant be breastfed probably every 2-3 hours" (P2) and "Every 2-4 hours so that's 10 times a day maybe, starting out" (P1). When asked about when breastfeeding education should take place again, the participant answers varied. Participants stated, "I think at preconception…" (P2) and "I think when they are pregnant, they should start having some information on breastfeeding" (P6).

Theme 3: Breastfeeding Resources

Theme 3, *Breastfeeding Resources*, captured the participants perceptions regarding available breastfeeding resources as well as barriers to breastfeeding resources. In response to available resources for breastfeeding mothers, participants voiced, "Breastfeeding café, the La Leche group in Utica, individual lactation consultants that can be contacted through the hospital or the county" (P1); "The breastfeeding café. Does that count?" (P4); "We have the

breastfeeding café, the breastfeeding coalition" (P2); and "We have the breastfeeding café. There is supposed to be somebody that helps them after they deliver that comes up to the floor" (P3). Finally, when asked what about barriers to breast feeding resources, barriers focused on language and cultural barriers. Participants replied, "…Don't speak English [patients]…literacy issues was another big thing" (P2); "I've seen girls come down from Utica that did not speak English, we were able to communicate through an app on the phone that translates" (P6); and "I feel like we could use a little breastfeeding area, we don't have that" (P3).

Discussion

This qualitative study uncovered perceived barriers to promoting breastfeeding efforts and promotion among RNs and NPs. The participants responses and perceptions were similar to those reported in the literature review, "There may have been a couple of teaching short teaching in-services from the county but other than that, not a whole lot of education" (P1). There is not enough nursing education, most participants reported short in-services otherwise little to no education during nursing school or in their careers. There were varying responses regarding when to offer formula, how often to feed an infant, and when breastfeeding education should take place. "I recommend formula in cases where the baby is having a hard time latching on…the mother's pumping she can't get enough breastmilk to feed the baby" (P6). "If she's having a hard time …mentally, emotionally, physically, if she's just exhausted…" (P5). These varying responses indicate a need for further education. All participants in the study agreed that breastfeeding is best for an infant, "It's just embedded in my head that breast is best" (P4). Participants results were similar to those found in the literature review in the area of HCP breastfeeding barriers and perceptions, lack of knowledge of national breastfeeding efforts as reported by (Svenby et al., 2016). Generational gap, no formal education or training, and time

constraints as reported by (Goodman et al., 2016; Shaw & Devgan, 2016; Sriraman & Kellams, 2016; Svendby et al., 2016). Participants seemed to understand the concept of gender identity, and the idea of a nonnuclear family as well as all inclusive language. Majority of participants also agreed that the breast can be both for breastfeeding and sexual purposes (Bucher & Spatz, 2019; Rippey & Falconi, 2017). Participants were on par with the literature in the area of general breastfeeding barriers reporting return to work, lack of education, low income, lack of family support, and low milk supply as breastfeeding barriers the mother faced as mentioned in, (Kimura et al., 2015; Sayres & Visentin, 2018).

Strengths and Limitations

Though this study revealed similar results as those uncovered in the literature review, there were also limitations. A limited sample size of only six participants, a single study in one single rural area, all participants were female, and all participants worked in the same specialty OBGYN site. Strengths in the study are the varying ages from 26 to 71 years old, and the varying years of practice from 2 to 43 years. The interview setting was also a strength as it provided a private and personal interaction that allowed interview questions to be answered open and honestly.

Future implications and Recommendations

Organizations and practitioners are charged with finding a balance with the use of lactation consultants. Though their use provides a place for breastfeeding families to have their concerns addressed their usage can also be a hindrance to the education of nurses becoming and staying educated in breastfeeding. More breastfeeding education needs to be embedded in nursing curricula at the undergraduate and graduate levels. Hospitals and organizations could make breastfeeding a part of the orientation process for nurses going on to a labor and delivery

units, pediatrician office, or an OBGYN office. Lactation consultants can also provide quick educational in-services to the communities and hospitals they serve. Further research is needed in this area focusing more on the pediatricians barriers to breastfeeding as well as further research into cultural barriers that may prevent a mother from breastfeeding.

Conclusion

In conclusion, it is evident that, though breastfeeding is a way of life that has been practiced since the beginning of time, societal shifts and generational gaps have declined use of the feeding custom. Lack of knowledge and perceptions of the tradition have only aided in this national decline. By understanding the above RN and NP barriers to breastfeeding, a plan of action can help overcome them. RNs and NPs play a pivotal role in the health promotion and empowerment of women. With what we know now in regard to barriers we can enhance the lives of our patients, their families, and infants. We can also strive daily to take action against the specific barriers restraining us from optimal care and education in our community.

