



Graduate Theses and Dissertations

Graduate School

January 2013

Factors Related to the Professional Management of Early Breastfeeding Problems: Perspectives of Lactation Consultants

Erica Hesch Anstey University of South Florida, eanstey@health.usf.edu

Follow this and additional works at: http://scholarcommons.usf.edu/etd



Part of the Public Health Commons

Scholar Commons Citation

Anstey, Erica Hesch, "Factors Related to the Professional Management of Early Breastfeeding Problems: Perspectives of Lactation Consultants" (2013). Graduate Theses and Dissertations. http://scholarcommons.usf.edu/etd/4860

This Dissertation is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.

Factors Related to the Professional Management of Early Breastfeeding Problems:

Perspectives of Lactation Consultants

by

Erica Hesch Anstey

A dissertation submitted in partial fulfillment of the requirement of the degree of Doctor of Philosophy
Department of Community and Family Health
College of Public Health
University of South Florida

Co-Major Professor: Ellen Daley, Ph.D. Co-Major Professor: Martha Coulter, Dr.P.H. Cecilia Jevitt, Ph.D. Karen Perrin, Ph.D. Sharon Dabrow, M.D.

Date of Approval: October 24, 2013

Keywords: family-centered care, barriers, grounded theory, interprofessional collaboration, coordination of care

Copyright © 2013, Erica Hesch Anstey

DEDICATION

To my family: Neil – my soul mate, thank you for your unwavering love and support, the sacrifices you have made over the past seven years, always believing in the importance of my work, and patiently keeping me grounded. Brennan and Jude – my children, thank you for inspiring me, keeping me laughing, and making every day brighter.

Stewart and Sherry – my parents, thank you for your unconditional love and encouraging (and sometimes tolerating) my passion for social justice since the age of four. Ali – my sister and friend, thank you for always being my cheerleader. I am deeply moved by the wisdom of your boundless kindness and compassion. Rick and Cini – my in-laws, thank you for believing in me and loving me as one of your own children. Ida – my Nana, thank you for your beautiful smile and teaching me to live my life full of "cookies."

To my wise women: La Leche League Leader Susan Overton and IBCLC Debbie Albert, for helping me to keep calm and latch on. Dr. Betty Coryllos (in memory) and Cathy Watson Genna, IBCLC, tongue-tie pioneers extraordinaire! I would not be the mother I am today without your passion, commitment, and support to help me successfully breastfeed my children.

In loving memory:

Fern – my grandmother, thank you delighting in my achievements big and small and for teaching my heart to be passionately stubborn – I inherited it from you

Gordon – my grandfather, thank you for showing me the value of a quiet walk

Jack – my Papa, thank you for holding education high in your values; I hope your first born

princess has made you proud

ACKNOWLEDGMENTS

Words cannot express my delight and gratitude to have been supported and guided by a powerhouse of remarkable maternal and child health advocates and leaders. I would like to express my deep appreciation to my co-major professor Ellen Daley who has believed in me for the past ten years, provided me with opportunities to grow as a researcher, mentored my professional development, and remained positive and understanding of life's curveballs. Her guidance and shared passion for women's health have helped me to shape this dissertation into something I can be most proud of. Marti Coulter, also my co-major professor, has generously dedicated time, expertise, insightful comments, and continuous encouragement on this dissertation project. I have deep admiration and gratitude for committee members Kay Perrin, Cecilia Jevitt, and Sharon Dabrow for valuable feedback and commitment to my success as a future public health researcher. I offer sincere thanks to Lynne Klasko for her interest in this project and dedicating hours of personal time to coding many interviews. I also appreciate funding by the College of Public Health and Department of Community & Family Health.

Throughout this endeavor, I have been surrounded by a cohort of brilliant peers who offered endless encouragement and kept me sane. I am thankful for my friendship with colleague and breastfeeding buddy Aimee Eden. My community of mothers and cherished friends (Heather Curry and Jennifer Montgomery especially), who lovingly mothered my children with me and offered support on so many levels, enabled me to complete this work with joy. Finally, my sincerest gratitude goes to the IBCLCs who participated in this scholarly work, shared their thoughts, and inspired me to continue my commitment to improving maternal and child health.

TABLE OF CONTENTS

List of Figures	viii
List of Tables	ix
Abstract	X
Chapter 1: Introduction	1
Statement of the Problem	4
Statement of Need	7
Purpose and Research Questions	12
Rationale	12
Key Terms	14
Chapter 2: Literature Review	16
Breastfeeding as a Socio-Cultural Behavior	
Factors Associated with Breastfeeding in the United States	
Demographic Factors	
Policy and Breastfeeding	22
Social Factors	25
Psychological Factors	26
Physiological Factors	28
Factors Related to Early Weaning	31
Age-related factors	32
Hospital-related factors	35
Lactation Support becomes a Profession	41
Historical context of Infant Feeding in the United States	41
The Medicalization of Infant Feeding	43
The Professionalization of Lactation Consulting	
Management of Early Breastfeeding Problems: The Providers	52
Assessing the mother-infant dyad	52
The influence of providers' knowledge, attitudes, and practices on	
breastfeeding	54
Barriers to Interprofessional Collaboration in the Provision of	
Breastfeeding Support	
Scope of Practice	
Role	
Provider Perspectives of Interprofessional Collaboration	
Access	69

Family-Centered Care	71
Origins of Family-Centered Care	
Family-Centered Care in Pediatrics	
Family-Centered Care in Breastfeeding Management	78
Theoretical framework to understanding barriers to providing breastfeeding	
support: Symbolic Interactionism	79
Self and Mind	
Role	
Identity	
Chapter 3: Methodology	89
Purpose of the Study	
Research Questions:	
Methodological Approach	
Grounded Theory	
Theoretical sampling	
Coding	
Research Design	
Sample Selection	
Description of the Providers	
Sampling Methods	
Instruments and Measures	101
Methods and Data Collection	102
Recruitment	102
Data Collection Procedures	106
Data Cleaning, Verification, and Management	107
Data Analysis	107
Constant-comparative method	108
Concept formation and development	109
Research Standards	111
Credibility	111
Dependability	112
Confirmability	116
Transferability	119
Ethical Issues and Human Subjects Protections	120
Chapter 4: Results	122
Demographic Information	122
Findings	128
Research Question 1: What do IBCLCs Perceive to be the Barriers to Providing	
Professional Support and Management of Early Breastfeeding Problems?	
Indirect Barriers	
Social Norms	
Knowledge	
Attitudes	
Summary of Indirect Barriers	141

Direct Barriers	142
Institutional Constraints	142
Lack of coordination	153
Poor service delivery	160
Social Support	168
Self-Efficacy of the Mother	
Summary of Research Question 1	
Research Question 2: How do the perceived barriers to managing early	
breastfeeding problems vary by the type of breastfeeding problem?	179
Thrush and Mastitis	
Tongue-tie	185
Insufficient Milk Syndrome (Medical)	
Latch, sore nipples, weight gain, perceived insufficient milk, and	
supplementing	192
Breast Augmentation and Reductions	197
Summary of Research Question 2	199
Research Question 3: What are the roles of various health care professionals in	
providing breastfeeding support and management of early breastfeeding	
problems, as perceived by the IBCLC?	200
Role of the IBCLC	
Scope of Practice	201
Educators	205
Breastfeeding Experts	207
Members of the Health Care Team	
Emotional Support	211
Holistic Approach	213
Empower Mothers	214
Role of Pediatricians, Obstetricians, and Nurses	216
Basic Breastfeeding Knowledge and Skills	217
Support Mothers	217
Anticipatory Guidance	220
Communication Liaison	221
Know when to refer	222
Summary of Research Question 3	223
Research Question 4: How do these roles impact the ability of the IBCLC to	
provide support and management of early breastfeeding problems?	226
Hierarchies of respect	
"We're board certified, but that doesn't mean anything"	230
Providers are influential	234
Damage Control	236
Role Strain and Role Conflict	
Summary of Research Question 4	244
Research Question 5: What are the communication strategies and other processes	
through which IBCLCs work with a) other health care professionals and b)	
families to provide support and management of early breastfeeding problems?	245
a) Health care professionals	245

b) Families	250
Summary of Research Question 5	255
Reflections	
Chapter 5: Discussion	260
Section I: Applying the Model	260
Indirect Factors: Social Norms, Knowledge, and Attitudes	
Direct Factors	
Section II: Symbolic Interactionism and Family-Centered Care	
Symbolic Interactionism	275
Self and Mind	278
Role	279
Identity	281
Family-Centered Care	
Section III: Strengths and Limitations	
Section IV: Implications for Public Health	
Moving the Science Forward	
Interprofessional Collaboration and Coordination of Care	299
Quality Improvement	
Implications for Policy	313
Section V: Future Directions	316
References	321
Appendix A: Semi-Structured Interview Guide	371
Appendix B: Recruitment Materials	377
Appendix C: USF IRB-Approved Informed Consent Form	381
Appendix D: IRB Approval Letter	385

LIST OF FIGURES

Figure 1 – Trends in IBCLCs Over Time	9
Figure 2 – Risk of Breastfeeding Cessation Before 6 Weeks by Number of Baby-Friendly Steps in Place	37
Figure 3 – Distribution of Participants by Region of Florida	104
Figure 4 – Recruitment Process Diagram	105
Figure 5 – IBCLCs' Perceived Influences to Managing Breastfeeding Problems	177
Figure 6 – IBCLCs' Perceived Influences to Managing Breastfeeding Problems	261

LIST OF TABLES

Table 1 – Surgeon General's Call to Action to Support Breastfeeding Action 11	11
Table 2 - Ten Steps to Successful Breastfeeding	23
Table 3 - Healthy People 2020 Goals and U.S. Breastfeeding Report Card	31
Table 4 – Certifications for Lactation Education	50
Table 5 – Role of the Pediatrician in Supporting Breastfeeding, According to the AAP	63
Table 6 – Core Principles of Family-Centered Care	75
Table 7 – The 10 Principles of FCMC	77
Table 8 – Recruitment Process by Practice Setting	105
Table 9 – Coding Process for Interrater Reliability	113
Table 10 – IBCLC' Professional Background and Practice Settings	123
Table 11 – Demographic Information on the Study Sample of IBCLCs Practicing in Florida (n=30)	125
Table 12 – Common and Uncommon Problems Reported by IBCLCs by Practice Setting	179
Table 13 – IBCLCs' Perspectives of Providers' Roles in Breastfeeding Support	200
Table 14 – Aspects of Lactation Consulting Least Liked by IBCLCs	243
Table 15 – Impacts of Fragmented vs. Coordinated Care	271
Table 16 – 10 Principles of Family-Centered Breastfeeding Care (FCBC)	293
Table 17 – Interpersonal Factors of IBCLCs to Explore in Future Research	317

ABSTRACT

Addressing the sub-optimal breastfeeding initiation and duration rates has become a national priority. Inadequate support for addressing early breastfeeding challenges is compounded by a lack of collaboration between providers such as lactation professionals, nurses, pediatricians, and the family. The purpose of this exploratory study was to understand International Board Certified Lactation Consultants' (IBCLCs) perceived barriers to managing early breastfeeding problems. This qualitative study was guided by the symbolic interactionist framework through a grounded theory methodological approach. In-depth interviews were conducted with 30 IBCLCs from across Florida. IBCLCs were from a range of practice settings, including hospitals, WIC clinics, private practice, and pediatric offices. Data were digitally recorded, transcribed, and analyzed in Atlas.ti. A range of barriers were identified and grouped into the following categories: indirect barriers such as social norms, knowledge, attitudes; direct occupational barriers such as institutional constraints, lack of coordination, and poor service delivery; and direct individual barriers including social support and mother's self-efficacy. A model was developed to illustrate the factors that influence the role enactment of IBCLCs in terms of managing breastfeeding problems. IBCLCs overwhelmingly wish to be perceived as valued members of a health care team, but often find interprofessional collaboration is a struggle. However, IBCLCs find creative strategies to navigate challenges and describe their role as pivotal in empowering mothers and their families to meet their breastfeeding goals. Though rarely actualized, IBCLCs place strong value on coordinated, team approaches to breastfeeding management that employ transparent communication between providers and focus on

empowering and educating mothers. Strategies for better collaboration and communication between IBCLCs and other providers are needed. Findings provide insight into the management issues of early breastfeeding problems and may lead to future interventions to reduce early weaning, thus increasing the lifelong health benefits of breastfeeding to the infant and mother.

CHAPTER 1: INTRODUCTION

As a result of its many benefits, improving breastfeeding rates in the United States (U.S.) has become an important part of the national health agenda. The U.S. Department of Health and Human Services Office on Women's Health commissioned an evidence-based review by the U.S. Agency for Healthcare Research and Quality (AHRQ) on the effects of breastfeeding on infant and maternal health in developed countries. This massive review included over 400 studies and found that breastfeeding was associated with a reduced risk of many pediatric health problems, including asthma, atopic dermatitis, lower respiratory tract infections, obesity, type 1 and 2 diabetes, acute otitis media, nonspecific gastroenteritis, sudden infant death syndrome, and childhood leukemia. In addition, maternal health benefits include a reduced risk of breast and ovarian cancer and type 2 diabetes. Also, an increased risk of postpartum depression was found to be associated with a shorter duration of breastfeeding or no breastfeeding (Ip, Chung, Raman, Trikalinos, & Lau, 2009).

These health benefits of breastfeeding have driven reputable and well-known health organizations such as the American Academy of Pediatrics (AAP) and the World Health Organization (WHO) to incorporate breastfeeding goals into their policy statements. The Policy Statement of the AAP recommends "exclusive breastfeeding for about 6 months, followed by continued breastfeeding as complementary foods are introduced, with continuation of breastfeeding for 1 year or longer as mutually desired by mother and infant" (American Academy of Pediatrics, 2012a). The WHO also recommends exclusive breastfeeding for the first

six months and suggests continuing breastfeeding for two years and *beyond*, citing comfort and nourishment as important reasons for continuing to breastfeed (UNICEF et al., 2010).

In addition to the many health benefits of breastfeeding, psychosocial, economic, and environmental benefits are similarly important. Women report psychosocial factors, such as a greater sense of bonding or closeness with their infants, as important reasons to initiate and continue breastfeeding (Bai, Middlestadt, Joanne Peng, & Fly, 2009; Bai, Wunderlich, & Fly, 2010; Guttman & Zimmerman, 2000; Neifert, Gray, Gary, & Camp, 1988). A U.S. cost analysis highlighted the significance of breastfeeding as a public health issue by examining the risk ratios, disease incidence, and costs associated with current breastfeeding rates compared to the costs if 90% and 80% of U.S. families complied with the current recommendation to breastfeed exclusively for six months. The authors estimate that the U.S. would save \$13 billion and 911 deaths or \$10.5 billion and 741 deaths per year if 90% or 80% of U.S. mothers breastfed exclusively for the first six months, respectively (Bartick & Reinhold, 2010). With six month exclusive rates around 16.4% in 2010, the U.S. is far from achieving these savings (Centers for Disease Control and Prevention (CDC), 2013). Finally, breast milk is a renewable, natural source of complete nutrition for infants' first six months of life, providing not only economic savings, but also environmental benefits (Gartner et al., 2005). If more women breastfed, the impact of formula from packaging in landfills, manufacturing waste, and transportation and fuel costs on our nation's carbon footprint would be significantly reduced (U.S. Department of Health and Human Services, 2011b).

Breastfeeding promotion efforts have been supported by national breastfeeding policies such as "A Blueprint for Action on Breastfeeding" released by the Surgeon General in 2000, the "Surgeon General's Call to Action to Support Breastfeeding" (2011), the Institute of Medicine's

(IOM) (2011) report on the prevention of childhood obesity, as well as the nation's Healthy People 2020 (HP2020) goals and objectives. "Blueprint for Action" (2000) identifies racial and ethnic disparities in breastfeeding among U.S. women and includes specific action steps to assist the health care system, the community, families, researchers, and employers in promoting breastfeeding (U.S. Department of Health and Human Services, 2000). The 2011 "Surgeon General's Call to Action to Support Breastfeeding" urges the nation's health professionals, communities, and systems of care to bring breastfeeding to the forefront with 20 specific action items that address mothers and their families, communities, health care, employment, research and surveillance, and public health infrastructure (U.S. Department of Health and Human Services, 2011b). This Surgeon General's "Call to Action" has brought national attention to breastfeeding in the past year. In addition, the 2011 IOM report on early childhood obesity prevention also recommends exclusive breastfeeding for the first six months and continuing for a year or more (with complementary foods) as a preventive measure for obesity (Institute of Medicine (IOM), 2011).

Healthy People 2020 (HP2020) breastfeeding objectives include increasing the proportion of infants in the U.S. who are ever breastfed to 81.9%, through six months to 60.6%, and through the first year to 34.1%. Exclusive breastfeeding goals are to reach 46.2% through three months and 25.5% through six months (U.S. Department of Health and Human Services, 2011a). According to The Centers for Disease Control and Prevention (CDC), data from the National Immunization Survey (NIS) found that as of 2010 (provisional), 76.5% of babies born in the U.S. were breastfed ever, 49.0% were still being breastfed at six months and 27.0% were being breastfed at 12 months. Exclusive breastfeeding at three and six months was 37.7% and 16.4%, respectively (Centers for Disease Control and Prevention (CDC), 2013). Although

breastfeeding rates are on the rise, Healthy People 2020 goals for breastfeeding duration and exclusivity remain unmet and low.

Statement of the Problem

A variety of challenges, such as sore nipples, perceived insufficient milk supply, lack of social support, and return-to-work issues, have been identified as barriers to breastfeeding success (Li, Fein, Chen, & Grummer-Strawn, 2008). Nipple pain in particular can be caused by poor latch and is commonly associated with early termination of breastfeeding within the first few weeks (Morland-Schultz & Hill, 2005; Riordan, Bibb, Miller, & Rawlins, 2001; Schwartz et al., 2002). For example, ankyloglossia, also called tongue-tie, is one possible cause for a poor latch and associated nipple pain (Hazelbaker, 2010; Walker, 2011; Watson Genna, 2008). This pain can create a complicated, stressful, and miserable breastfeeding experience for both the mother and her infant. Because a poor latch due to tongue-tie or other issues can often lead to an inadequate removal of milk and subsequently, a reduced milk supply, medical and lactation providers may advise the use of supplementation to protect the infant from inadequate weight gain. If an infant is feeding fine from a bottle, the root of the problem (in this case tongue-tie) may never be properly diagnosed or treated and the breastfeeding relationship will be terminated.

The AAP recently re-released (Feb. 27, 2012) its policy statement, "Breastfeeding and the Use of Human Milk," which explicitly states that breastfeeding newborn infants should be seen by a pediatrician for a "health supervision visit at 3 to 5 days of age, which is within 48-72 hours after discharge from the hospital" (American Academy of Pediatrics, 2012a)(p. e836). . However, though the AAP (2012) statement specifically states that "pediatricians also should serve as breastfeeding advocates and educators and not solely delegate this role to staff or nonmedical/lay volunteers," research has consistently demonstrated that pediatricians believe

they lack the skills needed to be breastfeeding advocates and educators (p. e836) (American Academy of Pediatrics, 2012a; Arthur, Saenz, & Replogle, 2003; Feldman-Winter, Schanler, O'Connor, & Lawrence, 2008; Freed, Clark, Curtis, & Sorenson, 1995; Freed, Clark, Harris, & Lowdermilk, 1996; Freed, Clark, Lohr, & Sorenson, 1995; Freed et al., 1995; Geraghty, Riddle, & Shaikh, 2008; Krogstrand & Parr, 2005; Schanler, O'Connor, & Lawrence, 1999). And yet, physicians are often perceived by mothers to have authoritative knowledge, skills, and advice on infant feeding. A lack of detailed knowledge about early breastfeeding problems may prevent physicians (and other lactation support providers) from being able to properly manage early breastfeeding problems and support the continuation of the breastfeeding relationship. Research on lactation specialists' perceptions of barriers (such as structural, interprofessional, or social barriers) to managing early breastfeeding problems is missing from the published literature at present. Thus, understanding providers' perspectives on the management of breastfeeding problems will identify areas for addressing the gaps in this management process with the ultimate goal of increasing breastfeeding success and reducing the incidence of early weaning.

Addressing the common causes for early weaning is complicated partly due to the scope of practice of the medical professionals involved. Problems may be compounded by the interdisciplinary range of medical professionals who advise and support the breastfeeding dyad, but may provide conflicting advice. For example, though family physicians and pediatricians may generally understand the benefits of breastfeeding and how to manage some breastfeeding pathology such as mastitis or thrush, they are not typically trained to assess the nuances of the breastfeeding relationship, including proper latch, nipple pain, and concerns about low milk supply. Lactation consultants and lactation counselors, on the other hand, are trained to assess

the breastfeeding relationship and address problems, but must refer out for diagnosis and treatment, which are beyond their scope of practice in the U.S.

The complexity of modern patient care had led to educational specialization, which is guided by distinct value systems that are instilled early in one's training. The professionalization of these various medical specialties has resulted in disciplinary silos that develop their own professional cultures. Each silo constructs its own "cognitive map" which concomitantly facilitates the performance of a shared occupational identity for its members at the exclusion of other professionals (P. Hall, 2005). A study by Szucs, Miracle, and Rosenman (2009) found that there are gaps in breastfeeding knowledge among the various provider groups that are involved with breastfeeding promotion and support. In particular, the researchers found that there are gaps in breastfeeding knowledge, education, training, and counseling skills among various providers, as well as inconsistent and poor communication between provider groups (Szucs, Miracle, & Rosenman, 2009). The proposed study will explore the perspectives of lactation consultants on barriers to managing early breastfeeding problems, such as structural issues, communication gaps regarding best practices for evidence-based breastfeeding management, and continuity of care among providers who are presented with breastfeeding concerns from their patients.

Studies have also demonstrated the importance of the provider's role in encouraging breastfeeding on mothers' decision to initiate breastfeeding (Lu, Lange, Slusser, Hamilton, & Halfon, 2001; L. C. Miller, Cook, Brooks, Heine, & Curtis, 2007; Taveras et al., 2004b), despite physicians (pediatricians, obstetricians, and family practitioners) needing more education in breastfeeding management (Arthur, et al., 2003; Feldman-Winter, et al., 2008; Freed, Clark, Sorenson, et al., 1995; Krogstrand & Parr, 2005; Schanler, et al., 1999; Szucs, et al., 2009).

While women are receiving public health messages that emphasize the importance of breastfeeding their babies, many pediatricians and other clinicians don't appear to feel confident in supporting women through the breastfeeding barriers that they may encounter. Several studies have shown that training programs, educational interventions, and workshops targeted to physicians can be effective at improving breastfeeding outcomes, improving knowledge and confidence among providers, and increasing positive attitudes toward breastfeeding (Bunik, Gao, & Moore, 2006; Haughwout, Eglash, Plane, Mundt, & Fleming, 2000; Hillenbrand & Larsen, 2002; Labarere et al., 2005). Various educational interventions with pediatric residents on breastfeeding have been shown to improve their knowledge, skills, comfort level, and support of breastfeeding (Bunik, et al., 2006; Feldman-Winter et al., 2010; Haughwout, et al., 2000; Hillenbrand & Larsen, 2002) and could be incorporated into the residency curriculum to improve physicians' ability to inform, educate, and empower their patients to breastfeed. However, improving interdisciplinary collaboration between various providers who manage breastfeeding, with a focus on valuing the work of lactation consultants and employing more lactation experts in their practices, may alleviate the role of the physician in the time-consuming management of breastfeeding. Lactation consultants have been found to provide more positive breastfeeding encouragement and support than nurses or physicians (Humenick, Hill, & Spiegelberg, 1998) and are important team members in the overall effort to improve breastfeeding rates (Thurman & Allen, 2008).

Statement of Need

Breastfeeding is a biological and socio-cultural practice involving the breastfeeding dyad, the family, the community, and various healthcare providers. Although breastfeeding intentions are high in the U.S. and many women (approximately 75%) will initiate breastfeeding, 60% of

women do not meet their breastfeeding goals (Centers for Disease Control and Prevention, 2009; Odom, Li, Scanlon, Perrine, & Grummer-Strawn, 2013). Results from the Infant Feeding Practices Study II found that among women who intended prenatally to breastfeed for at least two months, about 15% weaned prior to six weeks. Failure to receive "Baby-Friendly" hospital practices, which have been found to improve breastfeeding success, further impacted the duration of breastfeeding among these women, such that one third of women with prenatal intentions to breastfeed for at least two months weaned before six weeks if they did not experience any "Baby-Friendly" hospital practices (DiGirolamo, Grummer-Strawn, & Fein, 2008). Furthermore, the highest drop off in breastfeeding is within the first two to four weeks postpartum (Ertem, Votto, & Leventhal, 2001; Kuan et al., 1999; Taveras et al., 2003). Women who experience problems in the first few days postpartum are more likely to discontinue breastfeeding by two weeks (Taveras, et al., 2003). International Board Certified Lactation Consultants, or IBCLCs, are the only internationally recognized health care professionals specifically trained to be able to manage breastfeeding and human lactation (International Board of Lactation Consultant Examiners, 2012; International Lactation Consultant Association, 2011). The profession of lactation consulting is only about 27 years old, though the number of IBCLCs has increased dramatically since 1985. As of January 1, 2011 there were over 11,000 IBCLCs in the U.S. alone and over 25,000 internationally (International Board of Lactation Consultant Examiners, 2011). Despite this increase in the number of IBCLCs, there is virtually no research on the perspective of the lactation consultant regarding barriers to the professional management of early breastfeeding problems.

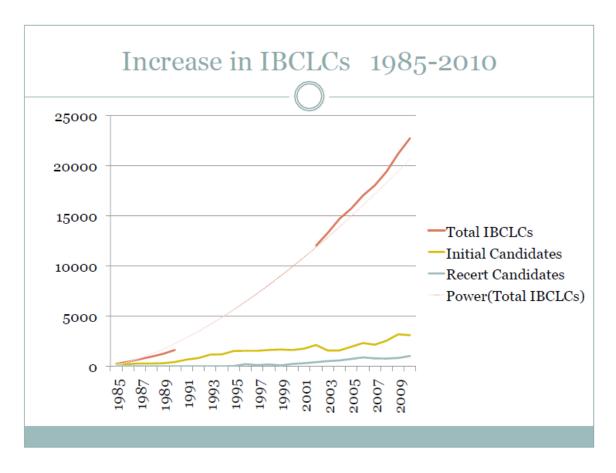


Figure 1 – Trends in IBCLCs Over Time (Eden, 2011)

The "Surgeon General's Call to Action to Support Breastfeeding" (2011) offers recommended actions across the various socio-ecological levels where breastfeeding barriers exist. Specifically, the Report calls for 20 actions, which are organized by the following categories:

- Actions for Mothers and Their Families
- Actions for Communities
- Actions for Health Care
- Actions for Employment
- Actions for Research and Surveillance
- Action for Public Health Infrastructure

- Under "Actions for Health Care," the recommended action items include the following:
- (Action 7) Ensure that maternity care practices throughout the US are fully supportive of breastfeeding,
- (Action 8) Develop systems to guarantee continuity of skilled support for lactation between hospitals and health care settings in the community,
- (Action 9) Provide education and training in breastfeeding for all health professionals,
- (Action 10) Include basic support for breastfeeding as a standard of care for midwives, obstetricians, family physicians, nurse practitioners and pediatricians,
- (Action 11) Ensure access to services provided by International Board Certified Lactation Consultants,
- (Action 12) Identify and address obstacles to greater availability of safe banked donor milk for fragile infants (U.S. Department of Health and Human Services, 2011b)

These specific requests speak to the need to better understand the barriers that may preclude the ability of "skilled support" to provide the best care possible. In particular, the justification for Action 11 (See Table 1) in the report specifically states, "Better access to the care provided by IBCLCs can be achieved by accepting them as core members of the health care team and creating opportunities to prepare and train more IBCLCs from racial and ethnic minority groups that are currently not well represented in this profession" (p. 48). One of the barriers to breastfeeding for some women may be simply having access to quality lactation support services. To address this access issue, the Surgeon General's Call to Action suggests implementation strategies such as treating lactation support as an "essential medical service" by the health care system as a whole and by third-party payers.

Table 1 – Surgeon General's Call to Action to Support Breastfeeding Action 11

Action 11. Ensure access to services provided by International Board Certified Lactation Consultants.		
Implementation Strategies	Potential Actors	
Include support for lactation as an essential medical service for pregnant women, breastfeeding mothers, and children.	HHS/CMS ⁵ Third-party payers	
Provide reimbursement for International Board Certified Lactation Consultants (IBCLCs) independent of their having other professional certification or licensure.	HHS/CMS Third-party payers	
Work to increase the number of racial and ethnic minority IBCLCs to better mirror the U.S. population.	HHS/HRSA	

The need to increase the diversity among lactation providers is especially important because of the lower rates of breastfeeding among low-income and minority women. By increasing diversity and providing reimbursement for specific breastfeeding management services provided by IBCLCs, improved access to lactation support for those most at risk for non-initiation and early weaning can be achieved (U.S. Department of Health and Human Services, 2011b). However, to better incorporate IBCLCs into the health care team, ensure access to their services, and support lactation consulting as a profession, inquiry into the barriers to providing management for early breastfeeding problems, from the perspective of the IBCLC, is warranted.

Purpose and Research Questions

The purpose of this exploratory study is to understand the nature of International

Board Certified Lactation Consultants' (IBCLCs) perceived barriers to the professional

management of early breastfeeding problems. This purpose was achieved by answering the following research questions:

Research Questions:

- 1. What do IBCLCs perceive to be the barriers to providing professional support and management of early breastfeeding problems?
- 2. How do the perceived barriers to managing early breastfeeding problems vary by the type of breastfeeding problem?
- 3. What are the roles of various health care professionals in providing breastfeeding support and management of early breastfeeding problems, as perceived by the IBCLC?
- 4. How do these roles impact the ability of the IBCLC to provide support and management of early breastfeeding problems?
- 5. What are the communication strategies and other processes through which IBCLCs work with a) other health care professionals and b) families to provide support and management of early breastfeeding problems?

Rationale

There is literature to suggest that a lack of coordinated or integrated care can impact the delivery of best practices to support and encourage breastfeeding (Arthur, et al., 2003; Krogstrand & Parr, 2005; Register, Eren, Lowdermilk, Hammond, & Tully, 2000; Schanler, et al., 1999; Sleutel, Schultz, & Wyble, 2007; Szucs, et al., 2009; Taveras et al., 2004a). However, there is a lack of knowledge about the barriers to the provision of this integrated breastfeeding support. In addition, the voices of professionals trained in lactation support and management in

the literature are sparse. Thus, to address the lack of knowledge about barriers to the management of early breastfeeding problems, this study aimed to first understand the perspective of lactation professionals regarding the early breastfeeding problems that are perhaps most challenging to manage and support. By exploring the perceptions of IBCLCs, this study also attempted to reveal how they interpret their experiences and roles in relation to other providers and their patients/clients in decision-making processes. There is a need to understand the perspective of the providers working most closely with the breastfeeding dyad regarding the management of breastfeeding problems. Exploring the perspective of the lactation consultant is necessary for identifying areas to address the gaps in this management process with the ultimate goal of increasing breastfeeding success and reducing the incidence of early weaning.

The study also allows for exploration of an area of breastfeeding that has not been well studied and adds the perspectives of lactation consultants to the literature, a population that also has not been well studied. The outcomes of this study identify the need for additional research into the barriers to the professional management of early breastfeeding problems from the perspective of other providers on the health care team or from the perspective of mothers who experience such problems. The results from this study could lead to the design of quantitative instruments for studies with a larger, perhaps national sample of professionals. The results of the study provide new insight into the breastfeeding problems that are most difficult to manage and the ways in which IBCLCs navigate the barriers to managing these problems. In addition, the results reveal factors that facilitate the management of early breastfeeding problems, which provide much needed information for working on the issues outlined in the Surgeon General's Call to Action. The ultimate goal from this proposed research study is to add to the literature to inform the development of interventions aimed at improving the professional management of

early breastfeeding problems in order to reduce the incidence of early weaning during the first few high-risk weeks postpartum.

Key Terms

- **Breastfeeding duration:** The length of time that breast milk is provided to an infant, in any amount (full, partial, or token) and by any method of delivery (at the breast, through a bottle, through a supplemental nursing device, in a cup, etc.)
- Breastfeeding exclusivity: Infant receives breast milk only (method of delivery does not
 define exclusivity) and no other solids or liquids. In some cases, 'exclusivity' does not
 preclude the infrequent provision of vitamins, minerals, water, juice, or other ritualistic
 liquids
- **Breastfeeding initiation:** The provision of any (even just one sip) of the mother's breast milk to the infant. Sometimes breastfeeding intention is measured as initiation.
- Early breastfeeding problems: Breastfeeding challenges that are more likely to occur in the first few weeks postpartum and often lead to early weaning.
- **Epoche or bracketing:** "The first step in 'phenomenological reduction,' the process of data analysis in which the researcher sets aside, as far as is humanly possible, all preconceived experiences to best understand the experiences of participants in the study" (Creswell, 2007, p. 235).
- Family-Centered Care: "An approach to healthcare based on mutually beneficial partnerships among patients, families, and healthcare professionals" (Johnson, 2000).
- Interprofessional collaboration: Also often called "Collaborative practice." "In health-care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, careers and

communities to deliver the highest quality of care across settings. * Practice includes both clinical and non-clinical health-related work, such as diagnosis, treatment, surveillance, health communications, management and sanitation engineering" (World Health Organization, 2010).

- Management (of breastfeeding problems): Providing care through assessment,
 diagnosis, treatment, referral, planning, intervention, evaluation and support related to
 problems experienced by either the mother or infant in the mother-infant dyad.
- Maternal-infant dyad: Two individuals regarded as a pair, in this case the mother and the infant.
- **Scope of practice:** The range of approved responsibility determined by the professional credential which has a distinct set of defined boundaries put forth by the practice guidelines of the credential
- Weaning: The process of transitioning an infant from receiving breast milk to a diet that consists of foods and liquids other than breast milk. The process begins the first time the infant is offered anything other than breast milk and. Weaning can occur quickly or gradually over years.

CHAPTER 2: LITERATURE REVIEW

Breastfeeding as a Socio-Cultural Behavior

The method of infant feeding by 21st century mothers in the U.S. is dependent on a multitude of factors, including their biological, social, and cultural roles within their families and communities. To truly succeed at improving breastfeeding outcomes, culturally-competent health promotion efforts must first contextualize breastfeeding practices within both dominant and marginalized cultures of motherhood. It is not enough to say, for example, that low-income African American women should breastfeed because it is the best nutritive and economic choice; rather, if health care providers are to effectively promote breastfeeding, it is critical to first understand how various cultural groups of women interpret and understand their roles as mothers and the social conditions that support or undermine these roles. Within one's culture, the meaning of motherhood (and how breastfeeding fits into one's notion of motherhood) may be unique and individual for each family.

The cultural significance of breastfeeding has changed dramatically in the U.S. over time, and continues to shift as mothers remain a large proportion of the workforce. Dettwyler (1995) describes four assumptions that underlie cultural breastfeeding narratives in the U.S.: 1) breasts are primarily intended for sexual purposes, 2) the importance of breastfeeding is for its nutritive value, 3) breastfeeding is only appropriate for young infants, and 4) breastfeeding is a private affair. These assumptions are useful in attempting to better understand the cultural context in which women make decisions about how, how long, why, and even where to breastfeed their children.

Women breastfeed, formula feed, provide pumped breast milk, or some combination for a variety of reasons. In addition, a multitude of factors influence the duration of breastfeeding as well as changes in infant feeding practices. Women's infant feeding decisions are also often culture specific and diverse even within the U.S., as well as compared to other nations of varying economic statuses. Socio-cultural attitudes about infant feeding practices, as well as access to formula or breast milk (pumped or at breast), are shaping women's infant feeding decisions. It is not only a general socio-cultural discomfort with breastfeeding that influences women's breastfeeding intentions in the U.S., but also attitudes about formula feeding. One study found that higher levels of comfort with formula feeding was not only strongly associated with decreased breastfeeding intentions, but that this comfort with formula mediated 37% of African American versus non-African American women's intentions to breastfeed. Thus, differing cultural attitudes about formula may be equally important for understanding racial and ethnic disparities in breastfeeding rates and should be considered when designing culturally-competent breastfeeding promotion interventions (Nommsen-Rivers, Chantry, Cohen, & Dewey, 2010).

In addition, working mothers and evolving breast pump technology is changing the way women feed their infants in Western culture. The Family and Medical Leave Act (FMLA), enacted in 1993 in the United States, provides unpaid, job-protected leave of up to 12 weeks (within a 12-month period) for family or medical reasons, and was intended to assist families in balancing the competing demands between work and home responsibilities (U.S. Department of Labor, Employment Standards Administration, & Division, November 2007). However, this federal law provides no guaranteed paid maternity leave and when compared to 21 other developed countries (high-income countries 1), the U.S. ranks last. Most of these other high-

-

¹ Sweden, Finland, Greece, Norway, Belgium, France, Italy, Portugal, Spain, Germany, United States, Denmark, Netherlands, United Kingdom, Austria, Canada, Ireland, New Zealand, Japan, Australia, and Switzerland

income countries provide between three months and one year of full-time equivalent (FTE) paid leave (Ray, Gornick, & Schmitt, 2008).

According to a study conducted by The Institute for Health and Social Policy to compare policies that support working families, the United States ranks poorly among other nations in terms of paid leave for illness and family care. The study used data (from the UN, OECD, World Bank, and ILO) to compare policies from 177 countries. With regard to childbearing, of 173 countries included, the U.S. was one of only 5 countries (the others are Swaziland, Lesotho, Papua New Guinea, and Liberia) that do not guarantee any paid leave. Ninety-eight of the 166 countries offering paid leave provide at least 14 weeks of paid leave; 66 countries provide paid paternity leave and 31 of these countries offer paid paternity leave for at least 14 weeks. Furthermore, working women's right to breastfeed is protected in at least 107 countries, with 73 of these countries providing paid breaks to support breastfeeding (Heymann, Earle, & Hayes, 2007). In the U.S., working full-time has been found to be inversely associated with breastfeeding duration compared to mothers who do not work (Mandal, Roe, & Fein, 2010; Ogbuanu, Glover, Probst, Hussey, & Liu, 2011; Ryan, Zhou, & Arensberg, 2006).

While the availability of breast pumps has facilitated the provision of breast milk to many women's infants and children, the use of breast pumps in the U.S. has moved beyond traditional uses for infants of working mothers or preterm infants, and is now also commonly used among non-working mothers of term infants for a variety of reasons. Recent advances in breast pump technology, has increased the effectiveness of pumps to remove milk more efficiently and for longer durations (Rasmussen & Geraghty, 2011).

The most commonly cited reason for expressing breast milk by women enrolled in the Infant Feeding Practices Study II (IFPS II) was to allow for another person to feed breast milk to

their infant. Other common reasons for expressing breast milk included: to have an emergency supply, to relieve engorgement, to increase milk supply, to have for when the mother doesn't want to breastfeed, to keep up milk supply when the infant is unable to nurse, to mix with cereal/food, to avoid nursing with sore nipples, and to donate (Labiner-Wolfe, Fein, Shealy, & Wang, 2008). In an Australian study of women's experiences of expressing milk, the researchers found that having enough milk or making more milk were the most important reasons cited for expressing. Women in this study also cited reasons such as the need to store extra breast milk, to relieve engorged breasts, to allow someone else to feed the infant, to relieve sore nipples, and to provide breast milk while at work. Of note, one-third of women in this study agreed with these statements: "breast pump/s enabled me to feed as long as I wanted to" and "without a breast pump, I would have stopped breastfeeding sooner" (Clemons & Amir, 2010).

While breast milk expression is not new, the technological advances in breast pumps have contributed to the normalization of milk expression as a part of women's breastfeeding experiences. In a study of lactation consultants' perspectives on breast pumps, a central theme was the perception that breast pumps have moved from "a luxury" to "a necessity." Lactation consultants cited several reasons for the changing cultural views about breast pumps: more technological births, increased availability (and visibility) of pumps in hospitals, less dedication to working through early latching difficulties, and an increased maternal desire for control related to milk supply or overall feeding practices (Buckley, 2009). Researching "breastfeeding" as a socio-cultural practice has become much more complicated as 21st century mothers combine endless variations of providing breast milk and breast milk substitutes to their infants. Geraghty and Rasmussen suggest that the variation in the delivery method of breast milk to infants (including donor milk) needs to be better explored. They suggest that the increase in

providing pumped breast milk may be associated with both benefits and harms to the mother and the infant, which require further research (Geraghty & Rasmussen, 2010; Rasmussen & Geraghty, 2011). In addition, it is important to conduct more research with mothers who are exclusively pumping their breasts to better understand the reasons why they are not feeding their infants at the breast (Shealy, Scanlon, Labiner-Wolfe, Fein, & Grummer-Strawn, 2008). The method of feeding an infant is important, especially considering recent research on differences in infants' self-regulation of milk intake by breast versus with a bottle, and the possible relationship between infants' self-regulation and future childhood obesity related to appetite regulation (Disantis, Collins, Fisher, & Davey, 2011; Li, Fein, & Grummer-Strawn, 2010).

As a biosocial practice, breastfeeding is firmly situated in medical discourse and research, with breastfeeding advocate and support persons (e.g., lactation counselors/consultants, medical practitioners) turning to evidence-based practice to support their agendas/goals in breastfeeding promotion. The challenge is to incorporate the socio-cultural context of breastfeeding into research and practice.

Factors Associated with Breastfeeding in the United States

Factors that impact breastfeeding include maternal and infant demographic factors, physiological factors, psychological factors, social factors, and state and hospital policies. These factors are often unique depending on the population, and may be particularly acute among vulnerable populations such as premature/low birth weight infants and those infants born with defects, abnormalities, or disabilities.

Demographic Factors

In the United States, research has demonstrated that breastfeeding rates vary significantly for particular demographics of women (Bentley, Dee, & Jensen, 2003; Kogan, Singh, Dee,

Belanoff, & Grummer-Strawn, 2008; Li, Darling, Maurice, Barker, & Grummer-Strawn, 2005; Newacheck, Kim, Blumberg, & Rising, 2008; Taylor, Risica, Geller, Kirtania, & Cabral, 2006). Among infants born in 2007, the CDC reports that breastfeeding rates at 6 months (with or without supplementation) were lowest among African American or Black women (27.9%) and highest among Asian women (58.6%), Hispanic or Latino women (46%) and White women (45.1%) (Centers for Disease Control and Prevention, 2010). Immigrant mothers also have higher rates of breastfeeding initiation and longer duration than women of the same race/ethnicity born in the U.S. (Celi, Rich-Edwards, Richardson, Kleinman, & Gillman, 2005; Merewood, Brooks, Bauchner, MacAuley, & Mehta, 2006; Singh, Kogan, & Dee, 2007). Studies have found that for every year a woman resides in the U.S., the odds of breastfeeding decreases by 4% (Thulier & Mercer, 2009).

Predictors positively associated with breastfeeding initiation and breastfeeding at 6 months of age include mothers who are older (>30), college educated, married, and not working outside the home. Breastfeeding initiation and duration rates are higher in the West and New England and lower in the North and South (Centers for Disease Control and Prevention, 2010; Kogan, et al., 2008; Li, et al., 2005; Ryan, Zhou, & Gaston, 2004; Taylor, et al., 2006).

Much of the literature suggests that women who participate in the WIC program have lower breastfeeding rates than women who do not participate in WIC (Bunik, Krebs, Beaty, McClatchey, & Olds, 2009; Jensen, 2011; Ziol-Guest & Hernandez, 2010). Supplementing with formula in the first two days of life is higher among those receiving support from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program (31%) than among those eligible, but not receiving WIC (19.7%) and those not eligible for WIC (20.1%) (Centers for Disease Control and Prevention, 2010). Due to the impact of supplementation on

milk supply, free distribution of formula by WIC may be undermining breastfeeding success for these women (Jensen, 2011). Some studies have suggested that the market value of formula is higher than the alternative expanded food package provided to breastfeeding mothers, thus, the value of formula may act as a disincentive for breastfeeding (Holmes, Chin, Kaczorowski, & Howard, 2009; Jensen, 2011). However, among working mothers who participate in WIC and breastfeed, access to an electric breast pump appears to be an important factor in increasing breastfeeding duration. One study found that compared to breastfeeding mothers who did not receive a pump from WIC, mothers who did receive a pump from WIC when requested were 5.5 times more likely to not request formula at 6 months. A survival analysis suggests that the impact of having access to the pump was most effective in the first one to three months postpartum. While 100% of the enrolled mothers who received a pump were still breastfeeding at one month, approximately 20% of mothers who did not receive a pump had stopped breastfeeding by one month and this dropped another 20% by three months (Meehan et al., 2008). Again, the significance of breast pump technology appears to be intricately related to breastfeeding in Western culture.

Policy and Breastfeeding

State legislation, hospital policies, and international standards can indirectly impact breastfeeding success in terms of ensuring that women have institutional support for breastfeeding. As of May 2011 in the U.S., 45 states, plus the Virgin Islands and the District of Columbia, have legislation in place that protects women's right to breastfeed in public places; however, only 24 states (and the District of Columbia and Puerto Rico) currently have legislation that mandates employer lactation support (Institute of Medicine (IOM), 2011) and only 6 states

have optimal regulations for child care centers to support lactation (Centers for Disease Control and Prevention (CDC), 2013).

There are several programs, recommendations, and policies underway to improve breastfeeding rates at the policy level. The Baby Friendly Hospital Initiative (BFHI) is a WHO and United Nations Children's Fund (UNICEF) sponsored program that focuses on providing the optimal care to new mothers to encourage the successful initiation and continuation of breastfeeding (Baby Friendly Hospital Initiative, 2010). The program is intended to protect, promote, and support breastfeeding through encouraging the adoption of "Ten Steps to Successful Breastfeeding" in hospitals (see Table 2) (Baby Friendly Hospital Initiative, 2010). The literature suggests that BFHI-designated hospitals do have better initiation, duration, and exclusivity rates (Cramton, Zain-Ul-Abideen, & Whalen, 2009; Hannula, Kaunonen, & Tarkka, 2008; Philipp et al., 2001; Rosenberg, Stull, Adler, Kasehagen, & Crivelli-Kovach, 2008); however, only 12% of pediatricians reported familiarity with the "Ten Steps" guidelines, according to a survey of AAP members (Feldman-Winter, et al., 2008).

Table 2 - Ten Steps to Successful Breastfeeding

"The Ten Steps to Successful Breastfeeding" (Baby Friendly Hospital Initiative, 2010)

- 1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
- 2. Train all health care staff in skills necessary to implement this policy.
- 3. Inform all pregnant women about the benefits and management of breastfeeding.
- 4. Help mothers initiate breastfeeding within one hour of birth.
- 5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
- 6. Give newborn infants no food or drink other than breastmilk, unless *medically* indicated.
- 7. Practice "rooming in"-- allow mothers and infants to remain together 24 hours a day.
- 8. Encourage breastfeeding on demand.
- 9. Give no pacifiers or artificial nipples to breastfeeding infants.
- 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic

In connection with the recent interest in breastfeeding as an important element in childhood obesity-prevention, many organizations such as the CDC, IOM, and AAP are working to increase breastfeeding rates at various federal, state, and local levels. In addition, Kaiser Permanente recently announced its commitment to supporting breastfeeding in their hospitals by joining with the Partnership for a Healthier America. Kaiser Permanente committed to transforming all 29 of its maternity care hospitals as Baby-Friendly designated and/or as participants in the Joint Commission's Perinatal Core Measures program by January 1, 2013. One of the HP2020 objectives is to "increase the proportion of live births that occur in facilities that provide recommended care for lactating mothers and their babies" to 8.1 percent. Currently, less than 5 percent of births in the U.S. are born in Baby-Friendly hospitals (Centers for Disease Control and Prevention (CDC), 2013).

Maternal employment is a significant factor associated with breastfeeding duration. Research has shown a consistent negative correlation between women who work outside the home and breastfeeding duration (Scott, Binns, Oddy, & Graham, 2006; Taveras, et al., 2003; Thulier & Mercer, 2009) which may be due to inflexible working conditions and lack of time, space, and support for breastfeeding or pumping breaks. The Business Case for Breastfeeding, a program of the Department of Health and Human Services, Office on Women's Health, aims to educate employers about the importance of developing and supporting lactation practices in the workplace for their employees (Office on Women's Health, 2010). On March 23, 2010, President Obama signed into law the Patient Protection and Affordable Care Act (PPACA), which amended Section 7 of the Fair Labor Standards Act to require employers to provide reasonable break time to employees to express breast milk whenever needed for up to the child's

first birthday. The amendment also requires provision of a private space (other than a bathroom) for employees to express their milk (United States Department of Labor, 2010).

Intense marketing of formula to women birthing in hospitals and/or participating in the WIC program can also undermine the breastfeeding relationship. Formula companies donate large sums of money to many different health organizations, invest heavily in hospital discharge gift baskets that contain their products, and mass market their products to women through the mail and through WIC clinics (Hausman, 2003; Van Esterik, 1989). This aggressive marketing of infant formula is opposed by the International Code of Marketing of Breast-milk Substitutes, jointly adopted by the WHO and UNICEF in 1981. The aim of the Code is to "contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding, and by ensuring the proper use of breast-milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution" (World Health Organization & UNICEF, 1981, p.8). The decades-long boycott of Nestle suggests that the Code would benefit from more stringent enforcement and regulation (Baby Milk Action, 2010). In addition, formula recalls due to bug contamination (Abbott Laboratories, 2010) and perchlorate (a rocket fuel chemical) (National Center for Environmental Health & Centers for Disease Control and Prevention, 2009) indicate a serious need for legal enforcement of infant food safety standards.

Social Factors

Social support and professional support are critical factors related to breastfeeding outcomes. These support systems are particularly important for adolescent and young mothers, who are at a higher risk for not breastfeeding. One study found that parental norms were more influential on adolescents' breastfeeding beliefs than peer norms (Swanson, Power, Kaur, Carter,

& Shepherd, 2006). In addition, embarrassment about breastfeeding in public has been found to negatively influence adolescents' and university students' attitudes toward breastfeeding (Earle, 2002; Forrester, Wheelock, & Warren, 1997). A mother's perception that her partner and/or mother feel positively toward breastfeeding is associated with longer breastfeeding duration (Scott, et al., 2006).

In addition to social support, professional support by lactation consultants/counselors, nurses, and pediatricians plays a critical role in a woman's breastfeeding experience. Many professionals report inadequate knowledge and training the area of breastfeeding management and this lack of skilled support can negatively impact breastfeeding success (Feldman-Winter, et al., 2008; Freed, Clark, Lohr, et al., 1995; Krogstrand & Parr, 2005; Philipp, Merewood, & O'Brien, 2001). Physician practices regarding formula supplementation recommendations have been found to impact mothers' decisions to continue exclusive breastfeeding (Taveras, et al., 2004b). Hospital practices also impact breastfeeding such that BFHI-designated facilities, while not perfect, demonstrate a trend toward improved breastfeeding success for their mothers (Abrahams & Labbok, 2009; Merewood, Philipp, Chawla, & Cimo, 2003). However, only 7.15% of live births in the U.S. (2010 provisional data) occur in designated BFHI facilities (Centers for Disease Control and Prevention (CDC), 2013). A review of the impact of lactation consultants on breastfeeding success suggests that the use of International Board Certified Lactation Consultants (IBCLCs) in a primary care (outpatient) setting appear to correlate positively with breastfeeding duration (Thurman & Allen, 2008).

Psychological Factors

Psychological factors associated with breastfeeding include self-efficacy and confidence, prenatal intention, and postpartum depression. Perceived insufficient milk and belief that the

infant isn't satisfied with breast milk alone are among the top reasons women report for early weaning and are most common among low-income and Hispanic women (Li, et al., 2008). The concern about milk supply and infant satisfaction are related to maternal confidence and self-efficacy, which have been found to impact breastfeeding duration. Some studies have shown that prior intention and attitude toward breastfeeding predict infant feeding method (Chezem, Friesen, & Boettcher, 2003; DiGirolamo, Thompson, Martorell, Fein, & Grummer-Strawn, 2005; Losch, Dungy, Russell, & Dusdieker, 1995). In particular, positive beliefs and attitudes, and higher levels of knowledge about breastfeeding, positively predict future intention to breastfeed (Fairbrother & Stanger-Ross, 2010; Swanson, et al., 2006). Recent research found that breastfeeding self-efficacy and comfort with formula feeding or breastfeeding independently predict breastfeeding intention. African-American mothers in this study had higher comfort with formula feeding, and this variable predicted and mediated the ethnic disparity in the intention to breastfeed (Nommsen-Rivers, et al., 2010).

Research on the relationship between depression and breastfeeding is mixed. A review of the literature found that some studies have reported a correlation between bottle-feeding and postpartum depression (PPD) and others have reported an association between breastfeeding and lower levels of depression, suggesting that breastfeeding may be protective for maternal mental health. However, results of other studies suggest that mothers with depressive symptoms are more likely to wean earlier and that depression has a negative impact on breastfeeding self-efficacy, which indicates that depression is a risk factor for poor breastfeeding outcomes (Dennis & McQueen, 2009).

Physiological Factors

Physiological factors that impact breastfeeding include infant health issues, maternal health and behavior, and birth experience. Infant health: Low birth weight infants (LBW) make up about 8.2% of all U.S. births (Hamilton, 2009). Preterm and LBW infants are at a higher risk for many acute, short- and long-term complications, and face greater challenges with regard to successful initiation and duration of breastfeeding due to their fragile physical and developmental state.³ For infants who are LBW, preterm, and/or in the neonatal intensive care unit (NICU), skin-to-skin, or kangaroo mother care (KMC), helps to increase milk production and provide ongoing access to human milk for the newborn.⁴ Continuous access promotes increased breastfeeding duration with these vulnerable infants by improving weight gain and increasing opportunities for non-nutritive sucking, which has been demonstrated to be essential to transitioning to breastfeeding among infants who are still receiving gavage⁵ feedings (Spatz, 2004). Breastfeeding is further supported by KMC through using a cup, spoon, or dropper to administer human milk when breastfeeding is not initially possible (Charpak, et al., 2005). These bottle alternatives help to avoid potential latching problems when the infant is able to initiate breastfeeding. Challenges to providing breast milk to infants in the NICU include a lack of access to breast pumps, lack of support, physical separation, stress, lack of staff training, and lack of knowledge by the parents (Gonzalez et al., 2003; Merewood, et al., 2003; Renfrew et al., 2009).