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Figure 1

Thematic Map

Appendix A

University at Buffalo
The State University of New York

University at Buffalo Institutional Review Board (UBIRB)

Office of Research Compliance | Clinical and Translational Research Center Room 5018 875 Ellicott St. | Buffalo, NY 14203
UB Federalwide Assurance ID#: FWA00008824

STUDY EXEMPTION

October 12, 2020
Dear Marian Thompson,
On 10/12/2020**,** the University at Buffalo IRB reviewed the following submission:

Type of Review: Initial Study	
Title of Study:	Perceived Barriers to Promoting Breastfeeding Efforts and Support among Nurse Practitioners and Registered Nurses Practicing in Rural Hospital in New York
Investigator: Marian Thompson	
IRB ID: STUDY00004904	
Funding: None	
Grant ID: None	
IND, IDE, or HDE: None	
Documents Reviewed:	• Demographic Survey and Semi.docx, Category: Surveys/Questionnaires; • HRP-502 -Consent Document Thompson 930.pdf, Category: Consent Form; • HRP-503-799 thompson revised 92220.docx, Category: IRB Protocol; • Recruitment Letter 1.pdf, Category: Recruitment Materials;

The University at Buffalo Institutional Review Board has considered the submission for the project referenced above on 10/12/2020 and determined it to be Exempt.

In conducting this study, you are required to follow the requirements listed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the Click system.

UBIRB exemption is given with the understanding that the most recently approved procedures will be followed and the most recently approved consenting documents will be used. If modifications are needed that may change the exemption determination, please contact the UB IRB Office. Also, see the Worksheet: Exempt Determination (HRP-312) for information on exemption criteria and categories.

As principal investigator for this study involving human participants, you have responsibilities to the SUNY University at Buffalo IRB (UBIRB) as follows:

1. Ensuring that no subjects are enrolled prior to the IRB approval date. Page 1 of 2

University at Buffalo
The State University of New York

University at Buffalo Institutional Review Board (UBIRB)

Office of Research Compliance | Clinical and Translational Research Center Room 5018 875 Ellicott St. | Buffalo, NY 14203
UB Federalwide Assurance ID#: FWA00008824

2. Ensuring that the UBIRB is notified of:

- All Reportable Information in accordance with the Reportable New

  Information Smart Form.

- Project closure/completion by submitting a Continuing

  Review/Modification/Study Closure Smart Form in Click.

3. Ensuring that the protocol is followed as approved by UBIRB unless minor changes that do not impact the exempt determination are made.

4. Ensuring that the study is conducted in compliance with all UBIRB decisions, conditions, and requirements.

5. Bearing responsibility for all actions of the staff and sub-investigators with regard to the protocol.

6. Bearing responsibility for securing any other required approvals before research begins.

If you have any questions, please contact the UBIRB at 716-888-4888 or ub- irb@buffalo.edu

Appendix B

Letter Asking Project Permission

Oneida Health
Chief Medical Officer

October 15th, 2020

Re: Permission to Perform Study

Dear Chief Medical Officer:

My name is Marian Thompson and I am a Family Nurse Practitioner at Oneida Hospital working at the Women's Care clinic. I am currently attending the State University of New York at Buffalo to obtain my Doctorate in Nursing Practice (DNP) degree. Part of my program requirement is completing a DNP project. The purpose of this Doctor of Nursing Practice (DNP) project is to explore perceived barriers to promoting breastfeeding efforts and support among registered nurses (RNs) and nurse practitioners (NPs) working in a rural hospital located in Oneida, New York (NY). The aims of this DNP project are to improve care and communication between RNs and NPs and the women they care for who are breastfeeding regarding the importance and benefits of breastfeeding and to promote breastfeeding efforts and support through the development of an evidence-based educational workshop outline for RNs and NPs caring for women who are breastfeeding. Project objectives are to1) conduct a review of the literature examining breastfeeding promotion and support barriers among healthcare providers caring for women who are breastfeeding; 2) develop a semi-structured interview questionnaire based on findings resulting from the review of the literature and content expert review; 3) conduct individual interviews via phone or Zoom videoconferencing; 4) analyze the interview data; and 5) develop an evidence-based educational workshop outline for the project site RNs and NPs outlining identified barriers to promoting breastfeeding efforts and support as well as facilitators and strategies to promote breastfeeding efforts and support.

I would like to invite the RNs and NPs at Oneida Health who have been working with women who breastfeed for 6 months or more to participate in this research study as part of helping me fulfill requirements for my DNP degree. If permitted, a recruitment email that I have created can be sent out by the hospital to eligible RNs and NPs.

Your consideration is greatly appreciated,

Marian E. Thompson FNP-BC, DNP Project Student
University at Buffalo, School of Nursing
Oneida, NY 13421
MET22@buffalo.edu
(702) 376-2161

Appendix C

Permission to Perform Study

From: "Reid, Ofrona" <oreid@oneidahealthcare.org
Date: October 15, 2020 at 12:28:56 PM EDT
Subject: RE: DNP Project Permission

Hi Marian,

Firstly, congratulations on your acceptance to the Doctorate program at SUNY Buffalo . Secondly, I approved your request and feel you research will help address the many bottlenecks many health providers face in the breast feeding space.

I believe your research project will further augment our organizations current successful breast feeding program.

Best,

-Ofrona a. Reid, MD, MBA, MS
Chief Medical Officer/VP of Medical Affairs
Oneida Health Hospital

Appendix D

Recruitment Letter

Dear RN and NP,

My name is Marian Thompson and I am a Family Nurse Practitioner at Oneida Hospital working at the Women's Care clinic. I am currently attending the State University of New York at Buffalo to obtain my Doctorate in Nursing Practice (DNP) degree. Part of my program requirement is completing a DNP project. The purpose of this Doctor of Nursing Practice (DNP) project is to explore perceived barriers to promoting breastfeeding efforts and support among registered nurses (RNs) and nurse practitioners (NPs) working in a rural hospital located in Oneida, New York (NY). The aims of this DNP project are to improve care and communication between RNs and NPs and the women they care for who are breastfeeding regarding the importance and benefits of breastfeeding and to promote breastfeeding efforts and support through the development of an evidence-based educational workshop outline for RNs and NPs caring for women who are breastfeeding.

I am inviting RNs and NPs at Oneida Health who have been working with women who breastfeed for 6 months or more to participate in this research study as part of helping me fulfill requirements for my DNP degree. If you agree to take part in the study, you will participate in a one-time individual interview session with me via phone or Zoom videoconferencing at a date and time of your choosing during the Fall 2020 semester. The interview session will last approximately one hour, will be video and audio recorded, and will be kept on my password protected personal laptop computer until the recording is transcribed verbatim onto paper as de-identified for data analysis purposes. After checking for transcription accuracy, the interview recording will be destroyed. The findings will be utilized to develop an educational workshop outline for the hospital RNs and NPs outlining identified barriers to promoting breastfeeding efforts and support as well as facilitators and strategies to promote breastfeeding efforts and support.

Your participation or lack thereof in this project will not adversely affect your employment with the hospital.

If you are interested in participating in my project, please email me or leave me a voicemail with your contact information with a day and time that I can call you to set up the interview day and time. Once an interview day and time are set, I will email you the verbal consent document for you to read prior to the interview session.

Your consideration in participating in my study is greatly appreciated,

Marian E. Thompson FNP-BC, DNP Project Student
University at Buffalo, School of Nursing
Oneida, NY 13421
MET22@buffalo.edu
(702) 376-2161

Appendix E

Verbal Consent Document

Title of Research Study*:* Perceived Barriers to Promoting Breastfeeding Efforts and Support among Nurse Practitioners and Registered Nurses Practicing in Rural Hospital in New York

Version Date: September 1, 2020

Investigator: Marian Thompson, DNP Project Student

Key Information:

The purpose of this Doctor of Nursing Practice (DNP) project is to explore perceived barriers to promoting breastfeeding efforts and support among registered nurses (RNs) and nurse practitioners (NPs) working in a rural hospital located in Oneida, New York (NY). The aims of this DNP project are to improve care and communication between RNs and NPs and the women they care for who are breastfeeding regarding the importance and benefits of breastfeeding and to promote breastfeeding efforts and support through the development of an evidence-based educational workshop outline for RNs and NPs working at the hospital caring for women who are breastfeeding.

Why am I being invited to take part in a research study?

You are being invited to take part in this research study because you are an RN or NP who works with breastfeeding women at a rural hospital in New York.

What should I know about a research study?

Your participation is voluntary.
Whether or not you take part is up to you.
You can choose not to take part.
You can agree to take part and later change your mind.
Your decision will not be held against you.
You can ask any questions you want before you make your decision to participate.
You can ask any questions you want at any point in time during the study.

Why is this research being done?

This study is being done to promote increased insight, knowledge, and understanding regarding the importance and benefits of breastfeeding among RNs and NPs working at a rural hospital in New York and to promote breastfeeding efforts and support through the development of an evidence-based educational workshop outline for RNs and NPs caring for women who are breastfeeding.

How long will the research last and what will I need to do?

Your participation in this study involves participating in a one-time individual interview session with the study's primary investigator (PI) that will take approximately one hour of your time.

Individual interviews will be conducted virtually using password protected Zoom videoconferencing recording or by telephone that will be recorded and will take place during a date, time, and location of your choosing.

What are my responsibilities if I take part in this research?