-

² Including respiratory distress syndrome, intraventricular hemorrhage, patent ductus arteriosus, necrotizing entercolitis, retinopathy of prematurity, disabilities, sensory impairments, and behavioral disorders, etc. (Spatz, 2004).

³ The benefits of human milk are particularly critical for preterm infants due to its ability to protect against necrotizing entercolitis and sepsis, enhance intelligence, improve visual acuity, protect against pathogens, provide complete nutrition, and enhance the immune system (Spatz, 2004).

⁴ Since premature infants are at higher risk for developmental problems, access to human milk is critical to improving long-term neurological development and IQ (Charpak et al., 2005; Spatz, 2004).

⁵ a process for feeding newborns formula or breast milk through a tube that is passed directly to the stomach via the infant's nose or mouth.

Even among full-term infants, various infant-related complications can impact breastfeeding in the early weeks. Some of these complications include multiples, congenital abnormalities and disabilities, metabolic disorders, upper airway problems, neurological diseases and disorders, and gastrointestinal problems (Walker, 2011).

Maternal health and behavior: Maternal barriers to breastfeeding success in the U.S. are multifactorial and range from perceived insufficient milk supply (Arora, McJunkin, Wehrer, & Kuhn, 2000; Lewallen et al., 2006; Li, et al., 2008; Schwartz, et al., 2002), latch problems, and painful, sore nipples (Lewallen, et al., 2006; Morland-Schultz & Hill, 2005; Riordan, et al., 2001; Schwartz, et al., 2002), to perceived lack of social support (Arora, et al., 2000), return to work issues (Arora, et al., 2000; Lewallen, et al., 2006; Schwartz, et al., 2002), concern about use of birth control, medications, or smoking (Ahluwalia, Morrow, & Hsia, 2005; Li, et al., 2008), and belief that the infant is self-weaning (Li, et al., 2008). Inverted nipples; endocrine, metabolic, and autoimmune conditions; maternal disabilities; breast augmentation/reduction; and other breast abnormalities may also impact breastfeeding (Walker, 2011). Nipple pain, generally caused by poor latch, is commonly associated with early termination of breastfeeding within the first few weeks (Morland-Schultz & Hill, 2005; Riordan, et al., 2001; Schwartz, et al., 2002) and has been associated with high levels of depression and/or emotional distress (Amir, Dennerstein, Garland, Fisher, & Farish, 1996). Early breastfeeding assessments and support can help to identify the cause of the nipple pain and prevent early weaning.

Maternal overweight and obesity also impact breastfeeding initiation and duration.

Systematic reviews of the literature have found strong support for the hypothesis that there exists a dose-dependent inverse relationship between maternal BMI and duration of breastfeeding

(Amir & Donath, 2007; Wojcicki, 2011). The mechanisms are not clearly defined, but range

from biological, physiological, and medical issues to socio-cultural, psychosocial, and psychological issues⁶ (Amir & Donath, 2007; Jevitt, et al., 2007; Rasmussen, 2007; Rasmussen, Hilson, & Kjolhede, 2001). A study by Rasmussen and Kjolhede (2004) found a lower prolactin response to suckling in obese women which can impact lactogenesis and milk production over time. Jevitt and colleagues (2007) explain the significance of delayed lactation for the continuation of breastfeeding. They suggest that if lactogenesis has not occurred before postpartum discharge from the hospital, these women may not feel confident in their ability to make enough milk for their baby and switch to formula (Jevitt, et al., 2007). In addition, pediatricians concerned with inadequate infant weight gain may also encourage supplementation, which can adversely affect milk production and lead to early weaning.

Birthing practices: Birth practices common in the U.S. discourage and undermine breastfeeding, including: lying in a supine position, staying immobile, having food and drink withheld, chemical induction and/or augmentation of labor, use of opiates for pain, cesarean delivery, operative vaginal births (forceps/vacuum extractors), and prolonged labor (especially with fetus in occiput posterior position) (D. C. Chen, Nommsen-Rivers, Dewey, & Lonnerdal, 1998; Smith, 2010). Labor medications in particular can compromise the infant's ability to suck, swallow, and breathe normally to initiate breastfeeding. Also, a cascade of interventions leads to higher likelihood of separation of mother and baby after birth, which interrupts the neurological process of skin and eye contact that assists with milk flow. On the other hand, unmedicated and uncomplicated birth generally facilitates the initiation of breastfeeding (Smith, 2010).

-

⁶ Biological factors such as large areolas and flat nipples are often characteristic in overweight and obese women with large breasts, making it more difficult for the newborn to latch onto the breast properly (Jevitt, Hernandez, & Groer, 2007). Cultural issues such as breastfeeding acceptance, psychosocial issues such as social support, and psychological issues such as self-esteem and depression also may negatively impact breastfeeding success and duration among overweight and obese women and need to be explored further. Birth outcomes that are more likely for obese women, such as macrosomia and cesarean delivery, also may impact the breastfeeding dyad at both the maternal and infant level.

Clearly, there is an extensive set of factors that are involved with a woman's decision and ability to breastfeed her children in the U.S. These factors described above are often interrelated and must be acknowledged as such when attempting to understand and support any woman's individual breastfeeding experience.

Factors Related to Early Weaning

As described above, there are multitudinous factors that influence breastfeeding initiation and duration. The nation's "Breastfeeding Report Card" in comparison to the Healthy People 2020 goals and objectives for breastfeeding (see Table 3) is indicative of the need to address barriers to breastfeeding initiation and duration. While the nation's breastfeeding initiation rate (denoted as "ever breastfeed" by the CDC) is just over 75%, exclusive breastfeeding by three months is only 37.7%, a drop of about 50%.

Table 3 - Healthy People 2020 Goals and U.S. Breastfeeding Report Card

	Healthy People 2020 Goals	National Rates 2010	Florida Rates 2010
Ever breastfed	81.9%	76.5%	71.8%
Breastfeeding at 6 months	60.6%	49.0%	40.9%
Breastfeeding at 12 months	34.1%	27.0%	20.0%
Exclusive breastfeeding at 3 months	46.2%	37.7%	29.2%
Exclusive breastfeeding at 6 months	25.5%	16.4%	10.6%
Percent of infants receiving formula before 2 days	14.2%	24.2%	34.1%

(Centers for Disease Control and Prevention (CDC), 2013; U.S. Department of Health and Human Services, 2011a)

Age-related factors

Factors related to formula supplementation and/or weaning have been found to differ by age of the infant. Weaning within the first few weeks is often related to physiological issues such as difficulty with latching and positioning, sore nipples, and perceived insufficient milk. Weaning after four weeks is more likely to be related to logistical or social factors such as pumping challenges and infant self-weaning perceptions (Ahluwalia, et al., 2005; Li, et al., 2008). A few national studies have been able to identify women's most commonly cited reasons for weaning their infants at different ages. In analyses conducted with data from the Infant Feeding Practices Study II (IFPS II), Li, Fein, Chen and Grummer-Strawn (2008) identified seven main factors that were related to women's decisions to stop breastfeeding their infants at various ages. The seven factors were:

"(1) lactational (6 reasons related to latch-on and nipple or breast problems), (2) psychosocial (7 reasons related to breastfeeding attitudes and social support), (3) nutritional (5 reasons related to concerns about milk supply), (4) lifestyle related (5 reasons related to diet, smoking, and personal freedom), (5) medical (4 reasons related to the mother's or infant's sickness or to the mother's pregnancy or plan for her next pregnancy), (6) milk pumping (2 reasons related to mothers not being able to or not wanting to express breast milk), and (7) self-weaning (3 reasons related to infants' biting, losing interest, or otherwise indicating that they were old enough to be weaned). These 7 factors accounted for 54% of the total variance in mothers' responses to the reasons why they stopped breastfeeding" (Li, et al., 2008, pp. S70-1).

In this study, the most commonly reported reasons for weaning within the first month were "Baby had trouble sucking and latching on" (53.7%), "Breast milk alone didn't satisfy my baby"

(49.7%), and "I didn't have enough milk" (51.7%). Similarly, these remained the top three reasons for weaning between the first and second month at 27.1%, 55.6%, and 52.2%, respectively. Perceived lack of satisfaction with only breast milk and concerns about milk supply continued to be important factors for mothers who weaned their infants between the ages of three to five months and six to eight months; however, the third most common reason was "My baby lost interest in nursing or began to wean himself or herself" (33.1%–47.9%) in these age ranges. After nine months, concerns about satisfaction by breast milk alone (43.5%), biting (31.7%), and perceived infant self-weaning (47.3%) became the top three cited reasons for weaning. The perception that breast milk alone did not satisfy their infants was among the most commonly cited reasons for weaning across all age groups (Li, et al., 2008).

This study demonstrates that within the first month after birth, lactational and nutritional factors have the largest impact on a mother's decision to wean, while psychosocial and milk-pumping issues become more important between two to three months of age, and perceptions of self-weaning became progressively more important after three months of age. Lactational factors generally decreased progressively after the first month, with the most significant drop from less than one month to two months. These lactational factors included sucking or latching problems; sore, cracked, or bleeding nipples; engorgement; breast infections or abscesses; excessive leaking; and painful breastfeeding (Li, et al., 2008).

In another study using data from IFPS II, researchers found that prenatal breastfeeding intentions are associated with initiation and duration but also that problems breastfeeding in the first week postpartum and emotional discomfort with breastfeeding were significant risk factors for weaning before 10 weeks. However, breastfeeding problems and emotional discomfort were not significantly associated with weaning in the 10<20 and 20<30 weeks postpartum; the authors

suggest that greater self-efficacy among some mothers who persevere through initial problems may explain the decreased influence of these factors on breastfeeding duration after 10 weeks (DiGirolamo, et al., 2005). The findings from both of these studies suggest a need for greater lactational support in the first few weeks following birth.

Ahluwalia, Morrow, and Hsia (2005), using two years of data from the Pregnancy Risk Assessment and Monitoring System (PRAMS), pooled data from 10 states and found that the primary reasons given for early weaning in this study included sore nipples, maternal perception of inadequate milk supply, infant difficulties with breastfeeding and maternal perception that the infant was not satisfied by breast milk alone. While issues with nipple pain and infant feeding difficulties were within the top four reasons for early weaning between one and four weeks postpartum (n=4687), nipple pain (34.9%) and baby had difficulty feeding (48.4%) were the top two reasons given for weaning before seven days postpartum (n=1105). In a study of factors related to breastfeeding success, Kuan and colleagues (1999) found that by four weeks postpartum, 17% of mothers who intended to breastfeed for at least one month had weaned. Mothers cited the following reasons for weaning by four weeks: latch/sucking problems (29.2%), painful breasts or nipples (18.0%), and baby seemed always hungry (10.1%).

Many studies have similarly reported that mothers who report early breastfeeding problems have a higher likelihood of weaning in the first few weeks postpartum (McLeod, Pullon, & Cookson, 2002; Schwartz, et al., 2002; Scott, et al., 2006; Tarrant, Younger, Sheridan-Pereira, & Kearney, 2011; Taveras, et al., 2003). While these and other studies have reported an association between breastfeeding problems and early weaning, some studies have not found this association. For example, in a study of primarily black (54%), Puerto Rican (34.4%), single (75%), and WIC-participating (91%) women, Ertem, Votto, and Leventhal (2001) did not find an

association between breastfeeding problems and early weaning; the authors suggest that this finding may explain why some early interventions focused on lactation support have not been found to be efficacious in other studies (Caulfield et al., 1998; Grossman, Harter, Sachs, & Kay, 1990). The main non-modifiable predictors of weaning by two weeks in this study were a lack of confidence in breastfeeding for two months and a belief that the infant enjoyed formula (Ertem, et al., 2001).

Early weaning is of particular concern to those working to increase breastfeeding duration and improve women's experiences of breastfeeding in the U.S. The highest drop-off in breastfeeding occurs within the first two to four weeks postpartum (Ertem, et al., 2001; Kuan, et al., 1999; Taveras, et al., 2003). Early lactation support generally focuses on helping mothers to achieve a comfortable and effective latch, bolster breastfeeding self-efficacy, and establish a robust milk supply, all of which address mothers' most commonly reported reasons for weaning in the first few weeks postpartum.

Hospital-related factors

Despite women's high intentions to breastfeed in the U.S., there is a large discrepancy between this intention and actual initiation and maintenance by the time a woman is discharged from the hospital with her baby. Changes in hospital maternity care practices have been found to successfully increase breastfeeding initiation and duration rates as reported in a Cochrane Review (Fairbank et al., 2000). Hospital practices that have been found to be associated with breastfeeding duration include pacifier use, the provision of discharge packs with free formula samples and coupons, assisting mothers to initiate breastfeeding within one hour of birth, rooming-in practices, no encouragement to breastfeed "on-demand," prenatal care classes, and the provision of information on breastfeeding support (Declercq, Labbok, Sakala, & O'Hara,

2009; DiGirolamo, et al., 2008; Langellier, Pia Chaparro, & Whaley, 2011; Scott, et al., 2006; Semenic, Loiselle, & Gottlieb, 2008; World Health Organization & UNICEF, 1981). On the one hand, systematic reviews and a meta-analysis have demonstrated the effectiveness of educational programs and lactation support on improving breastfeeding initiation and short-term duration (Guise et al., 2003; Hannula, et al., 2008; Palda, Guise, & Wathen, 2004). In contrast, written materials alone have not been found to significantly increase breastfeeding (Guise, et al., 2003; Palda, et al., 2004) and the provision of commercial discharge packets has been found to be detrimental to breastfeeding success (Langellier, et al., 2011; Palda, et al., 2004).

Data from the national Listening to Mothers II survey demonstrated that although 70% of primiparous mothers intended to exclusively breastfeed, by one week postpartum, only about 50% were exclusively breastfeeding. Several hospital practices were found to be significantly independently and/or cumulatively associated with mothers' failure to meet their exclusive breastfeeding intentions and included: in-hospital supplementing with water or formula, pacifier use, providing mothers with free formula samples or offers, and encouragement to feed "ondemand," among others (Declercq, et al., 2009). Avoidance of these practices has been found to promote breastfeeding and as such, have been incorporated into the BFHI's "Ten Steps" (DiGirolamo, et al., 2008; Kramer et al., 2001; World Health Organization & UNICEF, 1981). In addition, BFHI-designated hospitals generally have improved breastfeeding rates (Philipp, Merewood, Miller, et al., 2001). For example, one study that assessed six 'Baby-Friendly' practices on breastfeeding duration found that mothers who did not experience any 'Baby-Friendly' practices were approximately 13 times more likely to wean early when compared to mothers who experienced all six 'Baby-Friendly' practices (DiGirolamo, et al., 2008). See Figure 2 (Grummer-Strawn, 2012).

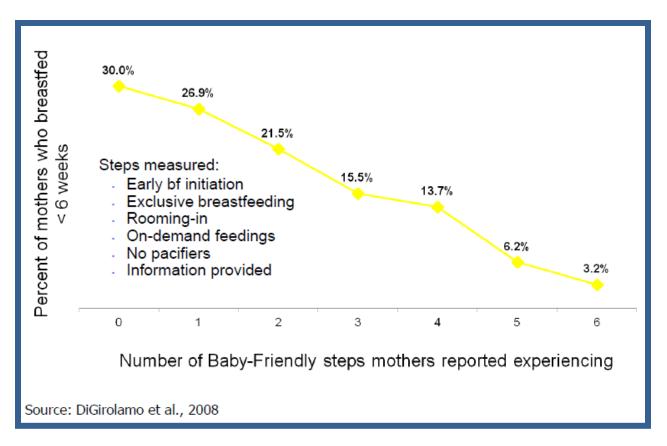


Figure 2 – Risk of Breastfeeding Cessation Before 6 Weeks by Number of Baby-Friendly Steps in Place (Grummer-Strawn, 2012)

Another study found that when women experienced all five specific hospital practices breastfeeding duration rates significantly increased. The five practices assessed were 1) breastfeeding within the first hour, 2) rooming-in, 3) no pacifier use, 4) breast milk only, and 5) receipt of a telephone number for support post-discharge. Among the mother who experienced all five practices, 68% were still breastfeeding at 16 weeks, compared to 53% of those who did not; these findings were found to be independent of the socioeconomic status of the mothers (Murray, Ricketts, & Dellaport, 2007). A survey of the nation's first 29 BFHI-designated hospitals found that the breastfeeding initiation rate at the Baby-Friendly hospitals averaged 83.8% in 2001, when the national average was 69.5%. The mean exclusive breastfeeding rate at the Baby-Friendly hospitals was 78.4%, compared with 46.3% nationwide. The steps reported

most difficult to implement were Step 2 (staff training), Step 6 (exclusive breastfeeding and the requirement to purchase formula), and Step 7 (rooming-in) (Merewood, Mehta, Chamberlain, Philipp, & Bauchner, 2005).

Despite the AAP's recommendation against routine supplementation, according to the 2009 mPINC⁷ report, almost 30% maternity care facilities in the U.S. and 36.5% in Florida reported supplementation with more than half of all healthy, full-term breastfeeding newborns as a general practice, up from 24% and 28% respectively, in 2007 (Centers for Disease Control and Prevention, 2011b). In Florida, about 85% of maternity care facilities do not "adhere to standard clinical practice guidelines against routine supplementation with formula, glucose water, or water" (Centers for Disease Control and Prevention, 2011a). In-hospital formula supplementation is common, and has been found to be associated with shorter breastfeeding duration (Declercq, et al., 2009; Semenic, et al., 2008); however, research suggests that the multitude of factors associated with this practice are complex and deserve further research to design better breastfeeding promotion interventions (Biro, Sutherland, Yelland, Hardy, & Brown, 2011). In addition, it is possible that in-hospital formula supplementation may be a sign for early breastfeeding problems, rather than a causal factor of early weaning (D. Sheehan et al., 1999). One study found that supplementing for medical reasons did not impact duration, but supplementing for no medical reason was associated with a shorter breastfeeding duration, for women exclusively breastfeeding or providing any breast milk (Ekstrom, Widstrom, & Nissen, 2003).

⁷ The first national Maternity Practices in Infant Nutrition and Care (mPINC) Survey, administered by the CDC every two years beginning in 2007, was designed to examine the impact of changes in maternity care practices related to breastfeeding over time.

Infants were more likely to receive supplementation if their mother was over the age of 35, had a BMI over 30, was primiparous, had a cesarean section, and if the baby was born with a birth weight less than 2,500 g, was admitted into a special care nursery, or was born in a hospital without BFHI accreditation (Biro, et al., 2011). Less is known about the reasons for supplementing breastfed infants. In a study of WIC recipients in the Washington, D.C. area, mothers reported the following reasons (in order of frequency) for in-hospital supplementation: desire by the mother to supplement, unsure why formula was given to the infant/"nurses just gave it," perceived insufficient milk supply, mother needed to rest, infant illness, mother had a cesarean section or was taking medication(s), recommendation by the physician/nurse, and poor latch-on. Eighty-seven percent of the women in this study were receiving medically unnecessary formula supplementation (Tender et al., 2009). In a study of 726 mothers receiving in-hospital supplementation, 37% were breastfeeding. The top three reasons (of 17) mothers gave for supplementing breastfed infants were: need to rest, maternal illness, and not enough breast milk (Kurinij & Shiono, 1991). In a study that included interviews with 38 postpartum nurses in Canada, the authors report that the nurses' main reasons for supplementing breastfeeding infants included "breastfeeding problems," "infant behavior," "maternal fatigue, "insufficient colostrum," and "infant's health" (Gagnon, Leduc, Waghorn, Yang, & Platt, 2005).

Hospital stay up to 48 hours is guaranteed for women who have had a vaginal delivery and up to 96 hours for women who have had a cesarean delivery (American Academy of Pediatrics, 2010). The AAP (2010) recommends that healthy, term infants have "completed at least 2 successful consecutive feedings, with assessment to verify that the infant is able to coordinate sucking, swallowing, and breathing while feeding" prior to discharge (p.406). In addition, the AAP recommends that

the mother's knowledge, ability, and confidence to provide adequate care for her infant have been assessed for competency regarding: breastfeeding or bottle feeding (the breastfeeding mother and infant should be assessed by trained staff regarding breastfeeding position, latch-on, and adequacy of swallowing); the importance and benefits of breastfeeding for both mother and infant (p. 407).

Research demonstrates that suboptimal breastfeeding at 72 hours is not uncommon and that many women are experiencing delayed Lactogenesis II, the onset of copious milk production, which generally occurs in women between 36 and 92 hours postpartum (Dewey, Nommsen-Rivers, Heinig, & Cohen, 2003; Walker, 2011). If most women are discharged between 24 and 48 hours postpartum, and Lactogenesis II does not occur until after this time, many women may not have achieved breastfeeding competency prior to discharge from the hospital. In addition, Walker (2011), explains that during the hours when infant feeding is at its most frequent (between the hours of 9:00 pm and 3:00 am), is precisely the "time that staffing levels are at their lowest, lactation consultants are unavailable, and family members have either gone home or are as tired as the mother" (p. 240). In addition, Gagnon et al. (2005) found that regardless of the time of birth, breastfeeding infants were at the highest risk for supplementation between the hours of 7:00 pm and 9:00 am.

The AAP recommends that the newborn be seen within 48-72 hours of hospital discharge by a qualified healthcare professional to assess breastfeeding. However, only 27% of maternity care facilities in the U.S. and 26% in Florida "provide hospital discharge care including a phone call to the patient's home, opportunity for follow-up visit, and referral to community breastfeeding support" (Centers for Disease Control and Prevention, 2011b). Mothers may not be able to identify or obtain breastfeeding support upon discharge from the hospital (U.S.

Department of Health and Human Services, 2011b). The need for breastfeeding support may be especially crucial for mothers dealing with breastfeeding problems that would require professional lactation expertise. In addition, low-income women may not have access to professional support and thus be at higher risk for early weaning.

To improve our nation's HP2020 goals and objectives related to breastfeeding duration, with the overarching goal of improving the lifelong health of mothers and their children, it is particularly important to address the major causes of early weaning within the first few weeks after birth. By acknowledging the multitudinous and interrelated factors that can impact breastfeeding, and by addressing the challenges and complications that impact breastfeeding within the first few critical weeks, providers of lactation support can begin to improve the nation's breastfeeding duration rates.

Lactation Support becomes a Profession

Historical context of Infant Feeding in the United States

The transition from breastfeeding to artificial feeding occurred in conjunction with the societal shift to scientific, technological, and medical advances characteristic of the Industrial Revolution. Infant formulas were developed in the second half of the 19th century in response to high rates of infant mortality (sometimes more than one-third of children died before age five)⁸ and the increase in the use of cow's milk for infants of working mothers who could not afford a wet nurse (Apple, 1987; Wolf, 2003). In order to respond to the rising infant mortality problem, the medical profession turned its attention to infant feeding. Concomitantly, infant formula manufacturers began marketing their products to women who were already concerned with the adequacy of their milk to protect their babies from rampant death and disease (Apple, 1987;

41

⁸ Though the current commonly used infant mortality rate definition is number of deaths per 1000 live births before the child's first birthday, this definition of IMR was not commonly used until the late 1800s (Brosco, 1999).

Brosco, 1999). Because the general belief among health officials was that gastroenteritis and diarrhea, more common among artificially-fed infants, were behind the high infant mortality rate, breastfeeding continued to be aggressively promoted in major cities as the best nutrition for babies. However, the scientific focus on improving artificial milk had begun and supplementation was widespread by the early 1900s. Due in part to the pasteurization of cow's milk, by 1920 breastfeeding was no longer considered to be unequivocally better than formula (Apple, 1987; Brosco, 1999; Wolf, 2003).

Early 20th century researchers misinterpreted the finding that the vitamin content of breast milk changes over time and varies among women, adding to the notion that breast milk may not be adequate for infants' nutritional needs (Apple, 1987). Concerns about early neonatal weight loss and the assumed lack of nutritive value of colostrum during the first few days postpartum led physicians to recommend supplementing with infant formula until the mother was lactating fully (Apple, 1987). The increasingly complicated artificial milk "formulas" led to a push for physician-control over infant feeding procedures, contributing to the specialization of pediatrics as a field and accrediting pediatricians as the well-trained experts in infant feeding (Brosco, 1999; Jones, 1983). Historian Rima Apple points out that "The lack of medical oversight in infant feeding, physicians contended, contributed to the infant death rate at a time when concerned researchers regarded the prevention of infant mortality through medically directed feeding as the keynote of the nascent specialty of pediatrics" (Apple, 1987, p. 24). The decrease in infant mortality and morbidity (gastrointestinal diseases primarily) from the late 1800s to the mid-1900s was often attributed to the refinement and increased use of formula and the transition to medical supervision of infant feeding practices (Apple, 1987). Though bottlefeeding may have contributed to improved infant health in the early 20th century, concurrent

improvements in sanitation, cleaner food and water, and an increase in overall access to health care likely obscured the negative impact of artificial milk (Apple, 1987).

The Medicalization of Infant Feeding

By the end of the 19th century, medical care of birthing women shifted from the domain of midwives to male doctors being trained in the newly professionalizing field of obstetrics (Ehrenreich & English, 1973). In 1920, about 20 percent of births took place in the hospital setting but rose to over 80 percent by 1950 (Apple, 1987). As a result of the professionalization of obstetrics, midwives were barred from practicing and the traditionally women-centered field was replaced by male physicians focused on science and technology (Ehrenreich & English, 1973). As the hospital became the primary location for birthing a baby, infant feeding practices also moved into the realm of medical oversight (Apple, 1987).

Breastfeeding is one of many women's normal reproductive experiences that began to be medicalized through the professionalization of medicine. Riessman defines medicalization as when "certain behaviors or conditions are given medical meaning – that is, defined in terms of health and illness," and when "medical practice becomes a vehicle for eliminating or controlling problematic experiences that are defined as deviant, for the purpose of securing adherence to social norms" (Riessman, 1983, p. 4). Van Esterik defines the medicalization of *breastfeeding* as "the expropriation by health professionals of the power of mothers and other caretakers to determine the best feeding pattern of infants for maintaining maximum health" (Van Esterik, 1989, p. 112).

Women in the 19th and 20th centuries looked to the developing medical profession for answers and guidance on childrearing. Women in upper classes participated in creating and maintaining an idealized version of the "modern" woman who no longer wanted to be tied down

to breastfeeding her infant. Childcare educators reinforced the notion that breastfeeding was not suitable for every woman by emphasizing the importance of carefully monitoring one's health, exercise, and demeanor to be able to produce adequate milk. Breastfeeding difficulties were attributed to a woman's "nervousness" and hospitals kept careful watch of breastfeeding babies by weighing them after every feeding and following feedings with a supplemental bottle (Apple, 1987). Feeding schedules in particular, promoted by hospital staff to allow new mothers to rest, assisted in establishing the control of infant feeding practices within the auspices of medical care and direction (Apple, 1987; Hausman, 2003).

The use of medical jargon specific to breastfeeding (colostrum, milk ejection reflex, insufficient milk syndrome) also contributes to the medicalization of infant feeding by labeling breastfeeding issues as medical problems that are best addressed by the expertise of a health care professional (Van Esterik, 1989). For example, perceived insufficient milk supply is one of the most common reasons for early weaning (Gatti, 2008; Li, et al., 2008), even though insufficient milk *syndrome* (due to primary causes beyond the woman's control, rather than more secondary mismanagement issues) only affects about 5% of lactating women (Neifert, 2001; Neifert et al., 1990). Lack of adequate support plus the use of formula supplementation exacerbates (and often causes) problems that may exist with milk supply, while simultaneously undermining women's confidence to adequately provide for their infants, thus further compounding the problem (Dykes, 2002; Hausman, 2003; Van Esterik, 1989). As breastfeeding success relies on a supply and demand model (nipple stimulation signals the body to produce more milk), supplementing with formula will eventually lead to a decrease in milk supply (unless there is significant effort put into pumping) (Walker, 2011).

One of the frustrations for physicians and breastfeeding women is the inability to know how much milk the infant has consumed at the breast. The discomfort with how much and how often has led physicians to focus on neonatal weight gain assessments through regular test weighing and supplementing to quantifiably account for the mystery of the milk transfer. One study in particular reveals that some lactation consultants are critical of physicians' overemphasis on the infant's weight and failure to assess the situation more comprehensively (Carroll & Reiger, 2005). The recently updated AAP Policy Statement (2012), "Breastfeeding and the Use of Human Milk," recommends that breastfeeding newborns receive a formal breastfeeding evaluation while in the hospital, and be seen by a pediatrician between three to five days at which point the pediatrician should evaluate hydration, observe feeding of the newborn, discuss maternal or infant breastfeeding issues, and evaluate weight gain. Assessment of feeding and further, more frequent follow-up care are recommended for any infant with a weight loss of more than seven percent by day five (American Academy of Pediatrics, 2012a). However, though the AAP statement specifically states that this visit with the pediatrician should include observation of a feeding, pediatricians consistently report having a lack of skills needed to properly assess and assist with breastfeeding (Freed, Clark, Lohr, et al., 1995; Krogstrand & Parr, 2005; Schanler, et al., 1999). Anxiety about infant weight gain along with discomfort assessing the mechanics of breastfeeding often leads physicians to recommend supplementing with formula when the infant's weight is in question or when a mother reports breastfeeding challenges. Infant formula companies don't hesitate to "capitalize on a mother's concern about

_

⁹ In September 2010, the CDC released new recommendations for the use of growth charts to better account for the differences in growth patterns between formula-fed and exclusively breastfed infants in the first two years of life. The CDC is now recommending the use of the WHO growth charts for infants under 24 months. The report states, "Some U.S. clinicians who are currently using the CDC charts might be unaware of or not understand the growth pattern of exclusively breastfed infants, which differs from that of formula-fed infants. These clinicians might inappropriately recommend that mothers supplement breastfeeding with formula or advise them to wean their infants from breastfeeding completely" (Grummer-Strawn, Reinold, & Krebs, 2010).

the quality and quantity of her milk supply through advertisements to health professionals" (Van Esterik, 1989, pp. 126-127) and by providing free formula in hospital discharge bags, further contributing to the medicalization of insufficient milk "syndrome" and infant feeding in general. Only recently (Feb. 2012) has the AAP explicitly stated that following breastfeeding, expressed breast milk and donor milk are the next best options for infants, before formula supplementation (American Academy of Pediatrics, 2012a).

The Professionalization of Lactation Consulting

As the use of infant formulas became the norm during the middle of the 20th century, initiation rates in the U.S. continued to drop from more than 70% in the 1930s to less than 30% in the 1970s (Thulier, 2009). Medicalization of infant feeding made finding breastfeeding support difficult, but the second wave of the feminist movement in the late 1960s urged women to take back control of their bodies from under the gaze of medicine and empower themselves with knowledge of their own bodies. Prior to this movement, on October 17th, 1956, seven women from the suburbs of Chicago came together for the first meeting of what would become the La Leche League (LLL). The mission of the LLL was to inform mothers who wanted to breastfeed through mother-to-mother support. In 1964 the group expanded globally and became La Leche League International (LLLI) and today has a presence in 68 countries. In 1958 the first edition of "The Womanly Art of Breast-feeding," was published as a loose-leaf pamphlet and was later published as a hardcover book in 1963; it is now in its eighth edition as of 2010. In 1974, the American Medical Association (AMA) accredited LLLI to offer continuing education credits in medicine (La Leche League International (LLLI), 2011).

Though ideologically different, LLLI and the feminist movement contributed to the resurgence of breastfeeding in the U.S. As LLLI expanded, the organization developed

guidelines for a training and application process to become qualified as a volunteer Leader. A lactation consultant program was developed in the early 1980s in response to an interest by many LLL Leaders who were interested in providing breastfeeding expertise as professionals. In 1985 a set of competencies was developed and the International Board of Lactation Consultant Examiners (IBLCE) was established to administer an exam to certify lactation consultants, leading to the formal establishment of a new profession (Eden, 2012). There are currently over 25,000 International Board Certified Lactation Consultants (IBCLCs) in over 90 countries and over 11,000 in the U.S. An IBCLC "is the only internationally certified healthcare professional in the clinical management of breastfeeding and human lactation" (International Board of Lactation Consultant Examiners, 2012; International Lactation Consultant Association, 2011). The lactation consulting profession, originally comprised primarily of LLL Leaders, has diversified over time and now includes individuals from a range of occupational backgrounds, such as nurses, midwives, and physicians. Lactation consultants also practice in a variety of settings including private practice, hospitals, physicians' offices, and public clinics (Eden, 2012).

The IBCLC is certified by the International Board of Lactation Consultant Examiners (IBCLE) through an examination required every 10 years and every five years either by exam or by 75 continuing education recognition points (CERPs) in human lactation, professional ethics, and breastfeeding (International Board of Lactation Consultant Examiners (IBLCE), 2011). Changes in the requirements of the IBCLC beginning in 2012 reflect a move toward a more clinical focus that may lead hospitals to require their lactation consultants to hold other certifications or licensures (such as nursing) as well (IBLCE in the Americas, 2012). Carroll and Reiger (2005) explain that despite the professionalization of lactation consulting, "many LCs who are midwives, and maternal, child and family health nurses, retain their primary professional

identity" (p. 104). Many professional lactation consultants without a medical or nursing background will enter into individual private practice rather than working in a hospital setting due to hospital policies. Establishing an individual private practice is often a difficult and costly, leading many lactation consultants to take on other part-time work. Most lactation consultants are not reimbursed by third-party insurers, thus, in addition to providing lactation support, many lactation consultants also manage a pump rental service to supplement their income (Thorley, 2000).

The profession of lactation consulting continues to evolve as the diversity of its membership requires conscious navigation between the biomedical process of lactation and maternalist ideologies that promote respect for the embodied knowledge of women (Blum, 1999; Carroll & Reiger, 2005). In a study of lactation consultants' perspectives on their role as specialists, Carroll and Reiger (2005) found that the technical biomedical expertise allows lactation consultants to problem-solve within a healthcare setting in a way that they are entitled to communicate with medical providers, yet the lactation consultants express some frustration with the pediatricians' focus on singular issues such as weight gain. Some of the lactation consultants in this study also expressed the difficult balance between the usefulness of evidence-based research and the risk of "information overload" when working with mothers. The lactation consultants in this study also differentiated their role from other medical professionals in terms of training and philosophy, such that they believe their perspective is more holistic across interpersonal and institutional contexts, and the greater social context. The authors explain that

On the one hand, they are trained within a health framework, work largely in institutional settings, and stress the physiological advantages of breastfeeding. On the other, they articulate a deeply felt appreciation for the embodied superiority of

breastfeeding for both mother and baby, and promote its emotional and psychological benefits. They feel that breastfeeding has to be promoted in a way that does not create feelings of guilt in the mother if she chooses not to breastfeed or if breastfeeding itself fails (p. 105).

The role of the lactation consultant appears to be "fluid" in that they must constantly shift between their own technical and embodied knowledge, while negotiating relationships with other medical professionals and the mothers they counsel.

In addition to the IBCLC, other types of more formal lactation support include peer counselors, Certified Lactation Counselors (CLCs), Certified Lactation Educators (CLEs), Certified Breastfeeding Educators (CBEs), and Certified Lactation Specialists (CLSs) (Kellymom, 2012). See Table 4 below. The extensive training of the IBCLC sets them apart from other credentials as these experts are able to provide more specialized support. Along with the emergence of professional lactation support comes potential confusion about the various credentials and possible resentment between those who volunteer to provide free breastfeeding support (such as La Leche League Leaders) and those who have become professional lactation counselors or consultants who work for pay. Some LLL Leaders have gone on to become IBCLCs, but continue to work in their voluntary LLL roles. There is some confusion about "which hat to wear" when a LLL Leader is also an IBCLC (Thorley, 2000). The International Board of Lactation Consultant Examiners (IBLCE) requires IBCLCs to practice within their Scope of Practice and to abide by a Code of Professional Conduct (IBLCE International, 2012). Several threads (January 2012) on LACTNET, a listserv for lactation professionals, have discussed "which hat to wear when" and the scope of practice for those who have multiple roles in lactation consulting/counseling, suggesting that some confusion persists (LACTNET, 2012).

Table 4 – Certifications for Lactation Education

Table 4 – Certifications for Title	Offered by	Length of	Certification
		Training	
La Leche League Leader	La Leche League	Individualized	Completion of
(LLL leader)	International	program	mentorship
Breastfeeding Counselor	Prepared Childbirth	1 day (must have	Examination;
	Educators, Inc.	minimum nursing	recertify by 18 CEs
		degree of RN and	every 3 years
		1 year which is	
		generally 90 hours	
		of clinical	
	Maa Di	experience)	D
Lactation Specialist	UC San Diego	18 hours	Examination
	Extension		
Certified Lactation	CAPPA	20 hours	Complete
Educator (CLE TM)	CAPPA	20 nours	Complete assignments and
Educator (CLE)			pass exam
Certified Lactation	Healthy Children's	40 hours	Written exam,
Counselor® (CLC)	Center for Breastfeeding	40 Hours	Recertify by 18 CEs
	Conter for Broadtrooming		every 3 years, or
			retake course and
			exam
Lactation Educator-	UC San Diego	45 hours onsite +	Completion of the
Counselor (CLEC)	Extension	60 hours online	course
Certified Lactation	Lactation Education	5 days	Written exam
Specialist (CLS)	Consultants		
Volunteer Breastfeeding	Breastfeeding USA	1-6 months	Completion of the
Counselors (BCs)			program
International Board	International Board of	General education	Board certified
Certified Lactation	Lactation Consultant	in health sciences	exam; recertify
Consultant (IBCLC)	Examiners (IBCLE)	(specific courses	every 5 years by
		required); 90 hrs	CEs or exam
		of coursework in	
		breastfeeding and	
		lactation, 500-	
		1000 hrs of	
		clinical practice	

The two roles (lay support groups and IBCLCs), though different, have the potential to complement each other and provide better overall support to breastfeeding mothers. While the extensive training of the IBCLC is often needed to help problem-solve the more clinical breastfeeding problems, community and mother-to-mother support groups (LLL) are more likely to be a continuing source of support for breastfeeding women and have greater potential to impact exclusive breastfeeding duration (Riordan & Auerbach, 1998; Thorley, 2000). For example, a systematic review of randomized and quasi-randomized controlled trials found that extra breastfeeding support had a positive effect on the duration of any and exclusive breastfeeding. Specifically, professional support was effective in increasing any breastfeeding duration, though the effect on exclusive breastfeeding was less clear. In contrast, lay support was effective in increasing exclusive breastfeeding duration, though the effect on any breastfeeding was less clear (Sikorski, Renfrew, Pindoria, & Wade, 2003).

Studies have also indicated that home visiting and counseling in a clinical setting may be more effective in supporting women struggling with breastfeeding than telephone support. In a systematic review, studies that reported primarily face-to-face interventions significantly reduced the risk for early weaning, compared to studies mainly providing telephone support which were not statistically significant (Sikorski, et al., 2003). Similarly, a more recent randomized control trial found that two weeks of daily breastfeeding support by telephone for new mothers was not enough to overcome the influences of formula on breastfeeding duration, including early supplementation, concerns about insufficient milk supply, and the perception that formula is a good alternative (Bunik et al., 2010). Comprehensive lactation support that includes prenatal

_

¹⁰ The authors of the systematic review explain that the studies generally reported breastfeeding data as "partial" or "exclusive" without providing specific definitions to clarify these terms. The authors of the review use the terms "any" or "exclusive" breastfeeding.

education, inpatient services and outpatient/post-discharge follow-up with the mother-infant dyad may be needed to fully support breastfeeding.

Evidence suggests that women who deliver their babies in hospitals that provide lactation support from an IBCLC have higher rates of any and exclusive breastfeeding compared to hospitals that do not have these lactation professionals (Bonuck, Trombley, Freeman, & McKee, 2005; Castrucci, Hoover, Lim, & Maus, 2006; Rishel & Sweeney, 2005). In order to meet the lactation support needs of women in the U.S., a greater ratio of IBCLCs to number of live births is needed. The Surgeon General's Call to Action to Support Breastfeeding cites data by Mannel and Mannel (2006), which suggest that 8.6 IBCLCs per 1,000 live births is needed. The Surgeon General's Report notes that this ratio includes "prenatal education on breastfeeding, inpatient support during the maternity stay, outpatient follow-up after discharge, telephone follow-up, and program development and administration. In most states, there currently are not enough IBCLCs to meet the needs of breastfeeding mother-infant pairs" (U.S. Department of Health and Human Services, 2011b, p. 27). According to the CDC's Breastfeeding Report Card (2013), the number of IBCLCs per 1,000 live births in 2010 (provisional) ranged from 1.29 in the District of Columbia to 13.66 in Vermont, with a national average of 3.35. In Florida, there were 2.40 IBCLCs per 1,000 live births, clearly well below the optimal IBCLC staffing needs (Centers for Disease Control and Prevention (CDC), 2013).

Management of Early Breastfeeding Problems: The Providers Assessing the mother-infant dyad

After delivery, women and infants are generally assessed and screened by a variety of practitioners such as nurses, pediatricians, lactation specialists, and other specialists as needed. For breastfeeding women, assessment of the mother and the infant is important for identifying

potential problems and building confidence prior to discharge. Feeding difficulties, along with jaundice and dehydration, have been identified as one of the most common reasons for hospital readmission (Brown et al., 1999; Escobar et al., 2002; R. T. Hall, Simon, & Smith, 2000; "Hospital stay for healthy term newborns," 2010; Paul, Lehman, Hollenbeak, & Maisels, 2006; Tyler & Hellings, 2005). Researchers have suggested that post-discharge follow-up and early interventions for mother-infant dyads experiencing feeding challenges may prevent unnecessary readmissions (Brown, et al., 1999; Escobar, et al., 2002; Paul, et al., 2006; Tyler & Hellings, 2005).

In working through early breastfeeding problems, understanding the mother and infant as a dyad within a socio-cultural context may offer the most panoramic insight and thus, enable the provider(s) to make more holistic, respectful and efficacious recommendations. IBCLCs must have evidence-based expertise in lactation, which includes knowledge of anatomy and physiology of the mother and the infant, as well as breastfeeding, which is a social, cultural, and psychological process. The focus on assessing the dyad has been stressed as an important factor in determining the appropriate time for hospital discharge. The AAP's Policy Statement, "Hospital Stay for Healthy Term Newborns," specifically recommends that "The length of stay of a healthy term newborn should be based on the unique characteristics of each mother-infant dyad, including the health of the mother, the health and stability of the infant, the ability and confidence of the mother to care for her infant, the adequacy of support systems at home, and access to appropriate follow-up care" (American Academy of Pediatrics, 2010, p. 406). As previously mentioned, IBCLCs are trained to be able to assess the mother-infant dyad with regard to breastfeeding, yet the ratio of IBCLCs per 1,000 live births is far from optimal. Research has shown that while some clinicians (i.e., pediatricians, obstetrician-gynecologists,

and maternal and child health nurses) have training in evidence-based breastfeeding practices, others have inadequate training or none at all (Arthur, et al., 2003; Freed, Clark, Sorenson, et al., 1995; Howard, Schaffer, & Lawrence, 1997; Krogstrand & Parr, 2005; Renfrew et al., 2006; Szucs, et al., 2009).

The influence of providers' knowledge, attitudes, and practices on breastfeeding

While in general pediatricians understand the importance and health benefits afforded by breastfeeding, survey results have shown that many feel that the benefits of breastfeeding don't outweigh the difficulties and, in fact, their attitudes and commitment to supporting breastfeeding have deteriorated since 1995 (Feldman-Winter, et al., 2008). Despite having knowledge of the benefits of breastfeeding, many physicians do not receive adequate breastfeeding and lactation education, and subsequently lack the confidence to provide breastfeeding support (Krogstrand & Parr, 2005; Renfrew, et al., 2006; Schanler, et al., 1999). Studies have suggested that nursing students (Spear, 2006) and pediatric nurses lack adequate breastfeeding management skills as well (Hellings & Howe, 2004; Register, et al., 2000). When compared to a previous study of physicians (Freed, Clark, Sorenson, et al., 1995), a study by Hellings and Howe (2000) of certified nurse midwives (CNMs), family nurse practitioners (FNPs), women's health care nurse practitioners (WHCNPs), and pediatric nurse practitioners (PNPs) found that overall, nurses have better knowledge about the benefits of breastfeeding and are more likely to believe their role includes the responsibility to provide breastfeeding support. However, their knowledge of managing breastfeeding problems and their sense of effectiveness in the management of these problems were similar to that of the physicians. Overall, CNMs appeared to be most skilled in knowledge and management of breastfeeding problems, as well as most likely to perceive

themselves to be effective, when compared to the other nurses in this study (Hellings & Howe, 2000).

There are a range of attitudes and practices by physicians and nurses that impact breastfeeding continuation among their patients. For example, clinicians underestimate their influence on mothers' decisions about infant feeding choices and duration of breastfeeding, yet mothers reportedly rely on their providers for infant feeding advice (DiGirolamo, Grummer-Strawn, & Fein, 2003; Dillaway & Douma, 2004; Freed, Clark, Sorenson, et al., 1995; Humenick, et al., 1998; Lu, et al., 2001; Szucs, et al., 2009; Taveras, et al., 2003; Taveras, et al., 2004b). Research has demonstrated that women who receive mixed or negative breastfeeding advice, or suggestions to supplement or wean from their physicians or hospital staff are more likely to cease breastfeeding earlier and not meet their intended breastfeeding goals (DiGirolamo, et al., 2003; Humenick, et al., 1998; Taveras, et al., 2004b). In a prospective cohort study, Taveras and colleagues (2004b) found that mother-infant dyads whose pediatrician did not perceive his or her advice on breastfeeding duration to be important were about twice as likely to not be exclusively breastfeeding at 12 weeks. Thus, provider attitudes about breastfeeding compared to formula feeding impact women's breastfeeding duration (DiGirolamo, et al., 2003; Humenick, et al., 1998; Szucs, et al., 2009). Even a perceived neutral attitude about breastfeeding from clinicians has been found to be associated with weaning by six weeks postpartum (DiGirolamo, et al., 2003).

In addition, women and their providers don't always share the same perception of the extent and quality of breastfeeding support provided. Taveras and colleagues (Taveras, et al., 2004a) found a disconnect between clinicians' perceptions of the breastfeeding support they provide with the support perceived by the mother: "Among those mothers whose pediatric

clinicians said they usually or always discussed breastfeeding duration during the 2-week pediatric visit, only 25% of the mothers reported that it was discussed" (p. e408). Discrepancies in perception of support between mothers and their providers have been reported in other studies as well (Dillaway & Douma, 2004).

Nurses who have had personal breastfeeding experiences often use this experience when counseling mothers (Hellings & Howe, 2004; Nelson, 2007) and pediatricians with personal breastfeeding experience (either themselves or spouses) are more likely to assist mothers with breastfeeding and discuss infant feeding choices (Feldman-Winter, et al., 2008). One study found that among a wide array of providers who offer breastfeeding support, those with personal breastfeeding experiences commonly provided advice based on these experiences over evidence-based best practices for breastfeeding and AAP policy statement recommendations (Szucs, et al., 2009).

Health care professionals who work with mothers on breastfeeding support need more training and experience overall. Studies have shown that additional training of health care professionals in breastfeeding support and management does have a positive impact on improving breastfeeding rates (Cattaneo & Buzzetti, 2001; Labarere, et al., 2005; Moran, Bramwell, Dykes, & Dinwoodie, 2000; Vittoz, Labarere, Castell, Durand, & Pons, 2004). Implementation of a formal breastfeeding education program, (a resource guide, breastfeeding protocol, and educational training) among obstetricians, pediatricians, and nurses significantly increased knowledge scores and overall comfort level in handling breastfeeding problems among the healthcare providers. In addition, exclusivity rates increased among the patients from 55% to 63% post-intervention and breastfeeding patients reported an increase in active observation by

nurses while breastfeeding, an increase in the number of nighttime breastfeeding sessions, and a decrease in nighttime formula supplementation (Mellin, Poplawski, Gole, & Mass, 2011).

Despite the AAP's recommendations about the importance of breastfeeding, education in this area is lacking among pediatric residency programs. A review of pediatric residency programs in the U.S. found that, on average, residents receive about three hours of formal breastfeeding training per year. In addition, this study found that residency programs have suboptimal implementation of AAP recommendations for supporting breastfeeding in the workplace, which includes the provision of breastfeeding rooms, breast pumps, and breast milk storage facilities (Osband, Altman, Patrick, & Edwards, 2011). The absence of formal policies that accommodate breastfeeding residents, in addition to the lack of breastfeeding education in pediatric residency programs in the U.S., undermine overall recommendations and efforts to increase our nation's breastfeeding initiation and duration rates. When given the opportunity to receive breastfeeding education, pediatric residents gain improved knowledge about lactation and breastfeeding, as well as improved confidence in their abilities to support breastfeeding women and manage potential problems (Bunik, et al., 2006; Feldman-Winter, et al., 2010; Haughwout, et al., 2000; Hillenbrand & Larsen, 2002). Investing in breastfeeding training for various healthcare providers is a valuable endeavor in the efforts to increase breastfeeding initiation and duration in the U.S.

Recent policy recommendations support the clear need for educational training for healthcare providers and breastfeeding promotion interventions. For example, the Patient Protections and Affordable Care Act (PPACA) includes a call for more formal breastfeeding education for women and families, more direct support of breastfeeding mothers, increased

training of primary care staff, and improved access to peer support (Patient Protection and Affordable Care Act, 2010).

Barriers to Interprofessional Collaboration in the Provision of Breastfeeding Support

Since there are a range of providers who may work with mothers and infants, it is important to understand their perceived roles, scopes of practice, and possible role conflict with other providers to better understand interprofessional collaboration as a possible team approach to breastfeeding support. Aside from improving breastfeeding knowledge and developing skill sets among various clinicians, many studies have suggested the need for providers to be able to offer consistent advice and information to women. Women commonly report inconsistencies with regard to breastfeeding advice, along with a lack of skilled providers, perceptions of rushed and overworked providers, and unhelpful practices that undermine breastfeeding (Hauck, Graham-Smith, McInerney, & Kay, 2011; Kelleher, 2006; McInnes & Chambers, 2008; Mozingo, Davis, Droppleman, & Merideth, 2000; A. Sheehan, Schmied, & Barclay, 2010). A metasynthesis of 31 studies from 1990-2007 by Schmied, Beake, Sheehan, McCourt and Dykes (2011) examined women's experiences and perceptions of breastfeeding support received by healthcare professionals and peers to better understand what practices women perceived to be most supportive. The authors identified four common categories that indicate women perceive support along a continuum from "authentic presence" which included effective support measures to "disconnected encounters" which were perceived as ineffective. In addition, women's experiences with breastfeeding support approaches were considered "facilitative" or "reductionist" (Schmied, Beake, Sheehan, McCourt, & Dykes, 2011). Themes within the "authentic presence" finding included empathy from the provider, taking time and touching base, and the provision of affirmation, whereas themes from the "disconnected encounters" included

insensitivity or invasive touching, and behaviors that left the woman feeling pressured, undermined, or rushed. Themes reflected under "facilitative style" included the provision of realistic and accurate information, practical assistance, and encouragement, whereas themes within the "reductionist approach" included receiving conflicting information and advice or information in the form of medical jargon. These findings offer insight into the practices that women believe are most supportive or detrimental to breastfeeding and should guide future interventions to promote best practices in breastfeeding support and management.

Scope of Practice

The inconsistency in breastfeeding advice and support by different health care providers can be a source of confusion and frustration for women who are experiencing some challenges in getting breastfeeding off to a good start (Barnett, Sienkiewicz, & Roholt, 1995; Humenick, et al., 1998; Laantera, Polkki, & Pietila, 2011; Olson, Horodynski, Brophy-Herb, & Iwanski, 2010; Rajan, 1993). Not only do these providers have a range of attitudes and levels of breastfeeding training and expertise, but they also work within diverse scopes of practice and may have different perceptions about their role in breastfeeding support. The roles of each type of provider are constrained by their scope of practice or practice standards. IBCLCs and other types of lactation counselors (CLCs) and educators cannot diagnose or treat medical conditions and must refer out to physicians for these aspects of care (Academy of Lactation Policy and Practice, 2011; International Board of Lactation Consultant Examiners, 2008; International Lactation Consultant Association, 2005). The role of the IBCLC includes, "assessment, planning, intervention, and evaluation of care in a variety of situations; anticipatory guidance and prevention of problems; complete, accurate, and timely documentation of care; communication and collaboration with other health care professionals" (IBLCE International, 2012, p. 2). In

addition, the practice of the IBCLC is guided by a code of ethics, a set of professional standards, and a professional scope of practice (International Lactation Consultant Association, 2011).

Physicians, including family physicians, obstetricians, pediatricians and specialists such as otolaryngologists (ENTs), as well as pedodontists, are trained and licensed to assess, diagnose, and treat various problems and prescribe medications (American Academy of Pediatrics, 2003). Scope of practice legislation for physicians also falls under the jurisdiction of each state individually. Nurses have varying levels of training and certification, and within each designation the degree of prescriptive authority, reimbursement, and independence are regulated by each state individually. Advanced Practice Nurses, which include Certified Nurse Midwives (CNMs) and Nurse Practitioners (NPs), or Advanced Registered Nurse Practitioners (ARNPs), have more advanced education than Registered Nurses (RNs). Specifically, "NPs may order, conduct, and interpret appropriate diagnostic and laboratory tests and prescribe pharmacologic agents, treatments, and nonpharmacologic therapies. Educating and counseling individuals and their families regarding healthy lifestyle behaviors are key components of NP care" (Sherwood, Brown, Fay, & Wardell, 1997). In addition, some NPs have additional specialization in areas such as family health, neonatal health, oncology, pediatric health, mental health, and women's health, among others (American Academy of Nurse Practitioners, 2010). Like NPs, CNMs and Certified Midwives (CMs) provide a range of services, which include "primary care, gynecologic and family planning services, preconception care, care during pregnancy, childbirth, and the postpartum period, care of the normal newborn during the first 28 days of life, and treatment of male partners for sexually transmitted diseases" (American College of Nurse Midwives, 1992). Assessment, diagnosis, and treatment, including prescribing controlled and noncontrolled

medications are all within the scope of practice for a CNM or CM as well (American College of Nurse Midwives, 1992).