If you take part in this study, your responsibility will include participating in a one-time individual interview session with the study's PI that will take approximately one hour of your time.

What happens if I say yes, I want to be in this research?

By voluntarily and verbally consenting to participate in this study, you agree to participate in a one-time individual interview session with the PI that will be conducted virtually using password protected Zoom videoconferencing recording or by telephone that will be recorded during a date, time, and location of your choosing. The interview session will last approximately one-hour.

All information and responses shared with the PI during the individual interview will be kept private and confidential. No information regarding your participation in this study or responses will be shared with the hospital you are employed in. There are no right or wrong answers to any question asked during the interview session, and you can refuse to answer or skip any question asked of you. If at any time you feel uncomfortable for any reason, you are free to withdraw from the study without fear of reprisal or penalty.

To ensure participant privacy and confidentiality, the recorded interview session will be kept on the PI's personal password protected laptop computer for the duration of the study. The interview session will be transcribed by the PI verbatim onto paper for data analysis purposes, and will be de-identified and assigned a number with no personal identifiers. No person other than the PI will know who participated in the study. All transcriptions will be read and re-read by the PI while listening to the recorded interview session to ensure accuracy, thoroughness, and quality. Once all transcriptions are checked for accuracy, thoroughness and quality, all recordings will be destroyed by the PI.

What happens if I say yes, but I change my mind later?

You are free to withdraw from this study at any time without fear of reprisal or penalty. Should you choose to withdraw, all identifiable data will be deleted.

Is there any way being in this study could be bad for me?

While breach of privacy and confidentiality is always a risk, all participant information will be kept private and confidential on the PI's personal password protected laptop computer for the duration of the study. No other individual will have access to participant information, and no

personal identifiers will be shared during the data analysis and dissemination of findings. No one but the PI will know who participated in the study.

Will being in this study help me in any way?

There are no direct benefits to you for participating in this research. Your answers however may contribute to promoting increased insight, knowledge, and understanding regarding improving care and communication between RNs and NPs and the women they care for who are breastfeeding.

What happens if I do not want to be in this research?

Your participation in this study is completely voluntary. You may choose not to enroll in this study, and/or you may choose to withdraw from the study at any time without fear of reprisal or penalty.

Can I be removed from the research without my OK?

There are no foreseeable circumstances for which you would need to be removed from this study.

How many people will be studied?

The PI expects to enroll between five and twelve RN and NP participants recruited from the hospital from September to November, 2020.

What happens to the information collected for the research?

Efforts will be made to maintain your privacy and confidentiality throughout the entirety of the study. All data and information obtained from the individual interview session will be kept confidential by the PI. No other individual will have access to your personal information, and all data will be de-identified by the PI prior to its analysis by the research team. No personal identifiers or information will be shared during the reporting of this study's findings.

At the conclusion of this study, all de-identified study data and materials will be stored in a locked file cabinet in the PI's DNP Project Advisor's office located on the South Campus at the University at Buffalo, School of Nursing. No other individual will have access to the locked cabinet. All de-identified study data and materials will be destroyed by the PI's DNP Project Advisor after a period of three years following the conclusion of the study as per UB's approved Institutional Review Board protocol.

Study findings will be disseminated via a traditional DNP project virtual defense and an evidence-based educational workshop outline for RNs and NPs working at the hospital outlining identified barriers to promoting breastfeeding efforts and support as well as facilitators and strategies to promote breastfeeding efforts and support.

What else do I need to know?

Participants will not be compensated for participating in this study.

Who can I talk to?

If you have questions, concerns, complaints, or think the research has hurt you in any way, you may contact the research team:

Marian Thompson (Primary Investigator)
University at Buffalo, School of Nursing, FNP DNP Program
met22@buffalo.edu
(702) 376-2161

You may also contact the research participant advocate at 716-888-4845 or researchadvocate@buffalo.edu.

This research has been reviewed and approved by an Institutional Review Board ("IRB"). An IRB is a committee that provides ethical and regulatory oversight of research that involves human subjects. You may talk to them at (716) 888-4888 or email ub-irb@buffalo.edu if:

- You have questions about your rights as a participant in this research.
- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Your verbal consent to participate in this study will be obtained by the PI prior to implementation of the interview session on the day of your scheduled interview. A copy of this verbal consent document should be retained for your personal record.

Appendix F

Demographic Survey and Semi-Structured Interview Questionnaire

Demographic Survey

Age: _____

Sex: _____

Practice Type: _____

Specialty: _____

How long have you been in practice (years)? _____

Have you personally had any experience with breastfeeding, you or your partner? _____

Semi-Structured Interview Questionnaire

1. Describe for me any national efforts to support breastfeeding under the Affordable Care Act that are free of charge to breast feeding mothers.
2. Describe for me any benefits to the baby from breastfeeding.
3. Describe for me any benefits to the mother from breastfeeding.
4. Tell me about any contradictions to breastfeeding.
5. Describe for me what you think is required to have a successful family unit.
6. Describe your perception of primary breast functionality.
7. What do you think is the optimal length of time for breastfeeding in relation to maternal and child benefits?
8. How often do you think an infant should be breastfed?
9. Describe for me when breastfeeding education should take place for breast feeding women.
10. Describe for me who should be included in breastfeeding education.

11. What are your thoughts regarding formula and when a breastfeeding mother should supplement with formula?
12. What do you perceive as the single most important barrier preventing you from breastfeeding promotion in your healthcare setting?
13. Describe for me any patient barriers to breastfeeding.
    - Do you feel these barriers can be overcome with education?
14. Tell me about any cultural barriers unique to your rural area that may discourage breastfeeding.
15. Describe for me your overall attitude toward breastfeeding.
16. Describe for me any professional education you had to prepare yourself to educate patients about breastfeeding?
17. Is there anything about breastfeeding and/or breastfeeding promotion barriers among RNs and NPs that you think is important for me to know that we did not discuss today?

Thank you for participating in this interview session.

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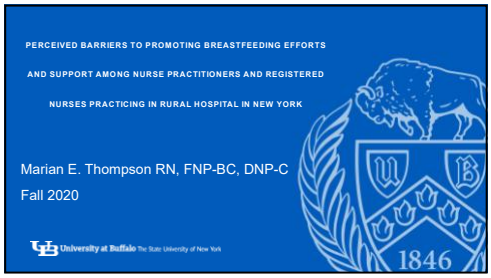

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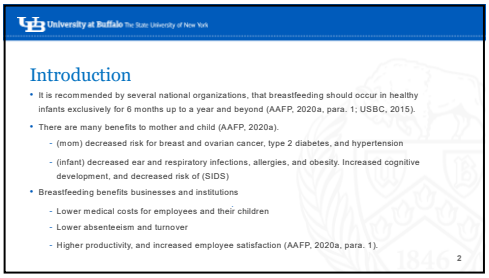

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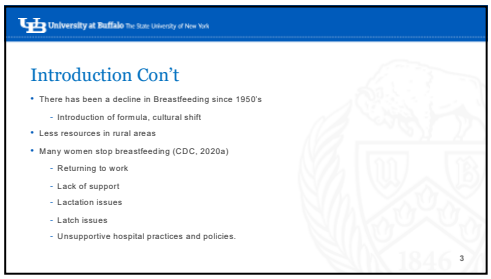

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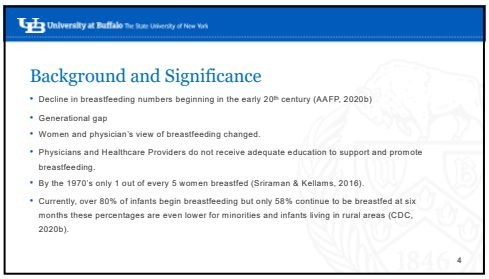