Family physicians, pediatricians, NPs and IBCLCs are all expected to practice as part of a coordinated health care team. When various members of a woman's health care team do not provide consistent breastfeeding advice and information, she is unlikely to receive the best care possible. Women benefit from consistent breastfeeding information that is delivered repeatedly from early pregnancy through the perinatal period. A systematic review of breastfeeding support interventions for professionals (from 2000-2006) found that interventions spanning more of the perinatal timeframe (pregnancy through intrapartum and postnatal periods) were most effective at improving breastfeeding rates. The study also found that multiple methods of education and support from healthcare professionals were more efficacious than single-method interventions (Hannula, et al., 2008). Improving continuity of care and support for breastfeeding requires a team approach between the family and several different types of health care professionals, which may include pediatricians, obstetrician-gynecologists, midwives, dieticians, social workers, pharmacists, lactation consultants, and nurses working in maternal and child health care (Fallat & Glover, 2007; Lawrence & Howard, 2001).

Role

With regard to breastfeeding support and management, the role of the lactation consultant is more clearly defined than the role of other types of providers. According to the IBCLE, the role of an IBCLC incorporates the following:

(1) provision of holistic, evidence based lactation support and care to women and their families from preconception to the end of the lactation cycle, (2) education of women, families, health professionals and the community about breastfeeding and lactation, and

(3) advocacy for breastfeeding women and participation in the development of social, maternal and child care, and infant feeding policy affecting breastfeeding practices and breastfeeding women (IBLCE International, 2012).

Perhaps due to the relatively nascent profession of lactation consulting, there is an absence of literature on lactation consultants' experiences and perceptions of their role or that of other providers in the management of breastfeeding problems or general breastfeeding support.

However, research with other types of providers suggests that some of the discrepancy (described above) in breastfeeding advice offered to women by various providers may stem from the differences in self-perceived roles by the providers who work primarily with mothers or infants, but not both. Pediatricians may not generally think of themselves in a position to provide medical care to adult women, just as obstetricians or midwives may not consider themselves as providers of care to infants, aside from the first few days or weeks. In a study of female physicians, there were differences among family physicians, obstetricians, and pediatricians in their comfort diagnosing and treating typical breastfeeding problems. The physicians were more comfortable diagnosing and treating problems among their usual patient base. For example, "a greater proportion of obstetrician-gynecologists were comfortable diagnosing and treating mothers' problems (sore nipples, mastitis, plugged ducts, infected nipples), and a greater proportion of pediatricians treated child-related problems" (Arthur, et al., 2003, p.307). Among these physicians, poor latch, infant weight gain concerns, and low milk supply were the most common reasons for referrals to other providers such as nurses or lactation consultants (Arthur, et al., 2003). In another study, nurse midwives and nurse practitioners were statistically significantly more likely than pediatricians and obstetricians to feel comfortable providing breastfeeding support such as evaluating latch, teaching breastfeeding techniques,

addressing pain issues, providing advice on returning to work, and addressing milk supply concerns. Almost two-thirds of the nurses in this study also believed the value of their breastfeeding advice to be very important, compared to about one-third of physicians (Taveras, et al., 2004a). These differences may be associated with the perceived role in providing breastfeeding support by each type of provider.

The recently released updated policy statement "Breastfeeding and the Use of Human Milk" by the AAP acknowledges that pediatricians breastfeeding attitudes have declined and that pediatricians are lacking in breastfeeding knowledge and skills. In this policy statement, the AAP reinforces the role that pediatricians should take in supporting and promoting breastfeeding (American Academy of Pediatrics, 2012a). See Table 5.

Table 5 – Role of the Pediatrician in Supporting Breastfeeding, According to the AAP

- 1. Promote breastfeeding as the norm for infant feeding.
- 2. Become knowledgeable in the principles and management of lactation and breastfeeding.
- 3. Develop skills necessary for assessing the adequacy of breastfeeding.
- 4. Support training and education for medical students, residents and postgraduate physicians in breastfeeding and lactation.
- 5. Promote hospital policies that are compatible with the AAP and Academy of Breastfeeding Medicine Model Hospital Policy and the WHO/UNICEF "Ten Steps to Successful Breastfeeding."
- 6. Collaborate with the obstetric community to develop optimal breastfeeding support programs.
- 7. Coordinate with community-based health care professionals and certified breastfeeding counselors to ensure uniform and comprehensive breastfeeding support.

(American Academy of Pediatrics, 2012a)

In addition to these roles, Geraghty, Riddle, and Shaikh (2008) have suggested that to reduce the barriers in accessing breastfeeding assistance or care, pediatricians can register the mother as a patient to document the mother's breastfeeding issues, more easily bill the insurance companies for time spent supporting the breastfeeding dyad, and facilitate communication with other

providers. This practice may be particularly important for low-income mothers who cannot afford to see a private lactation consultant or have access to lactation support through other means.

Despite these recommended roles for pediatricians, a range of barriers to providing breastfeeding support to mothers have been identified by various providers, though the perception of these barriers varies by type of provider. For example, one study found that when compared to obstetricians and pediatricians, nurse midwives and nurse practitioners were statistically significantly more likely to identify limited time for breastfeeding counseling, limited availability of lactation consultants, and limited availability of other breastfeeding support (i.e., classes) as barriers to providing adequate breastfeeding support to their patients (Taveras, et al., 2004a). Another study found that among nurses and pediatricians, time constraints were described as barriers to providing breastfeeding support amid other more important health problems. Due to the time constraints, these health care providers were more likely to provide breastfeeding support in the form of informational pamphlets, managing critical problems, and answering questions only when posed by the mother. The mothers in this study; however, reported wanting these providers to ask them about their breastfeeding experience during visits, rather than reactive support, and also valued provider encouragement as an important form of breastfeeding support (Dillaway & Douma, 2004).

Concern about maternal guilt has also been identified by health care providers as a factor that contributes to their comfort level in promoting breastfeeding (Dillaway & Douma, 2004; Labbok, 2008; Nelson, 2007). Dillaway and Duoma (2004) found that health care providers in their study did not want to make women feel guilty for weaning their infants; they also believed that by offering more support to breastfeeding women they would be unfairly giving more praise

to those who breastfeed as opposed to those who do not. Krogstrand and Parr (2005) found that only 54% of physicians in their study would recommend breastfeeding to women who expressed the decision to bottle-feed; the authors speculate that either apathy about breastfeeding or concern about overstepping their role by recommending breastfeeding might explain this low percentage. Labbok (2008) speculates that physicians may describe fear of causing guilt as a "subconscious justification" due to his or her own previous experiences or choices, a lack of adequate breastfeeding knowledge or support skills, or rationalization for accepting incentives, such as those from formula companies. Labbok suggests that "if a physician wishes to avoid stimulating guilt feelings in the patient, the proper response is to work on increasing his or her own skills and knowledge, to support a personal, rapid, and appropriate referral for the patient with ongoing follow-up, and to avoid commercial alliances" (p. 81). Physicians have the responsibility to provide the most accurate infant feeding information about evidence-based best practices to their patients. Guilt arises when one perceives "that there was something important that one did not do" (Labbok, 2008, p. 82). Women may feel a sense of loss or guilt related to their infant feeding decisions if they are not able to meet their expectations or later learn information that leads them to regret those decisions (Labbok, 2008).

Thus, healthcare providers' concern about contributing to women's feelings of guilt about their infant feeding decisions is not unreasonable. Several studies of mothers' lived experiences identified feelings of guilt, personal failure, or being judged to be associated with mothers' infant feeding decisions (Kelleher, 2006; Mozingo, et al., 2000; A. Sheehan, et al., 2010). In a study by Mozingo and colleagues (2000) the sense of shame for one mother was particularly poignant:

One woman recalled trying to conceal from her step-sister the fact that she had stopped breastfeeding (her stepsister had breastfed two babies): '. . .I didn't want her to know

that I had stopped breastfeeding. So, I ... took [the baby] in [to] the other room ... made her think I was breastfeeding ... I just felt like I would be shamed because I wasn't breastfeeding' (p. 124).

In addition, several of these studies also identified the "breast is best" message as a perceived symbol of embodied motherhood, such that when women stopped breastfeeding, they struggled with feelings of self-doubt in their role as a new mother (Kelleher, 2006; Mozingo, et al., 2000; A. Sheehan, et al., 2010). In contrast, some mothers, usually dealing with extreme pain or concern about their babies getting enough sustenance, reportedly felt a sense of relief when they finally decided to supplement or wean (Mozingo, et al., 2000). Despite the possibility of feelings of shame, guilt, or loss that may accompany a woman's infant feeding experience, the role of the health care provider is to offer unbiased, accurate information and support so that women can make informed decisions.

Provider Perspectives of Interprofessional Collaboration

While there is a wealth of literature on the nurse-physician relationship and problems with communication and collaboration between various providers, this area of inquiry has been relatively unexplored among the various providers who work with the breastfeeding dyad. A few studies have found that providers hold different beliefs about the role of other types of providers with regard to breastfeeding support and management of problems. In a study by Dillaway and Duoma (2004), nurses believed that pediatricians needed to be more involved in with breastfeeding support, whereas pediatricians believed nurses needed to be more involved. In addition, health care providers in this study generally believed that lactation consultants were best suited to provide extensive breastfeeding support. Szucs, Miracle, and Rosenman (2009) found that healthcare providers tended to "underestimate their own influence and overestimate

others' influence on breastfeeding dyads" (p. 36). In addition, many providers believed that lactation consultants were most responsible for providing breastfeeding management and support, but the lactation consultants noted that they cannot possibly address all breastfeeding concerns due to time constraints. All eight types of providers in this study identified a fragmented system of care that impacts breastfeeding success. According to Szucs, Miracle, and Rosenman (2009), "lactation consultants urged that the 'higher ups' set standards and policies that support breastfeeding and then hold providers accountable: 'we all have to come together' . . . changes would require more systematic communication between provider groups . . ." (p. 37). Clarification about various providers' roles in the support of breastfeeding and ownership of these roles may be needed for effective communication between providers to best support the breastfeeding dyad. Interestingly, none of the studies that examine the perspectives of providers on the role of the provider in breastfeeding support addressed this role in terms of access issues for low-income and minority women.

Limited communication between providers across health care disciplines and between providers and mothers was identified in The Surgeon General's Call to Action to Support Breastfeeding (2011) as a barrier to breastfeeding that needs to be addressed. The report also acknowledges that examples of coordination of care between the health care system and community resources do exist and have been found to have a positive impact on breastfeeding success by ensuring access to flexible and quality support post-discharge. Several of the Action items outlined by the report directly respond to the problem of sub-optimal collaboration between various providers who work with mothers and infants. Action 5 in the report calls for increased care coordination between hospital/birth center providers and programs available in community health care settings. Action 8 specifically states the need to "develop systems to

guarantee continuity of skilled support for lactation between hospitals and health care settings in the community" (p. 45). In addition, the report calls for more breastfeeding training and education for all maternal and child health professionals, for these professionals to include breastfeeding support as a standard of care in their practices, and for all women to have access to support provided by an IBCLC (Action 9, 10, and 11).

To increase collaboration between various providers, the Surgeon General's Call to Action (2011) suggests the need to integrate IBCLCs into the health care team: "Better access to care provided by IBCLCs can be achieved by accepting them as core members of the health care team and creating opportunities to prepare and train more IBCLCs from racial and ethnic minority groups what are currently not well represented in this profession" (p. 48). Thurman and Allen (2008) also discuss the need to integrate lactation consultants into the medical team; their systematic review, which yielded five studies, aimed to assess the literature on the effectiveness of IBCLCs in breastfeeding management. The authors concluded that while overall the five studies found some evidence to suggest that breastfeeding duration and/or exclusivity may be improved with IBCLC support, there were too many limitations for reliability and validity of the outcomes to be evaluated. A recent study designed to evaluate the impact of an outpatient postpartum breastfeeding intervention by lactation consultants overseen by a physician found that non-formula feeding rates were statistically significantly higher among the intervention group with an effect that was maintained for nine months (Witt, Smith, Mason, & Flocke, 2012). The authors suggest that coordinating an outpatient lactation visit within a primary care practice may better support breastfeeding mothers. Though the trends found in these studies are promising, more research is needed to better understand the impact of the lactation consultant on breastfeeding success when incorporated into the health care team, as well as the lactation

consultants' perspectives on interprofessional collaborative approaches to breastfeeding management.

Access

As previously described, low-income women, women in the WIC program, and African American women are particularly at risk for not breastfeeding or for early weaning. Though some research does support the positive impact of lactation support on breastfeeding initiation and duration, many women cannot access this support due to geographic or financial reasons. Studies have shown that low-income women have higher rates of breastfeeding when they receive positive support within the health care setting (Khoury, Moazzem, Jarjoura, Carothers, & Hinton, 2005; Pugh, Milligan, Frick, Spatz, & Bronner, 2002). Although women on WIC can often receive breastfeeding support through WIC peer counselors or other lactation specialists at WIC, other than the formula versus breastfeeding WIC packages, the range of barriers to receiving this support are largely unstudied. Unpublished research suggests that institutionalized racism may impact women's ability to successfully establish breastfeeding prior to hospital discharge. Institutional racism refers to the preconceived notions by hospital employees that particular groups of women do not, will not, or cannot breastfeed (Frost, Anstey, & Eden, 2011). Research has demonstrated, as previously described, that breastfeeding encouragement and support from health care providers does increase breastfeeding success. Future research needs to further explore the specific impact of discouragement, neutrality, and institutionalized racism on breastfeeding initiation and duration among low-income and minority women.

Another barrier for low-income women may be related to medical mistrust. One study found that health professionals reported that they lose trust from mothers who receive conflicting infant feeding information from various providers. In order to avoid confusion and mistrust, the

WIC providers in this study specifically described following the recommendations of the pediatrician, despite their concern that the pediatrician was too quick to recommend formula supplementation. The physicians in this study reported not having time to resolve feeding difficulties with mothers and the need to defer to WIC (Olson, et al., 2010). A recently published study found that postpartum home visits were associated with increased breastfeeding rates at two weeks and two months, when compared to women who received care in a physician's office (Paul et al., 2012). Home-based breastfeeding support may be an effective method of supporting low-income women to breastfeed.

The effect of the IBCLC on increasing breastfeeding success has been reported with WIC women and women receiving Medicaid. Among women in the WIC program, more mothers initiated breastfeeding when they received support from an IBCLC (Yun et al., 2010). Mothers receiving Medicaid who had contact with an IBCLC in the hospital were at increased odds (OR=4.13) of breastfeeding at discharge (Castrucci, et al., 2006). Clegg (2008), in describing the need for appropriate inpatient lactation support from an IBCLC, reported that 71% of lactation issues are of a nature that cannot be deferred to a bedside nurse or non-clinical staff. Some of these issues included nipple trauma, inverted/flat nipples, ineffective suck and swallow, severe engorgement, multiples, congenital anomalies, maternal request or anxiety, and maternal need for intensive breastfeeding support and assistance, among others.

One of the potential barriers for low-income women to receive adequate lactation support may be related to the lack of third-party reimbursements for lactation consultants and the difficulty in finding support that is covered by Medicaid. Gerry Calnen, a pediatrician and former president of the Academy of Breastfeeding Medicine has responded to this issue,

For primary care, breastfeeding support constitutes the quintessential health maintenance and disease prevention intervention....Traditionally, medical practitioners may have eschewed breastfeeding support interventions because they tend to be labor intensive, which as a general rule are poorly reimbursed. If breastfeeding-related metrics can be included in performance standards upon which Medicare bonuses are based, there could quite conceivably be a very substantial financial incentive for physicians to become far more actively involved in breastfeeding support in their respective practices....The nature of primary care could be radically altered in a short period of time, and in a very favorable manner. Our task now is to keep the importance of breastfeeding support front and center in the thinking of our policy makers....We need to educate the leaders of our professional health societies and the Centers for Medicare and Medicaid Services (CMS) that breastfeeding must not be overlooked if we truly wish to reduce the cost of medical care and safeguard the health of American citizens in the years ahead (Gutowski, Walker, & Chetwynd, 2010, p. 10).

Health disparities will persist if some women, especially those of a lower socioeconomic status and African American women, cannot access adequate support for breastfeeding. Due to the undisputable benefits of breastfeeding, if particular groups of women continue to have lower rates of breastfeeding, these women and their families will remain at a greater risk of health problems across the lifespan.

Family-Centered Care

Part of the challenge in addressing early breastfeeding problems in clinical settings may be that a biomedical approach is child-centered, rather than family-centered and in this way, the family context and the mother's symptoms (i.e., compressed or damaged nipples) are not often the primary area of concern. In the focused attention on the urgency to deliver enough milk to the child, the breastfeeding relationship can become quickly undermined, especially when the quick fix is supplementation rather than treating or managing the underlying problems(s). Failure to situate the needs of the mother and the family within the context of the solution ignores at least half of the equation. Furthermore, the mother-infant as a <u>dyad</u> may never be assessed by those most likely to be in a position to manage the problem, especially if interprofessional collaboration between providers is tenuous or absent.

Origins of Family-Centered Care

Family-centered care (FCC) is "an approach to healthcare based on mutually beneficial partnerships among patients, families, and healthcare professionals" (Johnson, 2000, p. 138). According to the Maternal and Child Health Bureau (MCHB), "Family-Centered Care assures the health and well-being of children and their families through a respectful family-professional partnership. It honors the strengths, cultures, traditions and expertise that everyone brings to this relationship. Family-Centered Care is the standard of practice which results in high quality services" (Maternal and Child Health Bureau, 2005). In recent years, "family-centered care" is now commonly called "patient- and family-centered care" to be more explicit about the active role of the patient as a member of the health care team and as a contributor to the decision-making process¹¹ (American Academy of Pediatrics, 2012b).

The term "family" is variable, and must be understood as such within the context of FCC.

The New Mexico Legislature's Task Force on Young Children and Families defines family in this way:

¹¹ Because breastfeeding decisions are primarily made by family members (since the "patient" is too young) family-centered care (FCC) will be the terminology used in this dissertation.

72

Families are big, small, extended, nuclear, multi-generational, with one parent, two parents, and grandparents. We live under one roof or many. A family can be as temporary as a few weeks, as permanent as forever. We become part of a family by birth, adoption, marriage, or from a desire for mutual support. . . . A family is a culture unto itself, with different values and unique ways of realizing its dream; together our families become the source of our rich cultural heritage and spiritual diversity. . . Our families create neighborhoods, communities, states, and nations (Johnson, 2000, p. 144).

When considering family in the breastfeeding relationship, the mother-infant dyad is central, but as research has shown, fathers and grandmothers also play an important role in infant feeding decisions. An FCC approach acknowledges that the family is the constant in the child's life, honors the strengths of the family, and respects differences through culturally competent approaches to care.

The concept of FCC dates back to the 1960s, when family advocates began to demand that the traditionally paternalistic health care system make changes to acknowledge the active role of the family as critical to children's developmental and psychosocial needs. This early work led to policy changes that allowed family members to remain with their children during hospital stays and while undergoing procedures. Making improvements to pediatric and maternity care was the primary focus of early FCC advocates. In the 1980s and 1990s, improving the standard of care for children with special health care needs (CSHCN) became a national priority. Various forms of support and legislation, such as a grant from the Maternal and Child Health Bureau (MCHB) in 1985 and the initiation of a National Agenda for Children with Special Health Care Needs by Surgeon General C. Everett Koop in 1987, helped to establish FCC as the new standard of care. In 1992, Family Voices and the Institute for Family-

Centered Care (now named the Institute for Patient- and Family-Centered Care) were founded to advance FCC throughout the health care system (American Academy of Pediatrics, 2012b; Johnson, 2000; Kuo, Houtrow, et al., 2012).

As FCC continued to gain popularity in the first decade of the 21st century, many organizations, including the AAP, incorporated FCC into their policy statements. Since then, FCC has been incorporated into inpatient settings (such as family-centered rounds) and ambulatory settings where it is usually tied to the Medical Home system of care (Kuo, Houtrow, et al., 2012). In 2001, the IOM report, "Crossing the Quality Chasm: A New Health System for the 21st Century," identified patient-centeredness as one of six specific aims to increase the delivery of quality health care. Among the 10 general principles described in this report to redesign the health care system were: shared-decision making with the patient as the source of control, evidence-based care, shared knowledge and information, and cooperation among clinicians (Institute of Medicine (IOM), 2001). More recently, HP2020 includes an objective (MICH-31) to "Increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, coordinated systems" (U.S. Department of Health and Human Services, 2011a). In addition, the PPACA calls for an amendment that would "establish the Patient-Centered Outcomes Research Institute to identify priorities for, and establish, update, and carry out, a national comparative outcomes research project agenda" (Patient Protection and Affordable Care Act, 2010). At this time, FCC is widely promoted in many health care settings and has been incorporated into our national health agenda.

Family-Centered Care in Pediatrics

FCC has become the standard practice framework in many health care disciplines, and especially so in pediatrics. The core principles of FCC can be found in Table 6. FCC in the

Table 6 – Core Principles of Family-Centered Care

- 1. People are treated with dignity and respect.
- 2. Healthcare providers communicate and share information with patients and families in ways that are affirming and useful.
- 3. Individuals and families build on their strengths by participating in experiences that enhance feelings of control and independence.
- 4. Collaboration among patients, families, and providers occurs in policy and program development and professional education, as well as in the delivery of care.

(Johnson, 2000)

context of pediatrics has been described as

The belief that health care providers and the family are partners, working together to best meet the needs of the child. Parents and family members provide the child's primary strength and support. Their information and insights can enhance the profession staff's technical knowledge, improve care and help design better programs and friendlier systems (Pettoello-Mantovani, Campanozzi, Maiuri, & Giardino, 2009, pp. 16-17).

Much of the literature on FCC in pediatrics focuses on its applicability to children with special health care needs; however, there is some research on FCC in maternity care practices, most commonly related to the NICU experience.

FCC has been widely endorsed as a superior framework for providing effective pediatric health care; however, evidence for the effectiveness of FCC is limited and just beginning to appear in the research literature. The most recent AAP Policy Statement on Patient- and Family-Centered Care (2012) summarizes the positive outcomes of this type of care as evidenced by the recent literature. These outcomes include: fewer emergency room visits, decreased anxiety for children undergoing procedures, faster recovery from procedures, increased satisfaction of care (for the patient and the family) which is directly linked to effective communication, increased confidence and competency for the caregivers, increased staff satisfaction, and cost-effectiveness (American Academy of Pediatrics, 2012b). A review of the literature from 1986-2010 reports a

positive association of FCC with improved outcomes in CSHCN for several areas, including satisfaction, access to care, communication, health status, efficient use of services, family functioning, systems of care, and the financial impact on the family (Kuhlthau et al., 2011). In addition, a secondary analysis of the 2005-2006 National Survey of Children with Special Health Care Needs found that 65.6% of respondents reported receiving FCC, and FCC was associated with several positive outcomes, including fewer unmet health care needs, more stable health care needs, and less delayed health care, among others (Kuo, Bird, & Tilford, 2011). Despite these promising results, many barriers to the provision of FCC have been identified, including the ability of providers to successfully communicate and negotiate with families to actively incorporate shared decision-making, a lack of coordination, access to services, and patient-provider relationships (Corlett & Twycross, 2006; Gramling, Hickman, & Bennett, 2004; MacKean, Thurston, & Scott, 2005).

An FCC approach has also been promoted within maternity care practices (Capitulo & Silverberg, 2001; Gramling, et al., 2004; Jimenez, Klein, Hivon, & Mason, 2010; Mullen, Conrad, Hoadley, & Iannone, 2007; Phillips, 2003; Roudebush, Kaufman, Johnson, Abraham, & Clayton, 2006; Westmoreland & Zwelling, 2000; Zwelling & Phillips, 2001). Phillips (2003) outlined 10 Principles for Family-Centered Maternity Care (see Table 7). Although breastfeeding support belongs under the purview of postpartum and newborn care, infant feeding is not explicitly included in these 10 Principles of Family-Centered Maternity Care. While Phillips covered many aspects of Family-Centered Maternity Care in this text designed to educate nurses and physicians, breastfeeding support only received cursory attention (Phillips, 2003).

Table 7 – The 10 Principles of FCMC

The 10 Principles of Family Centered Maternity Care (Phillips, 2003)	
Principle #1:	Childbirth is seen as wellness, not illness. Care is directed toward maintaining labor, birth, postpartum and newborn care as a normal life event involving dynamic emotional, social and physical change.
Principle #2:	Prenatal care is personalized according to the individual psychosocial, educational, physical, spiritual and cultural needs of each woman and her family.
Principle #3:	A comprehensive program of perinatal education prepares families for active participation throughout the evolving process of preconception, pregnancy, childbirth and parenting.
Principle #4:	The hospital team assists the family in making informed choices for their care during pregnancy, labor, birth, postpartum and newborn care, and strives to provide them with the experience they desire.
Principle #5:	The father and/or other supportive persons of the mother's choice are actively involved in the educational process, labor, birth, and postpartum and newborn care.
Principle #6:	Whenever the mother wishes, family and friends are encouraged to be present during the entire hospital stay, including labor and birth.
Principle #7:	Each woman's labor and birth care are provided in the same location unless a cesarean birth is necessary. When possible, postpartum and newborn care are also given in the same location and by the same caregivers.
Principle #8:	Mothers are encouraged to keep their babies in their rooms at all times. Nursing care focuses on teaching and role modeling while providing safe quality care for the mother and baby together.
Principle #9:	When mother-baby care is implemented, the same person cares for the mother and baby couplet as a single family unit, even when they are briefly separated.
Principle #10:	Parents have access to their high-risk newborns at all times and are included in the care of their infants to the extent possible given the newborn's condition.

The postpartum period of time has often been called the fourth trimester and as such, could be included in the provision of family-centered maternity care, which would include support and management of infant feeding. Other than a few articles that briefly mention FCC in the context of caring for preterm babies and one article describing a family-centered approach to phototherapy (for a baby with jaundice), the direct application of FCC to breastfeeding support or the management of breastfeeding problems is currently absent from the literature (de

Vonderweid & Leonessa, 2009; Kantrowitz-Gordon, 2013; Nyqvist et al., 2012; Szucs & Rosenman, 2013).

Family-Centered Care in Breastfeeding Management

Perhaps due to the relatively nascent field of lactation consulting as a profession, breastfeeding support has yet to be integrated into pediatric FCC practice. FCC is an approach that acknowledges the family as central to the optimal growth and development of the child and is rooted in the core values of providing collaborative care that respects, engages, supports, and empowers families to build confidence, discover and develop their own strengths, and have a sense of agency in the health care decision-making process. Pediatrics, maternal and child health nursing, and lactation consulting (IBCLC) all include FCC as a primary philosophy in the standard of care for the profession (American Academy of Pediatrics, 2012b; International Board of Lactation Consultant Examiners, 2008; Pillitteri, 2007). Specifically, the scope of practice for the IBCLC includes "using the principles of family-centered care while maintaining a collaborative, supportive relationship with clients" (International Board of Lactation Consultant Examiners, 2008). Though FCC appears to be promoted as the standard of care for each of these professions, it is unclear whether family-centered breastfeeding care is actually being implemented.