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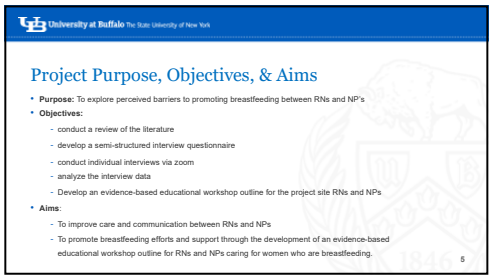
University at Buffalo The State University of New York
Project Purpose, Objectives, & Aims
Purpose: To explore perceived barriers to promoting breastfeeding between RNs and NP's
Objectives:
conduct a review of the literature
develop a semi-structured interview questionnaire
conduct individual interviews via zoom
analyze the interview data
Develop an evidence-based educational workshop outline for the project site RNs and NPs
Aims:
To improve care and communication between RNs and NPs
To promote breastfeeding efforts and support through the development of an evidence-based educational workshop outline for RNs and NPs caring for women who are breastfeeding.
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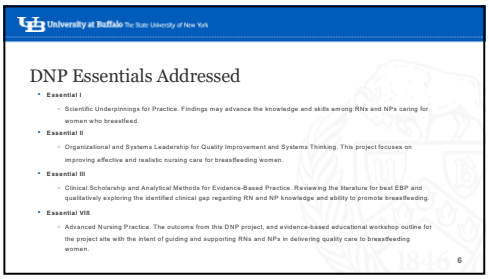
University at Buffalo The State University of New York
DNP Essentials Addressed
Essential I
Scientific Underpinnings for Practice. Findings may advance the knowledge and skills among RNs and NPs caring for women who breastfeed.
Essential II
Organizational and Systems Leadership for Quality Improvement and Systems Thinking. This project focuses on improving effective and realistic nursing care for breastfeeding women.
Essential III
Clinical Scholarship and Analytical Methods for Evidence-Based Practice. Reviewing the literature for best EBP and qualitatively exploring the identified clinical gap regarding RN and NP knowledge and ability to promote breastfeeding.
Essential VIII
Advanced Nursing Practice. The outcome from this DNP project, and evidence-based educational workshop outline for the project site with the intent of guiding and supporting RNs and NPs in delivering quality care to breastfeeding women.
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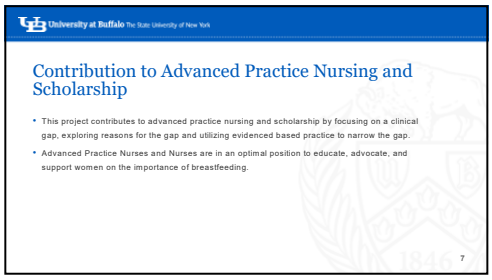
University at Buffalo The State University of New York
Contribution to Advanced Practice Nursing and Scholarship
This project contributes to advanced practice nursing and scholarship by focusing on a clinical gap, exploring reasons for the gap and utilizing evidenced based practice to narrow the gap.
Advanced Practice Nurses and Nurses are in an optimal position to educate, advocate, and support women on the importance of breastfeeding.
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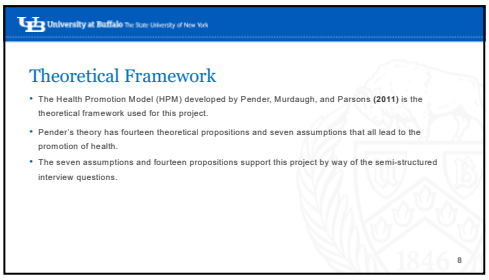
University at Buffalo The State University of New York
Theoretical Framework
The Health Promotion Model (HPM) developed by Pender, Murdaugh, and Parsons (2011) is the theoretical framework used for this project.
Pender's theory has fourteen theoretical propositions and seven assumptions that all lead to the promotion of health.
The seven assumptions and fourteen propositions support this project by way of the semi-structured interview questions.
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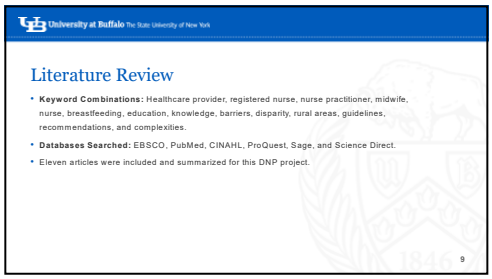

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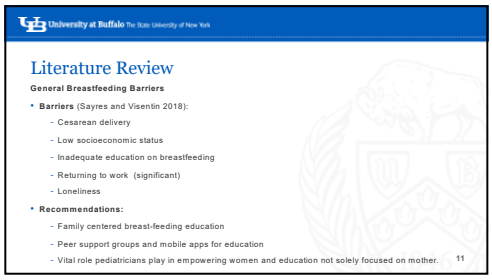

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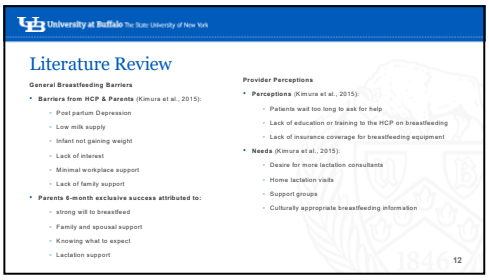

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Literature Review

Gender Identity

- Rippey and Falconi (2017) described gender identity as a barrier breast-feeders face based on:
  - Stereotypes (nuclear family)
  - Materials geared toward people who identify as women or mother
  - Formula = male medical model

Gender Identity

- Bucher and Spatz (2019) also uncovered gender disparities in breastfeeding:
  - Sexuality
  - Gender identity
  - Denial of breastfeeding related to the reaction of the male sexual partner in heterosexual relationships

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Literature Review

- Sriraman and Kellams (2016) discussed barriers in breastfeeding:
  - Over 70% of practicing obstetricians and pediatricians received minimal breastfeeding education or training.
  - Over 90% of pediatricians let their personal experiences dictate their breastfeeding advice.
  - Social cultural influences sparking misinformation.
- Breastfeeding barriers in one rural area in Missouri; interviewed HCP's and breastfeeding mothers in the community (Goodman et al., 2016):
  - Limited realistic information provided about breastfeeding.
  - Lack of continued resources.
  - Time constraints involved.