Family-centered approaches work within a systems framework, such that the system of care incorporates family-centered principles at the level of the patient, family, community, health care system, and policy. As identified by the *Surgeon Generals Call to Action to Support Breastfeeding*, improving breastfeeding success requires a systems approach across the system of care as well. Surgeon General Regina Benjamin states, "I have issued this *Call to Action* because the time has come to set forth the important roles and responsibilities of clinicians,

employers, communities, researchers, and government leaders and to urge us all to take on a commitment to enable mothers to meet their person goals for breastfeeding" (U.S. Department of Health and Human Services, 2011b, p. v). As described previously, inadequate support for addressing early breastfeeding challenges is compounded by a lack of collaboration between providers such as lactation professionals, nurses, and pediatricians, and the family. FCC has the potential to be used as an effective practice framework to address many of the Surgeon General's action areas to protect, promote, and support the breastfeeding dyad. Many of the action areas designated by the Surgeon General could be addressed by implementing the core elements and principles of FCC into breastfeeding support. Breastfeeding is a biological and socio-cultural practice involving many aspects of the healthcare system, including the breastfeeding dyad, the family, the community, and various healthcare providers. Barriers to breastfeeding are found at each of these levels; thus, implementing FCC as a practice framework that addresses the Surgeon General's Action items in the sections: Mothers and Their Families, Communities, and Health Care (Actions 1-12) remains a challenge. Cultural competency, interprofessional collaboration, role conflict avoidance, shared decision-making practices, and a focus on quality, satisfaction, and women's empowerment are critical to providing FCC in breastfeeding support. To implement FCC practices into breastfeeding support, barriers addressing early breastfeeding problems and barriers to interprofessional collaboration must be identified.

Theoretical framework to understanding barriers to providing breastfeeding support: Symbolic Interactionism

The application of FCC to professional breastfeeding support and management poses some particularly interesting questions considering the limited research on the lactation consultant's perceived role in the context of working on a health care team. An exploration of the myriad of barriers related to the management of early breastfeeding problems from the

perspective of the lactation consultant requires an understanding of the primary problems perceived to require lactation management, as well as lactation consultants' perceived role in managing these early problems. The interpretation, or meaning assigned by lactation consultants regarding early breastfeeding problems and how they are managed is crucial for understanding the construction of motives that lead to social behavior within the profession. The symbolic interaction framework, which explores the interpretation of events or interactions by individuals within a social context, is a useful framework for beginning this work.

The roots of symbolic interactionism can be traced back to the early 1900s in the teachings of George Herbert Mead, a social psychologist at the University of Chicago. The term "Symbolic Interactionism" was coined in the 1960s by Herbert Blumer, one of many scholars who contributed to the evolution of symbolic interactionism as a theoretical framework. One of the basic assumptions of symbolic interactionism is the co-construction of meaning by various individuals within a social context through the use of shared symbols (Dyson & Brown, 2006). Furthermore, symbolic interactionism focuses on the process in which meaning is constructed within a particular social context where individuals interact with each other and their environment (Benzies & Allen, 2001; White & Klein, 2008). In the words of Blumer (1969), "Symbolic interaction involves *interpretation*, or ascertaining the meaning of the actions or remarks of the other person, and definition, or conveying indications to another person as to how he is to act. Human association consists of a process of such interpretation and definition" (p. 66). Blumer outlines three main premises of symbolic interactionism. The relevance of these premises in the context of the professional management of early breastfeeding problems demonstrates the potential usefulness of symbolic interactionism as a theoretical framework for the proposed research study.

1) "Human beings act toward things on the basis of the meanings that the things have for them" (Blumer, 1969, p. 2).

Individuals use symbols to generate meaning for things, which form the basis from which the individual will respond to the thing. The thing itself does not have meaning but for what the individual ascribes to it through the process of 'symbolic interaction.' This premise suggests that determining how lactation consultants interpret breastfeeding problems (the symbolic meaning ascribed to these problems), would lead to a better understanding about how they practice with regard to supporting breastfeeding women and managing problems that arise. While there is no available literature on how lactation consultants interpret early breastfeeding problems, some research with pediatricians and nurses suggest that there are many problems that lead the practitioner to recommend weaning. However, these studies focus mostly on attitudes and beliefs, whereas the providers' interpretation of the problem, which results in this decision to recommend weaning, has not been fully explored (Freed, Clark, Sorenson, et al., 1995; Schanler, et al., 1999; Szucs, et al., 2009). In attempting to understand the motives behind the management of early breastfeeding problems by *any* health care provider, this first premise is critically important and should not be taken for granted.

2) "The meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows" (Blumer, 1969, p.2).

This premise expands on the idea of the first premise by acknowledging the influence of social interactions on the way individuals create meaning. In other words, the meaning of something is not inherent in the thing itself, but rather, within a particular social context. One study did explore nurses' perspectives of intrapartum care and facilitators/barriers to providing that care, where their interpretations of their setting and particular practices were revealed. In

this study, it was clear that their interpretation of medical interventions and their interactions with other providers shaped how they understood intrapartum care measures (Sleutel, et al., 2007). As lactation consulting develops as a profession, IBCLCs have, in some settings, been integrated into the health care team. Thus, it is likely that the meaning assigned to various aspects of the lactation consultant's job is influenced by the setting and interactions with the other health care team members.

3) "These meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters" (Blumer, 1969, p.2).

In this third premise of symbolic interactionism, the process of defining and interpreting meaning is understood as fluid and variable in such a way that the "interpretive process" continually inscribes and reinscribes meaning by the individual. Blumer (1969) elucidates:

The actor selects, checks, suspends, regroups, and transforms the meanings in light of the situation in which he is placed and the direction of his action. Accordingly, interpretation should not be regarded as mere automatic application of established meanings but as a formative process in which meanings are used and revised as instruments for the guidance and formation of action (p. 5).

This would suggest then that the lactation consultant will continue to renegotiate meaning associated with early breastfeeding problems, how to manage these problems, and the barriers associated with managing these problems. Thus, the fluidity and iterative nature of the process of defining and interpreting meaning would influence the actions carried out by the lactation consultant.

The exploration of the making of meaning in symbolic interactionism can aid in the revelation of the interconnections between interaction, the social context, and human behavior.

There are several other concepts pertinent to symbolic interactionism that are worth discussing briefly here in the context of the proposed study and include self and mind, role, and identity.

Self and Mind

The notion of 'self' is essential to symbolic interactionism in that the 'self' is simultaneously the object and the subject and is continually transformed though social interaction with others. The subjective 'self' represents the 'I' as the individual's own interpretation of oneself. Concomitantly, the objective 'me' consists of the individual's interpretation of oneself through his/her perception of how others see him/her. This concept has been described as the 'looking glass self' by Charles Horton Cooley in the early 1900s (White & Klein, 2008). White and Klein (2008) explain further that the 'self' in symbolic interactionism "is constructed by our consciousness from the two perspectives of I and me. The self as object contains the perspective of specific others when we take on the role of particular persons to see ourselves as they might, and it is constructed from the perspective of generalizations of roles, or generalized other" (p. 100). In the context of the present study, it would be reasonable to inquire about the construction of the 'self' for the lactation consultant both within and outside of the health care team. In what ways does this construction of 'self' influence how early breastfeeding problems are managed? How does interprofessional collaboration function within the web of interconnected constructed 'selves?'

Role

The concept of role, though not explicitly defined by Mead, has been interpreted as "the place of the actor" (White & Klein, 2008). There are several aspects of role that are important to symbolic interactionism and include the interrelated concepts of role expectation, role clarity, role strain, and role conflict. Role expectation refers to the expectations attached to a particular

between the individual and others, a lack of role clarity can lead to confusion and a failure to meet expectations. The expectation about the performance of the role must be understood, and the clarity of the role will likely determine the perceived success of the performance of the role (White & Klein, 2008). More specifically, symbolic interactionism proposes that, "The greater the perceived clarity of role expectations, the higher the quality of role enactment" (p. 104). In addition to assumed and defined roles, symbolic interactionism also allows researchers to consider issues of role strain, in which the actor may not have sufficient resources with which to satisfactorily perform the intended role. In addition, multiple conflicting roles typically imply multiple expectations, which can lead to role strain or the lack of resources to perform an intended role or roles. White and Klein (2008) describe several propositions related to role. Two of these are: 1) "The more individuals perceive consensus in the expectations about a role they occupy, the less their role strain" and 2) "The greater the diversification of a person's roles, the less consensus the person will perceive in the expectations about those roles" (p. 105).

An interrogation of this concept of role is needed to explore interprofessional collaboration in the management of breastfeeding problems. How do lactation consultants define their role in the management of breastfeeding problems, both in terms of their ideal role and the actual role they are able to perform? How is the role of the lactation consultant defined in the context of other providers and within the professional's social and environmental setting? Does role strain or role conflict act as a barrier to fulfilling role expectations in the management of breastfeeding problems?

Identity

Symbolic interactionism offers a contextual lens with which to better understand the links between identity and behavior. For example, how does a provider's (or the mother's) identity influence his/her behavior in a particular situation and how does his/her behavior during the event further define his/her identity? Individual roles may be more easily contextualized within social and cultural normative expectations, but how is individual identity created or developed through the meanings determined to be associated with one's identity? According to White and Klein (2008), these questions may be addressed through the application of symbolic interactionism:

Thus the complete picture for identity is that society provides the social roles (and meanings of those roles) that an actor organizes as a salience hierarchy. The actor then behaves in any situation according to the identity and meanings relevant to the situation. This perspective allows the actor to have agency and invoke different role identities based on salience of the identity and situational relevance (p. 103).

An exploration of the perceived professional identity of the lactation consultant may provide insight into the strategies used to circumvent or navigate barriers to the professional management of early breastfeeding problems.

Each discipline within the biomedical system has its own discourse and culture, which develop over time and continue to change as the system changes. Even though they may work together within the system, the culture of each discipline may remain nebulous to other disciplines. Hall (2005) suggests that the differences in values within professional cultures can lead to barriers in communication between the professions: "Since values are internalized and largely unspoken, they can create important obstacles that may actually be invisible to different

must be made apparent to all professionals involved" (p.191). The professionalization of lactation consulting has led to the relatively recent incorporation of lactation consultants onto the postpartum health care team. Thus, the values within the professional culture of lactation consulting may still be evolving and role expectations and clarity may require further delineation. Furthermore, as a profession becomes more legitimate in the eyes of others, the concept of professional boundaries may evolve such that professional boundaries are more clearly defined and maintained by the members of the profession (Carroll & Reiger, 2005; P. Hall, 2005). Research with lactation professionals in Australia found that the profession has yet to develop a sense of "occupational closure over the boundaries of their work, and effective power within the state and health system" (Carroll & Reiger, 2005, p. 107). The ways in which lactation consultants construct meaning within the social context of the biomedical model of patient care are important factors for understanding the relationship between role, identity, and the management of early breastfeeding problems.

The usefulness of symbolic interactionism as a theoretical framework, though most commonly applied in sociology and psychology, has been successfully applied to as a research framework in the health sciences, and in particular, nursing (Benzies & Allen, 2001; Burbank & Martins, 2010; Clarke & Star, 2003; Jeon, 2004; Klunklin & Greenwood, 2006; Meiers & Tomlinson, 2003). For example, in one study researchers combined symbolic interactionism with phenomenology to explore the co-construction of meaning through the family-nurse interaction in a pediatric intensive care unit setting (Meiers & Tomlinson, 2003). Another study by Klunkin and Greenwood (2006) illustrates the utility of the symbolic interactionist framework through grounded theory methodology to study the experiences of widowed and married Thai

women with HIV/AIDS. In another study designed to examine the ways in which community nurses work with family caregivers, the researcher explains the use of symbolic interactionism to "identify how they interpret their individual experiences and shared situations, what alternatives they use when acting in different situations, and under what conditions alternative actions are chosen" (Jeon, 2004, p. 251). Similarly, symbolic interactionism will be applied as a framework in the proposed research study to identify lactation consultants' interpretation of early breastfeeding challenges, the barriers to the professional management of early breastfeeding problems, and the ways in which these barriers are potentially circumvented.

Stryker and Vryan (2003) elucidate the conceptualization of symbolic interactionism as a theoretical framework, rather than a theory: "The distinction is between a set of ideas intended as an explanation of some particular aspect of the empirical social world (theory) and the imagery, premises, and conceptualizations underlying that explanation (theoretical framework)" (p. 8). The significance of the "framework" should not be minimized as there

are virtually unlimited ways of viewing the empirical social world, and without some frame or another, a researcher faces a potentially bewildering range of possibilities . . . The imagery, premises, and conceptualizations making up a theoretical frame give direction to inquiry. In short, a frame precedes theorization, suggesting some social phenomena in need of explanation, providing a sense of what is relevant and important to observe, and offering ideas about how concepts may interrelate to form an explanation of the phenomena of interest (pp. 8-9).

In this research study, the symbolic interaction framework offers a place to begin, though because symbolic interactionism is incomplete (as are all frameworks), it is equally important to remain present to its limitations and open to discovery beyond the focus of the frame. For this

particular study, it is important to identify how lactation consultants interpret their experiences in managing early breastfeeding problems (what is important), how their social context impacts these experiences, and when and how alternative choices are made in order to succeed in their goals of managing breastfeeding problems. Put simply, what is going on in the professional management of early breastfeeding problems?

CHAPTER 3: METHODOLOGY

Purpose of the Study

This study was designed to explore the perspectives of lactation consultants about early (prior to four weeks postpartum) breastfeeding problems that may lead to early weaning and identify factors associated with hindering the professional management of these problems. The goal of this research is to address gaps in the literature and to inform the development of strategies to reduce the incidence of early weaning, thus improving our nation's breastfeeding rates and ultimately, improving the health of women, infants, and future generations. The purpose of this exploratory study is to understand the nature of International Board Certified Lactation Consultants' (IBCLCs) perceived barriers to the professional management of early breastfeeding problems.

This purpose of this research was achieved by addressing the following research questions:

Research Questions:

- 1. What do IBCLCs perceive to be the barriers to providing professional support and management of early breastfeeding problems?
- 2. How do the perceived barriers to managing early breastfeeding problems vary by the type of breastfeeding problem?
- 3. What are the roles of various health care professionals in providing breastfeeding support and management of early breastfeeding problems, as perceived by the IBCLC?
- 4. How do these roles impact the ability of the IBCLC to provide support and management of early breastfeeding problems?

5. What are the communication strategies and other processes through which IBCLCs work with a) other health care professionals and b) families to provide support and management of early breastfeeding problems?

Methodological Approach

Due to the lack of current literature on lactation consultants; perspectives related to barriers to early breastfeeding management, it was important to first explore these research questions and the range of perspectives before conducting research to test hypotheses and existing theories. Qualitative research, such as in-depth interviews, focus groups, or participant observation, provide a framework for a "theoretical and methodological focus on complex relations between (1) personal and social meanings, (2) individual and cultural practices, and (3) the material environment or context" (Ulin, Robinson, & Tolley, 2005, p. 4). Qualitative research also enables a depth of perspective that is not always possible from quantitative studies. In addition, qualitative research was ideal for exploratory research because it interrogates the meanings and intentions behind people's attitudes and behaviors (Debus, 1988). As presented in Chapter 2, it is clear that the voices of lactation consultants have not been explored in the published literature. Without these perspectives, we cannot fully understand the complexities that are involved in the management of early breastfeeding problems. By studying IBCLCs' perspectives through in-depth interviews specifically, this research aimed to begin to identify how these problems are managed within and across the biomedical system.

Grounded Theory

Grounded theory has been used frequently in qualitative research with providers such as physicians and nurses, and especially with patients. In attempting to understand the management issues related to early breastfeeding problems, the goal is not to identify one answer to a so-

called "problem," but rather to reveal the diverse perspectives from IBCLCs working in a range of settings to gain a more complete picture of how these problems are currently managed, as well as the perceived barriers to management. Without prior research to guide this study, the inductive nature of grounded theory was particularly appropriate. Grounded theory is defined as "a qualitative research method that uses a systematic set of procedures to develop an inductively derived theory about a phenomenon" (Strauss & Corbin, 1990, p. 24). Grounded theory shares its roots with positivism and symbolic interactionism, but has evolved to a more constructivist and interpretive philosophy (Keddy, Sims, & Stern, 1996; Kushner & Morrow, 2003; Plummer & Young, 2010; Strauss & Corbin, 1990). By allowing the themes about barriers to managing early breastfeeding problems to emerge through a grounded theory approach, subjectivity is acknowledged (in order to minimize researcher bias) so that the focus of discovery arises out of the voices of the providers. Several aspects related to the methods of grounded theory research were specifically applied to this study, including theoretical sampling and constant-comparative methods of coding and analysis, such as open, selective, and axial coding methods, and memo writing (H. Y. Chen & Boore, 2009; Heath & Cowley, 2004; Jeon, 2004).

Theoretical sampling

Grounded theory recommendations are to aim for theoretical saturation, at which point no new information is observed from the data; however the concept of theoretical saturation is not clearly operationalized. Guidelines for estimating sample sizes needed to achieve theoretical saturation are absent from the literature. Guest and colleagues (2006) conducted research in an attempt to better understand at what point theoretical saturation is achieved. While the point of theoretical saturation will expectedly differ for every study, findings by Guest, Bunce, and Johnson (2006) provided some insight into the question of "how many interviews are needed?"

In a methodological study, Guest, Bunce, and Johnson (2006) tracked and grouped the number of codes identified throughout the analysis to be able to determine when they reached theoretical saturation. They concluded that

the majority of codes that were important in the early stages of analysis remained so throughout. Of the twenty codes that were applied with a high frequency in round 1 of the analysis, fifteen (75%) remained in this category throughout the analysis. Similarly, twenty-six of the thirty-one high-frequency codes (84%) in the second round of analysis (i.e. after twelve transcripts) remained in this category during the entire analysis . . . After analyzing all sixty interviews, a total of thirty-six codes were applied with a high frequency to the transcripts. Of these, thirty-four (94%) had already been identified within the first six interviews and thirty-five (97%) were identified after twelve (p. 73).

The results of this study suggest that theoretical saturation had generally been reached in the first 12 interviews (97%).

A study conducted by Mason (2010) aimed to determine the sample size needed to achieve saturation in PhD studies employing qualitative research methodologies. Of the 560 studies included, the average sample size was 31, with a range of one to 95. One hundred and seventy-four of these studies used grounded theory methodology; these studies had an average of 32 participants with a range of four to 87. Interestingly, the distribution of sample sizes across the entire study was found to be non-random due to a statistically significant proportion of the studies reporting sample sizes that were a multiple of ten, with 20 and 30 participants representing the most frequently reported sample sizes. This finding suggests that the researchers of these studies may not be adhering to the guidelines for a sample size that is

determined by saturation (Mason, 2010). Mason (2010) points out that various factors, such as the interviewer's level of experience, can affect saturation.

Because it is difficult to estimate sample size in advance when using saturation as the determining factor, this study did not aim for a predetermined set number of interviews; however, based on the studies just described the researcher estimated that saturation would be reached between 20 and 40 interviews. This estimate was based on the notion that saturation would need to be reached for professionals working in both medical and non-medical settings, as well as for professionals with both licensed and non-licensed backgrounds. The process used to reach theoretical saturation in this study will be described in more detail below.

Coding

In grounded theory, the constant comparative method of coding and analyzing data is recommended as a way to maintain theoretical sensitivity throughout the entire research process. The constant comparative method may use open coding first to begin examining and categorizing the data, followed by axial coding, where data is reorganized and grouped according to patterns that emerge from the data, and finally, selective coding, where the "core" categories are identified and described. The constant comparative method requires constant revisiting of the data such that each interview is coded before the next interview is conducted, which allows for flexibility in subsequent interviews to maximize the quality and depth of the information gained (Jeon, 2004; Starks & Trinidad, 2007). Throughout this process both analytic and reflective memos assist the researcher to "document and enrich the analytic process, to make implicit thoughts explicit, and to expand the data corpus" (Creswell, 2007, p. 290). These elements of coding and writing memos are crucial to the development of theory as emergent from the data.

A more detailed explanation of the coding processes applied in this study will be described below.

Research Design

Due to the variety of disciplines that may be involved in managing or supporting the breastfeeding relationship, qualitative research is critical to understand the nuances that each type of practitioner must navigate in doing his or her job. This study employed qualitative methods to explore the research questions by beginning with lactation consultants, who most closely work with breastfeeding issues. Interviews allow for the participants to interact with the researcher in more confidential, private environment (Ulin, et al., 2005). This type of setting provided by individual interviews was important to allow for participants to feel comfortable revealing the limits of their professional knowledge regarding breastfeeding management and to be able to speak openly about other providers they may work with on a health care team. The Principal Investigator (PI) conducted interviews with 30 lactation consultants (IBCLCs) practicing in Florida at which point saturation was reached. These interviews served to identify the most important factors related to the professional management of early breastfeeding problems, and barriers to providing best practices and family-centered care. The first four interviews were conducted as key informant interviews to assist in development of the semistructured interview guide and to allow the researcher to receive feedback on her interviewing style. The PI intentionally conducted these key informant interviews with one lactation consultant from each of four different practice settings: hospital, private practice in a pediatric office, private practice, and WIC. A short demographic survey was administered to all participants to better understand their educational and professional backgrounds as well as their

personal characteristics (e.g., age, education, training, ethnicity, county/state, and personal breastfeeding experience/exposure).

Sample Selection

Description of the Providers

The sampling frame for this study was comprised of lactation consultants with current IBCLC-certification working in the state of Florida. These IBCLCs work in a range of settings that include hospitals (in-patient and out-patient), private practice, pediatric offices, breastfeeding centers, and WIC or Health Department clinics. These providers work with women and their babies in the postpartum period, and in addition to the IBCLC credential, have various levels of experience, background, qualifications, and training with regard to breastfeeding support and management of breastfeeding problems. The gold standard for a lactation support practitioner is the International Board Certified Lactation Consultant (IBCLC), which requires formal and extensive training on all aspects of breastfeeding, many hours of supervised clinical practice, and successful completion of a Board Certified exam every 10 years. This study included only those lactation consultants who were currently certified as IBCLC because this level of lactation support requires the most stringent training and experience with regard to expertise (as opposed to other levels of lactation support).

Breastfeeding support can also be provided by counselors who have varied training such as Women, Infants, and Children (WIC) peer counselors and informal training such as La Leche League (LLL) Leaders, or by counselors with more comprehensive training such as certified lactation counselors (CLC), lactation educators (LE), or certified lactation educator/counselors (CLC). Other types of providers, such as nurses (in hospitals, family-practice offices, or pediatric offices), pediatricians, family medicine doctors, pediatric dentists, obstetricians, and

midwives may also provide varying degrees of breastfeeding support and/or management of problems. Future research may be needed to better understand the perspectives and practices of other types of providers who work with breastfeeding management.

Sampling Methods

Primarily purposive sampling was utilized in this study. IBCLCs were identified through online public listings of state membership lists such as the Florida Lactation Consultant Association (FLCA) (there are approximately 512 IBCLCs in Florida), the United States Lactation Consultant Association (USLCA), and an online directory of breastfeeding support in the Emerald Coast area of Florida. A recruitment letter was posted in the FLCA newsletter which is distributed to all members via email.

As inclusion criteria, all participants had to be age 18 or older and able to speak English. IBCLCs who work solely in neonatal intensive care units (NICUs) were excluded from this study. The infants in NICUs have particularly acute challenges and are often not receiving breast milk at the breast, thus breastfeeding challenges are less likely to manifest until close to or following discharge.

There are 67 counties in the state of Florida and participants were recruited from across the state. There are only four hospitals that have earned the Baby-Friendly Hospital Initiative (BFHI)-designation in Florida; these are Morton Plant Hospital and Mease Countryside Hospital in Pinellas County, Naval Hospital Jacksonville in Duval County, and Cape Canaveral Hospital in Brevard County. In order to determine whether there are differences in lactation consultants' perceived barriers to the management of early breastfeeding problems by BFHI designation, the cities where these hospitals are located were purposely included as primary sampling areas. Unfortunately, the PI was only able to interview one IBCLC working in a BFHI hospital.

Snowball sampling methods were also used to reach a more diverse sample of participants. Many IBCLCs also work under other credentials, which may include RNs and other specialty nursing credentials (Pediatric Nurse Practitioners (PNP); Advanced Registered Nurse Practitioners (ARNP)), LLL Leader, MD such as OBGYN or Pediatrician, other healthrelated degrees such as Registered Dietician (RD), or other non-medical degrees (e.g., BA, MS, MA, MPH). Furthermore, IBCLCs may work in a variety of different settings including hospitals (mother-baby units and neonatal intensive care units), outpatient settings, private practice, home visits, pediatrician or family doctor practices, WIC clinics, health departments, or in academic-affiliated clinics. The PI aimed to reach a diverse sample of IBCLCs with regard to primary credentials and employment settings so as to explore the range of possible barriers to providing breastfeeding management, and identify differences and similarities across their experiences and across the populations they serve. Due to the application of symbolic interactionism as a guiding theoretical framework in this proposed study, it was also important to interview a range of IBCLCs who hold various credentials to understand how they define their role in breastfeeding management, as well as how this role is influenced by various practice settings.

Because the PI employed grounded theory as a methodological approach, theoretical sampling was used in addition to purposive and snowball sampling. Theoretical sampling "involves recruiting participants with differing experiences of the phenomenon so as to explore multiple dimensions of the social processes under study" (Starks & Trinidad, 2007, p. 1375). In theoretical sampling, new participants continue to be added until theoretical saturation is reached. According to Starks and Trinidad (2007), though it is difficult to predict how many participants will be needed for saturation, most grounded theory studies report a range from 10-

60 participants. Onwuegbuzie and Leech (2007) suggest that sample sizes need to be large enough to achieve saturation, but not so large that "it is difficult to undertake a deep, case-orient analysis" (p. 116). Creswell (2007) suggests that between 20-30 participants can be expected in grounded theory studies in order to reach saturation, but also notes that more than 30 participants may be needed.

In this study, the PI kept careful notes about the coding process and the development of themes to determine when theoretical saturation was reached. Because the literature on reaching theoretical saturation in grounded theory studies is sparse, the PI believes that a summary of the process for this study is important to include in this dissertation. This level of transparency is important to establish trustworthiness of qualitative research and may assist other researchers in understanding the process. Ideally data collection and data analysis occur concurrently in grounded theory research, which enables the researcher to analyze each interview, field notes, and memos before proceeding to the next interview. This process allows for the development of themes, the emergence of new questions to add depth to the analysis, and the determination of theoretical saturation. In the present study, some practical limitations prevented the PI from always collecting and analyzing the data simultaneously. For example, because the PI chose to travel to conduct interviews face-to-face whenever possible, several interviews were often scheduled across only a few days. In an effort to remain true to the process of grounded theory, the PI reviewed field notes following each interview to think through developing concepts between interviews, and transcripts were coded in the order that the interviews were conducted.

In this study, theoretical saturation was determined by evaluating the development of new codes or themes and through the use of the constant-comparative method during axial coding.

The first interview resulted in the creation of 63 codes. Codes continued to be added so that

following three interviews there were 91 codes, following five interviews there were 110 codes, and following 9 interviews there were 138 codes. At this point, the PI significantly reorganized the codes into families to better reflect the concepts that were emerging from the data and to more clearly reflect how the data were answering the research questions. An excerpt from the PI's coding memo illustrates this process,

I'm working on revising the codes before I go further with my coding of interviews. I'm trying to create categories that go together, partly by renaming the codes and partly by creating code families. Many of the codes are related to barriers, so I'm going to work on putting those under BARRIERS (bar xxx) so that they will be easier to locate as I'm coding. I've got several WIC codes together as a family as well. I'm hoping that this will help me with focusing in on my research questions. I'm also going to merge the codes "Breastfeeding knowledge from experience" and "providers learning from personal experience" because they are redundant. I'm thinking that I need a code related to attitudes as a barrier and there are several codes that fit under that, such as "belief that formula is fine," "IBCLC is not valued," "provider attitudes," "this hasn't changed since 1980," and "unrealistic expectations." I also think I may need to break down "provider attitudes" into more refined codes since the attitudes vary. I am definitely creating a family for ROLE and for COMMUNICATION. These code families are all related to my research questions and I'm hoping that they will help me to examine the data in a fresh way. In creating these code families, many of the codes seem to belong in multiple families. There are differences, but often they are subtle, so I'm struggling with where to put them. For example, "Educating Parents" and "Educating Doctors and Providers" fit

into Communication and also Role. I'm putting them in Communication now, but may need to separate these depending on if they are talking about role vs. communication.

After rearranging the coding structure, there were 147 codes. As open and axial coding continued, between five and eight codes continued to be added per interview through the 17th interview. The 23rd interview resulted in only one additional code. In a memo written in connection to this interview, the PI described a sense of saturation for the hospital-based participants. The next interview was with WIC; only 2 codes were added and the PI noted a sense of reaching saturation with the WIC participants. As an additional hospital-based interview had already been scheduled, the PI proceeded with this interview despite believing saturation was reached. This ended up being an important interview to add. The PI wrote in a memo: "While I only added one code, I'm glad I got this interview because she was the first one to discuss the idea that the sexualization of breasts in our culture is a problem when it comes to breastfeeding support and the range of providers who may see breastfeeding mothers. In addition, she talked a lot about the culture of the Deep South, which I didn't get as thoroughly from other interviews. Other than this, I feel like I have reached saturation for the IBCLCs who are working in hospitals." After much difficulty in reaching the MD/IBCLCs, one last effort at recruitment yielded three interviews. Surprisingly few codes (3) were added for these interviews with pediatrician IBCLCs and the PI determined that saturation, while not definite, was likely reached for these MD/IBCLCs as well. Five of the seven MD/IBCLCs in Florida were eligible to participate; however, because the additional two eligible MD/IBCLCs could not be reached for interview, no other interviews were conducted with these providers. At 28 total interviews, the PI believed that saturation was reached; however, two additional interviews were conducted to confirm saturation. At the recommendation of two MDs, the PI reached out for an additional

interview with an ARNP who works in unique setting; no additional codes were added. The last interview with a private practice IBCLC had been rescheduled several times and as only 2 codes were added totaling 230, and the PI felt that saturation for private practice LCs had also been reached. As the analysis progressed, the number of codes did continue to change, but the PI remained confident in her determination of saturation.

Instruments and Measures

The semi-structured interview guide (Appendix A) included a set of questions intended to explore the perspectives of IBCLCs on the barriers to managing early breastfeeding problems. The questions aimed to better understand the nature of these early problems, management challenges, structural, environmental, and professional barriers to providing the support needed, and practices that facilitate the management of these problems. The questions were developed from the literature and from informal discussions between the PI and lactation professionals over several years. Questions about the participants' reasons for becoming an IBCLC, practice settings, and job descriptions were intentionally asked first to establish rapport. This process also provided the PI with an overall understanding of the participants' credentials and practice settings so that the remaining questions and probes would be appropriate for the individual participant. Following the first two interviews, the PI sought counsel from an outside expert qualitative researcher regarding the interview guide questions and the PI's style of interviewing, which led to some modifications to the interview guide and a reordering of some of the questions. Use of the semi-structured interview guide assured that the PI was able to ask similar questions for each participant to aid the analysis and comparisons across IBCLCs working in different settings and who hold various other professional credentials (Bernard, 1994). However, due to differences in work settings and perceived roles, some questions were participant-specific. Additional follow-up questions and probes also varied for each interview. The PI also maintained a reflective journal to allow for critical self-assessment, accountability, and reflexivity throughout the research process.

Methods and Data Collection

The semi-structured, in-depth interviews were the primary data collection methods used in this study; however, the PI's detailed field notes and two unsolicited follow-up emails from participants were also included as elements of data collection. Interviews were conducted between July 2012 and June 2013. Initially, four key informants were identified through convenience sampling from informal networks by the PI. Key informants were all contacted by email. These lactation consultants represented an in-patient hospital setting, private practice setting, WIC setting, and outpatient (physician's office) setting to assure that the interview guide was tailored to represent the potential diversity of perspectives by primary employment setting and population served. The key informants were selected from the overall sample of potential participants so that they were representative of the participants included in the study.

Recruitment

Following the four key-informant interviews and refinement of the interview guide, indepth semi-structured interviews were conducted with 26 additional IBCLCs from across the state of Florida for a total of 30 interviews. IBCLCs were recruited by the PI through purposive and convenience sampling methods (public state membership lists such as the Florida Lactation Consultant Association (FLCA) and the United States Lactation Consulting Association (USLCA)). Participants were recruited through email, and/or a telephone call/message, and through the FLCA organizational newsletter, to invite them to participate in the study. See Appendix B for recruitment materials. One participant contacted the PI as a result of the

recruitment information in the FLCA newsletter. Most participants responded to the first email to express an interest in participating. No more than three emails and one phone message were sent to any potential participant in recruitment efforts.

While selection of participants was limited to IBCLCs working in settings in Florida, they do not represent each hospital, practice, or county equally. Rather, to honor the grounded theory approach, the focus was to obtain the breadth of experiences and perspectives of the barriers to managing early breastfeeding problems. The PI aimed to explore as wide a range of IBCLC roles and practice settings as possible to best understand the breadth of perspectives in Florida. Because Florida is a large state with a range of geographical, demographic, cultural, and developed community environments, part of the PI's recruitment strategy was to reach out to IBCLCs practicing in various settings in each of seven regions of Florida. The PI sought to examine potential differences and similarities regionally, by practice setting, and by primary credentials. Some areas of Florida have very few IBCLCs, thus, to protect the anonymity of the participants, the practice settings of the participants will not be described in detail. To provide some context for the location of the IBCLCs included in this study, the number of participants per region is displayed in the map of Florida in Figure 3. Interviews were conducted with participants in each of the following regions: northwest (n=5), northeast (n=5), central (n=5), west central (n=8), east central (n=1), southwest (n=1), and southeast (n=5).

In addition to purposive recruitment based on geography, the PI intentionally recruited participants with unique combinations of credentials (e.g., ARNPs, speech language pathologists, occupational therapists), uncommon demographic characteristics for IBCLCs in Florida (African American and Asian IBCLCs), unique practice settings (e.g., pediatric offices, breastfeeding

centers, BFHI hospitals, military hospitals), and those working in more than one setting or in more than one role.

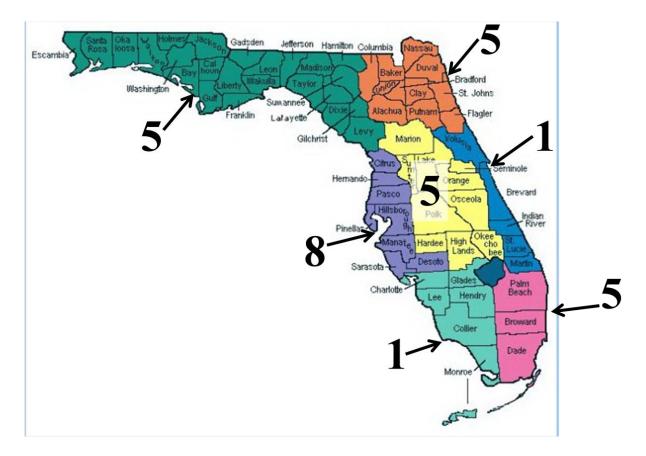


Figure 3 – Distribution of Participants by Region of Florida http://www.flca.info/resourcedir.htm

A total of 50 IBCLCs were directly emailed to be recruited to participate in this study.

One IBCLC contacted the PI after seeing the recruitment information in the FLCA newsletter.

The response rate was 82% and the participation rate was 59%. The total final sample size was 30. See Figure 4 for the recruitment process diagram and Table 8 for the recruitment process by practice setting. It is important to note here that Figure 4 represents a summary of the recruitment process over the course of the entire study, which followed a grounded theory methodological approach whereby recruitment, data collection, and analysis were iterative.

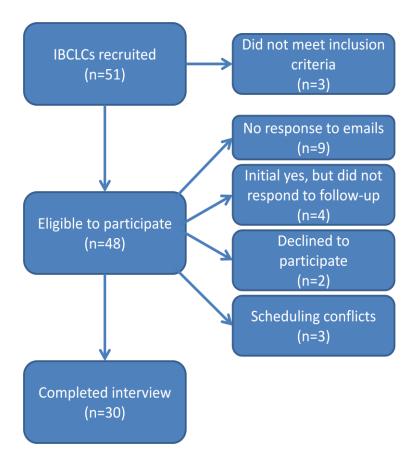


Figure 4 – Recruitment Process Diagram

Table 8 – Recruitment Process by Practice Setting

	Hospital	WIC	Private Practice	MD	Private Practice and Hospital	Total
Contacted	21	13	9	6	2	51
Not eligible	2	0	0	1	0	3
No response	3	5	0	1	0	9
Initial yes, but no response to	2	1	0	1	0	4
follow-up						
Declined	1	0	1	0	0	2
Scheduling	1	0	1	0	1	3
conflicts						
Interviewed	12	7	7	3	1	30

Data Collection Procedures

Several days before the scheduled interview, the PI emailed a copy of the informed consent document to each participant so that they would have an electronic copy for their records and extra time to read it in advance. Prior to the start of the interview, the PI carefully went over the informed consent document and each participant provided verbal or written consent to participate in the interview and to be audio recorded using a digital voice recorder (See Appendix C). All participants also completed a brief demographic questionnaire. Detailed notes were taken by the PI during all interviews. The length of the interviews ranged from just over 1 hour (69 minutes) to two and a half hours (146 minutes) with an average of about two hours (110 minutes). Interviews were conducted in person (n=23) when possible, or over the phone (n=5) or through Skype (n=2), when traveling was not possible. Several interviews that were originally planned to be conducted in person in northwest Florida were rescheduled to phone/Skype interviews due a family emergency for the PI. In-person interviews were conducted in a location of the participants' choosing, which included local libraries (n=3), restaurants (n=2), hotel lobbies (n=2), participant offices (n=8), available conference rooms (n=3), and participant homes (n=5). Several studies have demonstrated that telephone interviews are comparable to face-toface interviews in terms of the quality of the data collected, even when combining interview modes (C. Miller, 1995; Sturges & Hanrahan, 2004). In the present study, the PI found that although non-verbal cues were not observable in the phone interviews, the interviews were equally as dynamic, informative, and detailed. Skype was an excellent alternative to the phone because it did allow the PI to observe non-verbal cues and build rapport slightly quicker. Participants were not compensated for their time; however, they were all sent a personal, handwritten thank you note following the interview.

Data Cleaning, Verification, and Management

All interviews were transcribed using a professional transcribing service. The PI ensured accuracy of the transcriptions by listening to 10% of the recorded files while reading along with the transcriptions. Participants were given an identification number so that their names were not connected to the data. The digital files of the interviews were labeled with this identification number as part of the file name prior to being sent for transcription. In addition, the transcription company signed a non-disclosure agreement to maintain the confidentiality of the participants.

One master list that connects the participant to their identification number is kept by the PI on a password-protected computer and is not accessible by anybody else. Maintaining this list allowed the PI to verify any statements made by the participants in an effort to maintain credibility of the data through member checking. A database consisting of all data related to this study was maintained on a secure (password-protected) computer only accessible by the PI and one master's-level research assistant (RA). All paper files are stored in a locked cabinet and will be properly destroyed after the required time period of a minimum of five years after the close of the study with the USF IRB.

Data Analysis

All interview transcriptions were entered into Atlas.ti student version 7.1.1, computer-assisted qualitative data analysis software (CAQDAS) to identify emergent themes, contribute to the development of an evolving codebook for the study, and maintain an audit trail of the analytic process. All 30 transcripts and follow-up emails received from participants were imported into one hermeneutic unit (HU) in Atlas.ti. Several analytic techniques were employed, such as a constant-comparative method that includes open coding, axial coding, and selective coding, as well as analytic and reflective memos (Neuman, 2003; Strauss & Corbin, 1990). Attention to emergent codes was particularly important because the experiences, interpretations,

and practices expressed by the participants differed from those of the researcher, resulting in different assumptions and understandings of the issues being explored. Bracketing, described in more detail below, was critical for maintaining the integrity of the data and identifying the PI's biases.

Constant-comparative method

The constant-comparative method of analysis is an iterative process whereby the coded data was compared with the data in each phase of the study to determine similarities and differences between phenomena with the intention of refining codes and broadening concepts (Wasserman, Clair, & Wilson, 2009). With constant comparison, Lincoln and Guba (1985) explain that:

Delimiting begins to occur at the level of the theory or construction, because fewer and fewer modifications will be required as more and more data are processed . . . The inquirer begins to realize both *parsimony* and *scope* in his or her formulation. Second, as delimiting occurs the original list of categories will be reducible in size because of improved articulation and integration; options need no longer be held open. At the same time the categories become *saturated* . . . (Lincoln & Guba, 1985, p. 343).

The iterative nature of this constant-comparative method was maintained through an ongoing process of data analysis to identify themes, to code the themes into categories, and to examine new perspectives. This process allowed the PI to identify new themes and perspectives that required modification of several interview probes to gather the most useful information possible and maintain the evolving and iterative process that is integral to grounded theory methodology. By engaging in a constant-comparative process, the researcher could identify similarities and differences across the data, while continually refining codes and themes in the process of concept formation.

Concept formation and development

The process of concept formation and development did not occur in clearly defined stages of the analytic process. The PI began with open and in vivo coding, which was the first step in breaking down the raw data. To avoid over-fragmentation, the line-by-line coding was conducted in the manner described by Charmaz (2006) such that the line or lines represented a conceptual idea, rather than coding each individual line separately. In this phase, all ideas were considered which generated a rather large list of codes that represented broad concepts and initial themes. Through constant-comparison new segments of data were compared with previous codes, such that similarities and nuances were identified and patterns emerged. At this point, the PI entered the axial phase of coding which continued to occur simultaneously with open and invivo coding as additional interview transcripts became available. Through axial coding, codes were categorized into groups that represented broader concepts and aspects of the research questions. These core categories, labeled as "Code Families" in Atlat.ti, became the principle components used to begin to explain the data. The initial "Code Families" included: Background, Barriers, Breastfeeding Problems, Communication, Family-Centered Care, Role, Role Impact, Supporting Factors, and WIC. These categories were further developed and refined as additional interviews allowed the researcher to interrogate the meaning of the emerging concepts.

Detailed memos documented the analysis process which allowed the PI to maintain an audit trail as she moved through concept formation to concept development and then into concept integration. For example, one of the main categories to emerge was "hierarchies of respect." The PI was grappling with this way this concept is played out in the healthcare setting

and looking to understand how the participants interpret their position within the hierarchy. The following memo offers a glimpse into this analytic process:

The hierarchy of power in the hospital setting is a social issue that permeates large organizations, including the health care system. Within this system, the hierarchy can be intrinsically learned and part of the organization. From an organizational standpoint the NICU is a self-contained environment that would lend itself more easily to better communication between providers. In the "normal" mother-baby units, there are parallel hierarchies that are competing with each other simultaneously. Can I ask/probe more about these competing hierarchies in the next few interviews? Question- does institutional support create an environment where IBCLCs feel more respect from other providers? Does this also facilitate more/better collaboration between providers? Mother-baby units seem to be very task-focused. What needs to get done today, rather than what does this baby or mother/infant dyad need today. Participants seem to both accept and approve of the hierarchy, while simultaneously feeling frustrated by the boundaries this creates for them in providing what they consider to be best practices. Maybe this is more of a personal moral dilemma as they struggle to adhere to their scope of practice while trying not to undermine other providers?

Symbolic interactionism was also a major guiding framework for this study. As the concepts were further developed and integrated, the PI looked to the premises of symbolic interactionism to interrogate the ways in which the participants create and re-create meaning within their individual social contexts. In order to fully understand the barriers for IBCLCs in managing breastfeeding problems, it was critical to identify their perceived roles and the roles of other providers in breastfeeding management. The symbolic interaction framework posits that individuals continue to renegotiate meaning as their contexts and relationships with others change, and thus they align their conduct based on the social interactions they have with others in their unique settings. The PI looked to symbolic interactionist assumptions to explain the perceived roles of IBCLCs in more detail. For example, taking the concept "hierarchies of respect" that was mentioned previously, the PI wrote the following memo:

I am thinking about the code "the importance of reputation" being important to the I/me aspect of self and mind in symbolic interactionism. If society precedes the individual as this assumption suggests, then perhaps the perception of reputation of IBCLCs or oneself is indeed influencing the ways in which they practice lactation consulting and communicate with other providers.

For example, in PD13, lines 98-100, she is talking about choosing not to go see a mom whose behaviors don't clearly reflect a commitment to breastfeeding. In addition, she chose not to get involved in another scenario (because her shift was ending) where she felt that the doctor/nurse were not following hospital procedures and recommending supplementation despite this not being in the best interest of the mother. In SI, "the greater the perceived clarity of role expectations, the higher the quality of role enactment," "more consensus in role expectation = less role strain," and more diversification of role leads to less consensus about expectations about the roles.

Perhaps the hierarchical structure (doctor's orders) prevents her from enacting her role with quality because there is constraint. If everyone at the hospital does not agree with what her role is/should be, then she may be experiencing role strain, leading to her decisions to opt out of following through with her expectations to provide best practices in bf support for these women. Furthermore, as described early in the interview, she provides care across the hospital in several departments, which may obfuscate her concept of role expectations.

Symbolic Interactionism as a guiding theoretical framework was particularly relevant and useful for a study of providers working in a health care context with other providers and with families, which will become more apparent in Chapter 5.

Research Standards

The criteria used for determining the quality and trustworthiness of qualitative data are different than the standards used in quantitative research (validity, reliability, objectivity, precision, and generalizability) (Lincoln & Guba, 1985; Ulin, et al., 2005). For this study, issues of credibility, dependability, confirmability and transferability of the qualitative phase were addressed in the following ways:

Credibility

Credibility concerns the trustworthiness of the data; in other words, are the findings supported by the data and does the study population consider the findings to be accurate (Tashakkori & Teddlie, 1998; Ulin, et al., 2005)? First, the PI role played and recorded a practice interview with a colleague knowledgeable about the profession of lactation consulting. This process helped the PI to assess the flow of the instrument, determine if questions needed to

be added or changed, and to improve her interviewing skills. Then, key informant interviews assisted with determining face validity of the semi-structured interview guide to enhance credibility of the instrument. Interviewer bias and social desirability bias are also possible weaknesses that can impact interviews (Neuman, 2003). The feedback on the interview guide from the key informants, as well as the iterative analysis process and debriefing sessions served to maintain a sense of awareness for the PI. Careful attention to inconsistencies in the data, debriefing sessions with the PI's committee and an outside qualitative expert, as well as use of a reflexive journal, allowed the research process to remain transparent and contemplative. Issues of concern or question were brought back to the participants for member checking of the data.

Dependability

Due to the nature of qualitative research, it is not possible for the findings to be replicated to demonstrate reliability. Thus, dependability is important for determining the quality and rigor of the research process (Lincoln & Guba, 1985; Tashakkori & Teddlie, 1998; Ulin, et al., 2005). In this study a master's level research assistant (RA) with qualitative research experience was hired as an independent coder to work on inter-rater reliability and to be sure that the codes were dependable. The RA and PI independently coded eight (27%) of the same interviews; they met regularly to ensure that the data was being coded accurately and consistently, and that the analysis process remained iterative and credible. An example of how the RA and PI discussed discrepancies is as follows. The following segment of data was coded independently by the RA and the PI. Note that some of these codes have changed or developed further since this memo was created (for example, lack of education has become lack of knowledge).

Respondent: I think one of the biggest ones is really provider - misinformation from providers and that then gets passed on to the mothers as misinformation. So it's astounding to me how few providers or how many providers have such little knowledge of the basics of what's in breast milk and the benefits of it and so the providers themselves

think that this is a choice instead of a health imperative and I don't consider it a choice. I think it's a health imperative. Unless you don't have the milk to give to the baby then there will be risks just like you take the risk of taking a medication or anything else that that chemical preparation is just not going to be right for that child. So when you can put it to people that way then they're not as lax about making a decision but they also recognize that you really are going to support them for the health benefits of it and certainly, I have parents and moms that can't do it. They have pain or they have work and they run out of milk and they can't afford to buy the human milk but they'd do anything - everything else that they can to support their milk supply. So that's why I love being in the practice that I'm in because people will come to me because that's the group they know they're going to get that support.

Table 9 – Coding Process for Interrater Reliability

Segment of data	PI code	Segment of data	RA code
Entire segment	"bar_attitudes of		
	providers		
Respondent: I think	"bar_info_inaccurate"		
one of the biggest			
ones is really provider			
- misinformation from			
providers and that			
then gets passed on to			
the mothers as			
misinformation.			
T.1.1 C.1	(4) 1 1 0	1.1.1	1 1 1 6 11
I think one of the	"bar_lack of	I think one of the	bar_lack of evidence-
biggest ones is really	education providers"	biggest ones is really	based info/practice
provider -		provider -	
misinformation from		misinformation from	
providers and that		providers and that	
then gets passed on to		then gets passed on to	
the mothers as		the mothers as	
misinformation.		misinformation.	
So it's astounding to		So it's astounding to	
me how few providers		me how few providers	
or how many		or how many	
providers have such		providers have such	
little knowledge of the		little knowledge of the	
basics of what's in		basics of what's in	
breast milk and the		breast milk and the	
benefits of it and so		benefits of it and so	
the providers		the providers	

themselves think that		themselves think that	
this is a choice		this is a choice	
instead of a health		instead of a health	
imperative and I don't		imperative and I don't	
consider it a choice.		consider it a choice.	
I think it's a health	"sup_fact_bf	I think it's a health	Role_peds should be
imperative. Unless	supportive providers"	imperative. Unless	supportive
you don't have the		you don't have the	
milk to give to the		milk to give to the	
baby then there will		baby then there will	
be risks just like you		be risks just like you	
take the risk of taking		take the risk of taking	
a medication or		a medication or	
anything else that that		anything else that that	
chemical preparation		chemical preparation	
is just not going to be		is just not going to be	
right for that child.		right for that child.	
So when you can put		So when you can put	
it to people that way		it to people that way	
then they're not as lax		then they're not as lax	
about making a		about making a	
decision but they also		decision but they also	
recognize that you		recognize that you	
really are going to		really are going to	
support them for the		support them for the	
health benefits of it		health benefits of it	
l l l l l l l l l l l l l l l l l l l		and certainly, I have	
		parents and moms	
		that can't do it. They	
		have pain or they	
		have work and they	
		run out of milk and	
		they can't afford to	
		buy the human milk	
		but they'd do anything	
		- everything else that	
		, ,	
		they can to support	
and contain by I bear	our foot material	their milk supply.	
and certainly, I have	sup_fact_maternal		
parents and moms	determination		

that can't do it. They			
have pain or they			
have work and they			
run out of milk and			
they can't afford to			
buy the human milk			
but they'd do anything			
- everything else that			
they can to support			
their milk supply. So			
that's why I love			
being in the practice			
that I'm in because			
people will come to			
me because that's the			
group they know			
they're going to get			
that support."			
So that's why I love	"practice philosophy"	So that's why I love	"practice philosophy"
being in the practice		being in the practice	
that I'm in because		that I'm in because	
people will come to		people will come to	
me because that's the		me because that's the	
group they know		group they know	
they're going to get		they're going to get	
that support.		that support.	

These differences were discussed in detail to understand the different codes being applied. This process assisted the PI in refining the codes by examining the nuances and the subtle differences and similarities between codes and within the data. This is demonstrated partly by this team memo:

We need to differentiate between these codes more clearly. "Lack of education" (such little knowledge) vs. lack of evidence-based (passed on to the mothers as misinformation). I coded with "sup_fact_breastfeeding supportive providers" because she says she believes it is a health imperative so she is supportive of breastfeeding and then goes on to suggest how peds should be similarly supportive vs. [RA] coded "role_peds should be supportive" because it's a health imperative so the role should be for peds to support this and because she says "when you can put it to people that way," suggesting that their role

should be to do this. We discussed that this participant is switching to mothers when she states "when you can put it to people that way," and not other providers. However, she's still speaking in the context of a breastfeeding-supportive practice, which does related to "role_peds should be supportive" and because this is the context of this segment, we are double coding to include both. The attitudes code is also not quite right as this is really getting at the idea of her practice philosophy.

These types of in-depth discussions about discrepancies helped the PI to further develop the codes and concepts to be more robust and clear.

The PI also met regularly with committee members to provide updates on the methodological process, discuss initial findings and interpretations, and explain her analytic process. These meetings were important in guiding the process of data collection and analysis by helping the PI to identify new areas to probe during interviews and to consider other interpretations. For example, after one meeting, the PI added probes to explore the competing hierarchies that the participants were describing as both intrinsically learned and as part of the organizational structure.

Confirmability

Observer bias can be reduced through the use of a reflexive journal and debriefing sessions, as well as through use of the constant-comparative method. Ulin, Robinson, and Tolley (2005) explain that "qualitative researchers have an obligation to observe and document their own roles in the research process, including assumptions, biases, or reactions that might influence the collection and interpretation of data. Applying reflexivity contributes to the confirmability of the results" (p. 26). Due to the personal experience of the PI with early breastfeeding problems, reflexivity was particularly important. In addition, although this study used grounded theory methodological approach, there are some elements of phenomenology as well by exploring IBCLCs' lived experience and attempting to understand the meaning that this lived experience has for the IBCLC. Due to the phenomenological nature of this component of

inquiry, it was necessary for the PI, who has had lived experiences as a mother with early breastfeeding problems, to identify presuppositions in order to set them aside. One technique for doing this is called "epoche" or "bracketing" in which the researcher finds ways, through a keeping a reflective journal, being interviewed, or recording thoughts, to temporarily separate [bracket] prior experiences of the researcher from having undue influence on interpretation of the data (Bednall, 2006; Creswell, 2007). Fischer (Fischer, 2009) clarifies the concept of bracketing in qualitative research in this way (long quote retained for clarity):

authentic bracketing has two ongoing engagements. First, the researcher continuously identifies and records his or her assumptions about a topic as well as his or her interests in it. This process allows one to self-consciously and regularly check to see whether one is imposing meanings on the data and to re-look to see what other meanings might appear. This ongoing practice, however, is not merely an effort to get rid of bias but also an effort to specify the perspectives through which meanings can become evident.

Second, bracketing includes getting in ever deeper touch with the meanings of one's subject matter through evolving reflexive and hermeneutic readings of data. That is, in this second engagement, one continuously discovers what his or her earlier interpretive understandings and assumptions were and reexamines them against emerging insights. What is bracketed *set aside for the moment or directly questioned* in this second engagement is one's earlier understandings of data (p. 584).