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Literature Review

- Shaw and Devgan (2016) evaluated the knowledge of HCP's regarding breastfeeding:
  - 100% of participants stated breastfeeding should occur w/in 1 hour of birth.
  - Varying responses regarding how long an infant should breastfeed, overnight bottle supplementation, and on demand feeding.
- Norwegian study evaluated the knowledge and beliefs of HCP's (Svendby et al., 2016):
  - 49% of breastfeeding knowledge questions were answered correctly.
  - Only half of participants knew of Norwegian recommendations for breastfeeding.
  - All agreed breastfeeding education should be taught in medical school.
  - Believed breastfeeding education should be completed post delivery.

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Methods and Design

- **Setting:** Rural hospital in Oneida, NY
- **Population:** RNs and NPs who care for breastfeeding women in the approved hospital for more than six months.
- **Design:** Qualitative Descriptive study
- **Procedures:**
  - University at Buffalo, Institutional Review Board approval granted
  - Recruitment via email invitation
  - Verbal consent obtained
  - Sample: 4 RNs and 2 NPs voluntarily recruited
  - Password protected Zoom individual interviews conducted with each participant

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Human Protections & Ethical Considerations

- Voluntary participation. Participant right to refuse to answer any question and to withdraw from study participation at any time explained. All questions about study participation answered prior to conducting the interview.
- Interview recordings were transcribed by student as de-indentified, read and re-read for transcription accuracy and thoroughness, and then destroyed.
- Confidentiality: no information regarding participation or responses was shared with the hospital; participants informed that their employment would not be affected regarding study participation.
- Participants were assigned a number to protect privacy and confidentiality.
- Information will be stored for as per UB IRB protocol.

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Data Collection

- Interviews were conducted utilizing semi-structured interview questionnaire developed by the student guided by findings resulting from the literature review and the HPM.
- Demographic information was obtained from each participant prior to asking interview questions.
- Semi-structured interview questions were reviewed by a panel of nurses including a doctorally prepared nurse midwife and UB School of Nursing faculty member who is a women's health NP.
- Additional probing questions were produced in interviews to allow for a more comprehensive answer.

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Demographic Survey

Demographic Survey

- Age
- Sex
- Practice Type
- Specialty
- Years in Practice
- Personal or Partner experience with breastfeeding

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Semi-Structured Interview Questionnaire

1. Describe for me any national efforts to support breastfeeding under the Affordable Care Act that are free of charge to breast feeding mothers.
2. Describe for me any benefits to the baby from breastfeeding.
3. Describe for me any benefits to the mother from breastfeeding.
4. Tell me about any contradictions to breastfeeding.
5. Describe for me what you think is required to have a successful family unit.
6. Describe your perception of primary breast functionality.
7. What do you think is the optimal length of time for breastfeeding in relation to maternal and child benefits?
8. How often do you think an infant should be breastfed?
9. Describe for me when breastfeeding education should take place for breast feeding women.
10. Describe for me who should be included in breastfeeding education.

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Semi-Structured Interview Questionnaire

11. What are your thoughts regarding formula and when a breastfeeding mother should supplement with formula?
12. What do you perceive as the single most important barrier preventing you from breastfeeding promotion in your healthcare setting?
13. Describe for me any patient barriers to breastfeeding. Do you feel these barriers can be overcome with education?
14. Tell me about any cultural barriers unique to your rural area that may discourage breastfeeding.
15. Describe for me your overall attitude toward breastfeeding.
16. Describe for me any professional education you had to prepare yourself to educate patients about breastfeeding?
17. Is there anything about breastfeeding and/or breastfeeding promotion barriers among RNs and NPs that you think is important for me to know that we did not discuss today?

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Data Analysis

- Braun and Clarke's 6 phased Reflexive Thematic Analysis was used to analyze data (Braun & Clarke, 2013; Braun et al., 2019):
  1) data transcription and familiarization; initial noticings;
  2) generating initial codes;
  3) constructing candidate themes;
  4) revising and refining candidate themes;
  5) defining final themes and refining theme names; and
  6) finalizing the data analysis and connecting findings to existing evidence-based literature.
- Data were analyzed manually using an inductive approach and use of semantic, or direct explicit codes.

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Findings

Participant Demographics

- 4 RNs and 2 NPs
- Age range: 26-71 years old
- Sex: All female participants
- Practice: All OBGYN
- Length of Time in Practice: Ranged from 2 - 43 years
- Personal Breastfeeding Experience: 1 out of 6 participants.

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Findings Con't

Findings revealed one overarching theme and three subthemes.

- **Overarching Theme**:
  "Not enough help…Everyone should be educated" (P3):
  - Not a priority on the floor
  - Lack of time
  - Providers/Pediatricians encourage formula
  - Lactation consultants
  - Motivating staff
  - Not knowing direction to point moms in
  - No family support.

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Findings Con't

- **Theme 1**: *Breastfeeding Benefits*
  - Mom
  - Baby
- **Theme 2**: *Breastfeeding Barriers*
  - Mom
  - Nurses
- **Theme 3**: *Breastfeeding Resources*
  - Availability
  - Cultural barriers

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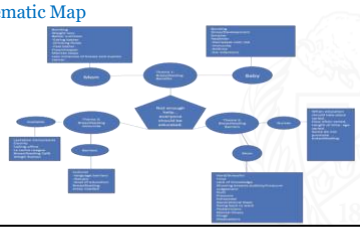
Thematic Map



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Discussion

- There is not enough nursing education. Most participants admitted they received little to no education during nursing school or in their careers.
- All participants agreed that breastfeeding is best.
- Varied responses about when to offer formula, how often to feed an infant, and when breastfeeding education should take place indicated a need for more education.

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Discussion

- Overall, the results were similar to those found in the literature review regarding HCP barriers and perceptions:
  - Lack of knowledge of national breastfeeding effort and lack of breastfeeding knowledge (Svendby et al., 2016)
  - Generational gap, no formal education or training, and time constraints (Goodman et al., 2016; Shaw & Devgan, 2016; Sriraman & Kellams, 2016; Svendby et al., 2016).

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Discussion

Gender Identity

- Participants seemed to grasp the idea of a nonnuclear family and all-inclusive language. Majority of participants also agreed that breasts can be both sexual and for breastfeeding (Bucher & Spatz, 2019; Rippey & Falconi, 2017).

General Breastfeeding Barriers

- Participants discussed the need to return to work, lack of education, low income (stigma), lack of family support, lactation support, and low milk supply as breastfeeding barriers the mother faced (Kimura et al., 2015; Sayres & Visentin, 2018).

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Strengths and Limitations

Strengths

- The interview setting provided a private and personal interaction that allowed interview questions to be answered open and honestly.
- Varying ages and years of practice

Limitations

- Limited sample size
- A single study in one single rural area
- All participants were female
- All participants worked in the same specialty OBGYN site

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Future Implications and Recommendations

- Use of lactation consultants can hinder nurses becoming and staying educated.
  - Find a balance
- More breastfeeding education embedded into nursing curricula at the undergraduate and graduate levels.
- Make breastfeeding a part of the orientation process for nurses going on to a Labor and Delivery floor, pediatrician office, or OBGYN office.
- Lactation consultants in-house could do educational 'lunch and learns'.

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Conclusion

- Formula and generational gaps have led to educational gaps with our healthcare clinicians as well as with our breastfeeding families.
- RNs and NPs are in a unique position to empower women and promote breastfeeding. This action cannot take the stronghold that is needed without an increase in education and a positive perception of breastfeeding.

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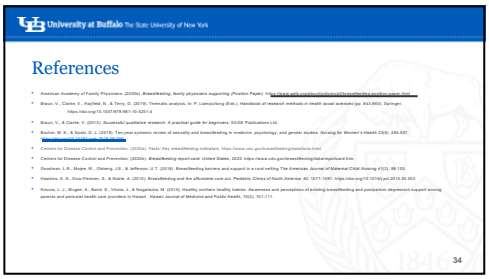

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Workshop Outline for RNs and NPs

- **Educational Needs**
    - Breastfeeding benefits
        - Baby
        - Mom
    - On demand feeding
    - When to use formula
    - Ways to motivate staff
    - Breastfeeding resources
- **Recommendations**
    - Make breastfeeding education a part of orientation for the nurses going into Pediatrics, Labor and Delivery, and OBGYN areas.
    - Certified Lactation Consultants (CLC) could do monthly in-services with the staff to assist with breastfeeding education and staying up to date with the most recent recommendations.
    - The hospital should obtain a Baby-Friendly designation, this requires a specific plan that encompasses training staff.
    - Add CLC's in the pediatrician practices.
    - Culturally appropriate breastfeeding resources and materials (available in multiple languages)
    - Resources available at an appropriate literacy level for the community.
- **References for more information**

- American Academy of Family Physicians. (2020). *Breastfeeding and lactation for medical trainees.* https://www.aafp.org/about/policies/all/breastfeeding-lactation-medical-trainees.html
- HealthyPeople.gov. (2020). *Maternal, infant, and child health: Objectives: Infant care.* https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives
- American Academy of Pediatrics. (2020). *Policy on Breastfeeding.* https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Breastfeeding/Pages/AAP-Policy-on-Breastfeeding.aspx
- American College of Obstetrics and Gynecologists. (2018). *Optimizing Support for Breastfeeding as a Part of Obstetric Practice.* https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/10/optimizing-support-for-breastfeeding-as-part-of-obstetric-practice