For this study, the PI engaged in several activities to enhance the confirmability of the results. First, the PI spent time answering the interview guide questions while thinking about what the responses might be for various types of providers in different practice settings prior to any interviews. These assumptions were reviewed at times during the course of data collection and

analysis to remind the PI to remain open to new ideas and understand how her assumptions related to emerging insights. As a bracketing technique, the PI kept a detailed journal about expectations of the research prior to conducting the interviews and as they arose throughout the research. For example, the following is an excerpt about the researcher's assumptions about WIC prior to beginning the interview process:

I am interested to see what I learn about how IBCLCs function within the WIC setting. I do have some assumptions about WIC from previous encounters with a few WIC IBCLCs and also through a study I worked on with low-income African American women who succeeded at breastfeeding. My understanding of WIC is that there is an issue related to the pumps. The hospital nurses seem irritated that they can't get WIC to give their patients pumps. WIC apparently does not have enough pumps in our community and so there appears to be some sort of system to determine who is eligible for a pump. I don't fully understand this process, but I do feel like other IBCLCs are rather critical of WIC in this way. In addition, when we did those focus groups with African American mothers, they identified that WIC could be very supportive or quite undermining when it came to supporting them. It seemed like it just depended on the day and who you would see at the WIC office. According to those women, some staff support them in breastfeeding, while others seemed to doubt their ability to succeed at breastfeeding or simply assumed that they did not want to breastfeed (racist). I don't think I have particularly strong biases about WIC, but I will need to pay attention to my previous knowledge and experiences related to WIC. My understanding is that WIC clinics work differently depending on the county. My guess is that IBCLCs in the WIC setting work very hard to promote breastfeeding, but that policies and a lack of knowledge by other staff make their jobs very difficult. They must feel like they are constantly swimming upstream.

The PI also reviewed the "bracketed" information with the independent coder. This person did not have extensive breastfeeding knowledge and does not share the PI's specific background or credentials, which enabled her to identify influences of the PI's "bracketed" material on the interview process, coding, and interpretation of the data. Finally, the PI sent portions of written results and analyses to a few participants via email as part of the member checking process. Member checking allows the participants the opportunity to actively participate in confirming that the interpretations are accurate and credible.

Transferability

Transferability relates to the applicability of the results from a study to other similar contexts in a conceptual (rather than statistical) manner (Ulin, et al., 2005). This is difficult in qualitative research that so heavily acknowledges the impact of cultural factors and subjectivity on the research findings. Because this qualitative study was conducted in Florida, the results cannot be generalized to other counties in Florida or the U.S. However, the research may be transferable to future studies in similar contexts, such that the area of inquiry into the management of early breastfeeding problems may be addressed among other types of lactation counselors or health care providers, as well as extending into other geographic areas. The potential for transferability relies in part on the ability of the proposed study to advance "our understanding of a complex behavioral health phenomenon" (Ulin, et al., 2005, p. 169). If this study succeeds at advancing our understanding of the barriers to interprofessional collaboration in the context of managing early breastfeeding problems from the perspective of IBCLCs, additional exploration among other populations of providers may be warranted.

As the PI conducted all interviews, it is also important to recognize that personal characteristics of the PI, such as gender, race, and class may have served as both a limitation and/or a facilitator at various points throughout the research process. For example, most IBCLCs are female and many have breastfed their own children, which may have enabled the PI to be perceived more as an insider; however, as a non-IBCLC, the PI may have been held with slightly more reserve, requiring more rapport-building. Gender, race, class, and prior experiences also undeniably influence one's interpretation of interview data. The PI employed several tactics (discussed above) to increase the confirmability of the results.

Ethical Issues and Human Subjects Protections

Because the success of research is based on a trusting relationship between the researcher and the participants, ethical considerations are of the utmost importance. There were no known risks to subjects who participated in this study. However, there was a very small possibility that participants may have felt uncomfortable answering some of the questions if they were not comfortable with talking about particular breastfeeding issues (though this was unlikely given their occupation). The study was approved by the USF IRB (see Appendix D). The rights and welfare of potential participants were protected from coercion or undue influence as the PI stressed that participation was completely voluntary, and that interview responses would remain confidential. The PI explained the purpose of the study, expectations regarding the expected length of time of the interviews, and the security measures being taken to ensure confidentiality. All participants, including key informants and interviewees read and signed the informed consent (or provided verbal consent) prior to the interview. All participants were emailed the informed consent prior to the interview so that they had enough time to read and understand the informed consent, and ask questions. To minimize any breach in privacy of the participants who were interviewed on the phone or via Skype, a waiver of a signed informed consent was approved by the USF IRB in favor of a verbal consent (See Appendix C for informed consent documents).

All participants were informed that their competence would not be the subject of evaluation and that their professional roles and decisions would be respected. In addition, all study related materials are maintained on a password-protected secure computer and stored in a locked cabinet where only the PI and RA could add data and access information. Confidentiality of the participants' data is protected in accordance with IRB regulations. Anonymity of the providers was maintained in all phases through use of an identification number and pseudonyms throughout data collection, analysis, and written results and manuscripts. The benefits of this

study likely outweighed any risks. For example, the topics discussed during the interview may lead to an increased interest in the ways that early breastfeeding problems are managed.

CHAPTER 4: RESULTS

In-depth interviews were conducted with 30 IBCLCs from across the state of Florida to understand their perceived barriers, as the professional experts in human lactation and breastfeeding, to managing breastfeeding problems and supporting breastfeeding families. This chapter provides an overview of the demographics of the participants in this sample and explains the findings for each research question.

Demographic Information

Demographic information was collected at the time of the interview with a short questionnaire (see Appendix A). A total of 30 interviews across 18 counties in Florida were conducted by the PI between July 2012 and June 2013. All lactation consultants in this sample are female and the majority self-identified as white (n=23; 76.7%). Although the registering body (International Board of Lactation Consultant Examiners) doesn't collect data on race and ethnicity of IBCLCs, the several news articles and a conference in June 2013 called Inequity in Breastfeeding Support Summit (Seattle, WA) have highlighted that this profession struggles with ethnic diversity (Allers, 2012; Hoffmeister, 2013). Six (20%) participants self-identified as Hispanic and one (3.3%) self-identified as Asian. Although the PI purposively sent recruitment emails to the four known potential African-American IBCLCs in Florida, only one responded, but she failed to respond to follow-up calls and emails to schedule an interview. Ages of the participants ranged from 34- to 70-years-old, with almost two-thirds in their 50s and 60s (*M* = 52).

The participants described having earned a variety of credentials, both medical and non-medical that included childbirth education certification; bachelor's, master's and doctoral degrees; nursing degrees; and medical degrees. Three of the participants were pediatricians and three were ARNPs, which afforded them broader scopes of practice than the other participants. The participants were employed in a range of settings, which included both in-patient and outpatient hospital settings (n=13; 43.3%), WIC offices (n=7; 23.3%), pediatric offices (n=4; 13/3%), and private practices (n=8; 26.7%). Although some of these setting are more diverse, they have been collapsed into the broader categories to protect the anonymity of the participants. The professional backgrounds of the IBCLCs by practice setting are displayed in Table 10.

Table 10 – IBCLC' Professional Background and Practice Settings

	Non-Medical	Medical Doctor	Nurse	Total
Hospital	2	-	11	13
WIC	6	-	1	7
Private Practice	7	-	1	8
Pediatric Office	1	3	-	4
Total	16	3	13	32*
* Although the sample size was 30, two IBCLCs worked in more than one practice setting				

One of the participants working in a private practice has her office located within a pediatric office setting. Another private practice participant also works part-time in a hospital setting. The private practice participants also worked in a combination of settings, including home offices, external offices, mothers' homes, and sometimes a combination of these. Although most of the participants worked primarily in the capacity of lactation consulting (n=24; 80%), several of these participants identified their primary credential as their RN (n=4) or their ARNP (n=2). These participants explained that the nursing degree provided them with their foundation of knowledge such that they consider this to be their primary credential. For some, these credentials have become so interwoven that they could not claim one as more primary than the

other, despite working as lactation consultants specifically. For example, when asked which she considered to be her primary credential, one hospital-based participant responded:

That's a tough one. That's a tough one. But they've been integrated together for such a long period of time. My assessment of a baby's well-being, systems, physiology head to toe, I'd say, is a nurse. Okay. My observation of a mother and baby dyad together breastfeeding, what did I learn about that in nursing school? Nothing. In nursing school, you learn women have breasts; breast milk is best for babies; and babies - some women choose to breastfeed. You don't learn very much. So assessing the dyad actually in feeding, alright, transfer of milk, is what I learned as an IBCLC. But what I learned in mother's health is nursing. PCOS, thyroid, that's all - that's all nursing. And baby's physiology, you know, kidney function and all - and all that cardiac function, respiratory function to apnea, you know, that's nursing. (P1, hospital, 230:232)

Sometimes participants would describe their nursing degree as their primary credential, but when asked how they introduce themselves to parents, they will say as a lactation consultant. Fifteen (50%) of the participants certified as IBCLCs by exam between 2001 and 2011 and 50% certified between 1988 and 2000.

Less than half of the participants (43.3%) had personal experience with La Leche League (LLL). Overall, there were seven participants who had some experience as LLL Leaders, none of whom had medical or nursing degrees. Four of the Leaders were white and three were Hispanic. Most (n=5) were in private practice settings and two worked in WIC settings. Six participants described participating in LLL as mothers receiving support, all of whom were white and had either nursing or other health-related degrees. Two worked in WIC settings and four worked in hospital settings. None of the medical doctors described any personal experience with LLL.

Eighty percent (n=24) of the participants had two or three children (range: 1-7; M = 2.8). All but one biological and one adopted child of the total combined 83 children (including two sets of twins) received some breast milk for at least one month. Demographic information is summarized in Table 11.

Table 11 – Demographic Information on the Study Sample of IBCLCs Practicing in Florida (n=30) $\,$

Participant Characteristics	Number of Interviewee s (n=30)	Percentage of Interviewees
Sex		
Female	30	100%
Male	0	0%
Age (range: $34-70$; $M = 52$)		
30-39	5	16.7%
40-49	5	16.7%
50-59	12	40%
60-69	7	23.3%
70-79	1	3.3%
Race/Ethnicity		
Asian	1	3.3%
Hispanic	6	20%
White	23	76.7%
Other Credentials*		
Childbirth Education Certification	5	16.7%
BA, BS	5	16.7%
BSN, RN	9	30%
ARNP (PNP)	3	10%
MA, MS, MFA, MHS, MPH	5	16.7%
Other	2	6.7%
PhD	1	3.3%
MD	3	10%
None Listed	4	13.3%
Primary Credential Used in Occupation	**	
IBCLC	24	80%
MD	3	10%
Other	3	10%
Breastfeeding Education		
Certified Lactation Counselor (CLC)	5	16.7%
Peer Counselor	3	10%
Certified Lactation Educator (CLE)	3	10%
Certified Breastfeeding Educator (CBE)	1	3.3%
Registered Lactation Consultant (RLC)	2	6.7%

Practice Setting***				
WIC	7	23.3%		
Hospital	13	43.3%		
Pediatric Office	4	13.3%		
Private Practice	8	26.7%		
La Leche League Experience				
None	17	56.7%		
Received Support as a Mother Only	6	20%		
Leader Experience	7	23.3%		
Year First Certified by Exam (range: 19	88-2011)			
1985-1989	1	3.3%		
1990-1994	3	10.%		
1995-2000	11	36.7%		
2001-2004	5	16.7%		
2005-2010	9	30%		
2011	1	3.3%		
Number of Children ($M = 2.8$)				
1	2	6.7%		
2	12	40%		
3	12	40%		
4	2	6.7%		
6	1	3.3%		
7	1	3.3%		

^{*}Not all participants answered this question and many participants had more than one other credential listed; therefore, the numbers don't add up to the total 30, but rather represent the range of credentials held by the IBCLCs in this sample.

Participants went into the field of lactation consulting for a variety of reasons. Many had always been drawn to maternal and child health or they worked as childbirth educators or nurses in mother-baby units and found a passion for breastfeeding support. In this capacity they often felt that they filled a need in their communities. Many of them had their own struggles with

^{**}Of those who work primarily as IBCLCs, 4 considered their RN to be their primary credential and 2 considered their ARNP to be their primary credential.

^{***}Two private practice IBCLCs also work in a second setting; therefore, the total does not equal 30.

breastfeeding or simply loved breastfeeding their own children and wanted to help others to overcome problems and have positive experiences. One hospital-based IBCLC said,

Then after I had him, and had problem after problem that I found that could have been prevented if I had somebody to help me, I was determined not to let another woman go through what I did unnecessarily. Right after that, I became the hospital guru... Everybody in the hospital, they knew, "Oh, if you have any problems with breastfeeding, go see [participant name]." (P10, hospital, 11)

Those who had participated as La Leche League Leaders decided to make a career out of providing lactation support. For example, when asked what brought her to lactation consulting, one IBCLC said,

My love of breastfeeding. I so loved breasting feeding my son. I started going La Leche League meetings so I became a La Leche League leader. Quite a few years later, it's like all of a sudden I realized that my son was going to be on his own and I had to find a career. Since I love breastfeeding, I felt I should just continue that path. (P23, WIC, 11)

A few women had experience in the WIC program as mothers and/or peer counselors prior to taking the IBCLC examination. One participant explained,

I was a WIC client. Well, I knew I was going to breastfeed because I had enough education in that that I knew that that was what my baby needed and we had decided that was what I was going to do. I was in the WIC office about six months nursing my son. They asked me, "Oh. Would you like to be a peer counselor?" . . . I was mentored by wonderful IBCLCs that were like, "You just need to go get your IBCLC." (P24, WIC 11)

One of the pediatricians also wanted to help other women to succeed at breastfeeding which arose from her personal experience. She said,

So my wanting to be a lactation consultant really came from my own personal experience and wanting to help women succeed in their desire to breastfeed. The first person actually that encouraged me was — she was a La Leche League leader actually and she was a woman that helped me to get my baby on the breast. That was my firstborn because I was doing it all wrong and he was biting me and she actually got the baby on the breast and I said, "Oh, this is what it's supposed to feel like. This is marvelous." So that was my first experience and then I wanted to be like her when I grew up basically, even though I was a pediatrician at the time. (P18, pediatrician, 12)

Many of the participants also described having mentors and co-workers who encouraged them to sit for the exam.

Findings

Research Question 1: What do IBCLCs Perceive to be the Barriers to Providing Professional Support and Management of Early Breastfeeding Problems?

The participants were asked to describe some of the factors that influence their success in providing support and management of early breastfeeding problems. Two main categories of barriers emerged: indirect and direct. The indirect barriers were defined in broad terms and included "social norms," "knowledge," and "attitudes." "Social norms," "knowledge," and "attitudes" were found to be interconnected and also influential of the social support for mothers and her self-efficacy. Direct barriers are represented by two categories: 1) occupational factors and 2) individual factors. The occupational factors included "institutional constraints," "lack of coordination," and "poor service delivery." The individual factors identified were "social support" and "mother's self efficacy." Both indirect and direct barriers are described in this section in more detail.

Indirect Barriers

Social Norms

Participants described a cultural mindset that is not attuned to breastfeeding as the normal method of feeding a baby in the U.S. In addition, social norms about breastfeeding were considered by a few participants to be indicative of a larger social commentary about the value of mothers in U.S. society. For example, one participant stated,

It is our lifestyle too, because we don't have our mothers being honored and exalted for having children. In other countries, they're allowed to take off from work for a whole year. A lot of mothers are being rushed back into work, and having too many roles to fulfill in their lives to be the mother, and a full-time worker, or even part-time worker, and having no aunt or grandma, or someone else to help them with their daily chores, as they would, if they all lived in one house. (P5; WIC, 206)

One participant articulated this as a domino effect, suggesting that a lack of value for mothers and children in general is the bigger societal issue, such that breastfeeding cannot become a societal norm until parenting itself is valued by society.

It's a whole – it's a governmental, societal, cultural issue. If you don't value parenting, if you don't value mothers and you don't value our children, how the hell are you going to value breastfeeding? You're not. You're just not – we value – okay, here's my – we value consumerism, and the most important thing is to get a consumer out of you; that's the most important thing and the only way you're going to consume is if you work, okay; and if you work, you're going to have to institutionalize your children; and if you institutionalize your children, it's going to be hard to breastfeed; after that, you've got to work, because you've got to consume. (P22; Private Practice, 228)

In addition, a few participants felt that breastfeeding cannot become a social norm until women are able to succeed at meeting their breastfeeding goals. Negative associations from unsuccessful breastfeeding experiences permeate a societal awareness and inadvertently create expectations of failure. One participant said,

I think we have a nation of failed breastfeeders, and that is a very powerful force. So, regardless of the individual reasons, the overall cloud that hangs over breastfeeding in our culture is one that is primarily associated with negative things - guilt, compromise, basically unsatisfaction, pain, [Laughter] worry - and all of those people that are dropping out by two, three, four, five weeks - all of them - those aren't people that wean their baby. Those are people who could not breastfeed for whatever reason. That's a really powerful force that you just - it's invisible and it's there, and until we get to a point where enough women are able to breastfeed to their satisfaction, whether that's going to be three months, six months, five years, but looking back and saying, "That worked for me," until we get to that point, it's going to be an uphill - I don't know. (P21, Private Practice, 403).

Social norms were also described in contrast to "other" (non-white) cultures outside of the U.S. For immigrant families, breastfeeding is sometimes perceived as a barrier to acculturation, whereas formula feeding is elevated as a desired status symbol and a cultural ideal that represents integration into U.S. society. Two participants singled out Cuban families in

particular. A private practice IBCLC explained that grandmothers often influence mothers by telling them they don't need to suffer through breastfeeding now that they are no longer in Cuba, suggesting that they "don't need to be an animal anymore." (P22) Another participant explained,

Sometimes, I'll have people from Cuba, and they now have baby number two or three and they're wanting to supplement. They wanted to give formula, and I'll say, "Well, what did you do with your first child that you had in Cuba?" "Well, I just exclusively breastfed that child. We didn't have formula." I said, "Well, they still work. These breasts still work the same way. You don't need to." See, now they're in the United States, now they feel like they have to give formula. [Laughter] That drives me crazy because I've had several people who – it tends to be Cubans, that they didn't do it down there – or Puerto Rico, but now that they're here, now we're going to give formula. (P16, Hospital, 447).

Several participants commented passionately about the impact of the formula industry on the creation of social norms about infant feeding practices in the U.S. They described frustration that the formula industry has permeated/infiltrated the health care system such that pediatricians learn about infant feeding from the formula representatives. A few participants working at WIC offices felt that WIC sends mixed messages to mothers because of their affiliation with formula companies. One participant explained the dilemma with WIC in this way,

Hmm-hmm, well, of course I mean WIC is the biggest purchaser of formula in the United States and actually in the world. So working at the WIC office it has seemed to me that there was one room in the WIC office that promoted breastfeeding and the other eight didn't. So what are the chances that the mother is going to get the message that breastfeeding is what's normal – when to go ahead and breastfeed? (P5, WIC, 91)

Another hospital-based IBCLC got a bit choked up as she explained the power of the formula industry on influencing social norms around infant feeding even within medical practices that believe they are supportive of breastfeeding:

I know that [formula advertising] influences mothers greatly and it really bothers me that I honestly feel like we're promoting formula more than we're promoting breastfeeding and the IBCLC. I get a little emotional about the formula because – . . . It also bothers

me when I go [to the OB's office]—as supportive as that office is of lactation – that I see so much advertising from the formula companies in the obstetrician's office. I think that no formula company should be allowed to advertise that they are the feeding experts, the breastfeeding experts. It makes my skin crawl. [Laughter] Sorry. (P17, Hospital/Private Practice, 409)

One of the pediatricians explained that she consciously had to shift her mindset from formula to breastfeeding as the normal way to feed a baby. She described how entrenched the formula industry was in her own practice at one time: "We were really focused on formulas. In fact formulas were so economically intertwined in our offices with samples, and gadgets, and presentations, and lunches you couldn't imagine pediatric practice without formula. I mean, I was an expert on formula." [Laughter] (P27, Pediatrician, 11) A few of the participants described the need for an entire societal paradigm shift to normalize breastfeeding within the health care system and among providers and families.

Knowledge

Almost every participant described a lack of breastfeeding knowledge by providers to be a major barrier in managing breastfeeding problems. In addition to specific references to a lack of knowledge, training, and skills, this theme saturated the interviews by way of examples demonstrating the impact of this lack of knowledge on service delivery to families. These specific examples will be described in more detail below; this section will be focused on the broader implications.

While some IBCLCs did acknowledge that there are many breastfeeding supportive providers in their communities, they often spoke with expressions of frustration about the overall lack of knowledge about breastfeeding and how to manage problems. They attributed providers' lack of knowledge to inadequate and inconsistent training, reliance on personal experiences for information, and attitudes about breastfeeding. They included nurses, pediatricians,

obstetricians, and ENTs when describing barriers related to knowledge. Participants ascribed a lack of training and educational opportunities as a failure of the educational institutions that are training health care providers. One participant explained, "I mean there's no education for doctors on breastfeeding. There's very little. The pediatric programs I think do about nine hours average in the three-year residency that's documented. So what do they know? They don't know anything." (P21, private practice, 299) When asked if nurses should all be trained in breastfeeding, one IBCLC responded,

It's not institutionally provided in many nursing schools. I know a few they will have a one-day lecture or one-hour lecture. So unless the student is interested in doing OB or pediatrics when she graduates, the opportunity to get any more than that in school is not really there. It would make our job easier if everybody, every other professional doctor and nurse had a really good training in helping. But also a bigger part of that is if they couldn't help, but they would know, "Oh, I need to find somebody who could." There's a disconnect there, too. "I don't really know how to help this mom." "It's okay if you give formula," is what they'll say. "It's okay if you supplement. It's okay." You know what I mean? There is not that sort of continuum of the importance of their relationship between the nursing mom and her infant. (P25, WIC, 237)

In this passage, the participant emphasized that while a general set of basic breastfeeding support skills would be ideal, providers need to know when they should reach out to other providers rather than resorting immediately to supplementing with formula. Her comment "There is not that sort of continuum of the importance of their relationship between the nursing mom and her infant," is indicative of the greater societal need for breastfeeding to be valued.

Many of the participants believed that the personal experiences of providers or their spouses drive their approaches to breastfeeding support more than formal training or knowing about evidence-based practices. Their experiences can have a positive or a negative impact on their attitudes about breastfeeding. One participant suggested that because physicians do not often consider breastfeeding as part of their medical purview, they don't learn about it and therefore must rely on personal experiences as knowledge. She said,

It really isn't a medical condition that needs a bunch of medical advice. It's a normal baby thing and yet again you have to have knowledge about it, the correct knowledge about it. So that means it needs to be studied in medical school, and studied and updated on as pediatricians, then they need to do it, but they don't look at it like a medical thing. So it means it's down on the totem pole of their knowledge and so therefore it's based on personal stuff and not stuff they have to update themselves on. (P13, hospital, 298)

Another IBCLC explained that pediatricians are included among parents who do not succeed at meeting their breastfeeding goals, and that these experiences influence how they manage breastfeeding problems in their practices. She said,

pediatricians base their advice on breastfeeding on their personal experience and/or the experience of their spouse. If we know that 80% of moms start breastfeeding, and by six weeks, only 25% are breastfeeding, those pediatricians and/or their spouses are in the majority of that category too. It's just a depressing situation. (P21, private practice, 349)

One of the pediatricians confirmed this pattern of drawing on personal experiences from her perspective as physician, and declared this pattern to be problematic:

So everybody wants to [support breastfeeding] but what happens is, people like the pediatricians, my peers, they don't go out and seek breastfeeding education. They think they know breastfeeding education because they breastfed or because their wife breastfed and that's the limit of their experience and knowledge. That's the lens through which they view other mother's problems. So they don't broaden it beyond that to go out and look at breastfeeding education. That's a real problem from my point of view because it's just so limiting. (P27, pediatrician, 369)

Finally, another pediatrician described how her personal experiences have informed some of her breastfeeding management recommendations when she said,

When I have - especially when they have latching problem - they have latching issues in a baby that doesn't cooperate and doesn't want to latch. I know that the baby-friendly hospital lactation consultants there are very — they're very reserved about say using a nipple shield because we're taught in the lactation education that nipple shield can interfere with breastfeeding and milk supply and all that. I have a lot of successes because I use it as a last resort. They don't always think of the last resort. They're there. I think they have the criteria for a baby-friendly hospital to make sure this baby gets on the breast. Sometimes it's very overwhelming for the mom. If the baby doesn't latch when she comes home and she doesn't have that nipple shield there, that's it. She stops. Whereas I see if she has it and I know that just because I know how I felt when I had that breast pain when I had the baby. My first child, that was so painful. I didn't have a nipple shield. It wasn't even available. Now I wish if I had that that would have helped me so much. Many babies the shield helps them. (P28, pediatrician, 235)

Her example is revealing and corroborates the other participants' comments about providers using personal experiences to guide their breastfeeding management practices. Despite being an IBCLC, this pediatrician dismisses some of her formal lactation education and draws on memories of her own challenges to find creative ways to help her patients meet their breastfeeding goals.

Attitudes

Attitudes were primarily described as provider-related barriers; however, the attitudes of mothers and families were also mentioned. Participants identified a range of attitudes that subsequently influence institutional practices, collaboration between providers, social support and self-efficacy of mothers, and ultimately, lead to poor delivery of services related to managing breastfeeding problems and providing breastfeeding support. Attitudes were attributed in part to a lack of knowledge and social norms around breastfeeding, as well as geographical norms and demographic characteristics of providers such as gender and age. Though not often explicitly stated, a general discomfort about the function of breasts in lactation (as opposed to sexual pleasure), was apparent in participants' descriptions of providers avoiding working with families on breastfeeding-related issues. The following interview segment offers one example,

Respondent: A lot of it just depends on their personal experiences with breastfeeding and if they're supportive of it then so. Honestly, at this point, I see it's kind of a division. They're those mother-baby nurses that are very pro-breastfeeding and willing to help a mother extra time included and some maternity nurses that I've heard say, "I don't do breast."

Interviewer: Okay. So what happens if a mom is like, "I need help" and one of them is like, "I don't do breasts"?

Respondent: The maternity nurses sometimes will change assignments. If there's one that is more supportive of breastfeeding than another. They'll change assignments. They will contact me. (P17, Hospital/PP, 435:437)

Another provider was told by her peers that if she ever decided to leave the hospital, the mothers would no longer be given breastfeeding support. She expressed a sense of disappointment in the level of professionalism of her peers and offered a contrasting example to illustrate her point:

Which is a shame. Yes because I don't go back and say "I'm not doing a burn patient so . . . they'll go back and have to be seen by PT or nursing" or you know. I think they're scared. I think they feel uncomfortable - that taboo, that social taboo and stuff like that. (P7, Hospital, 393:397)

Some participants believed that the discomfort about breastfeeding was more evident with male providers. One participant explained that the discomfort for men may be because breastfeeding assessments really require the provider to carefully watch the baby nursing, and they don't do this enough to gain confidence and increase their comfort levels. A hospital-based IBCLC from the panhandle believed that social norms about breasts influence the way some physicians practice medicine. She offered this example:

Respondent: I had a mom who had before she ever got married, before she had children, she had a mass taken out of her breast that was benign. She asked the doctor, the surgeon, to do an incision that would run parallel to the milk duct. She didn't want the duct - she wanted as few ducts cut as possible. She didn't want him to cut across the ducts and his answer was, "I have no idea how to do that. We're only taught to do what will make the breast look the best." So it wasn't about the function of the breast but it was about how the breast would look, and I think that's an interesting attitude that some physicians probably have. Now the function, the form and the function, there's an attitude and many of the doctors have no idea that what mastitis is, how to treat it, yeast in the breast, what to do that you can continue breastfeeding. There's a real dichotomy in our thinking about what the breast is for.

Interviewer: And you think physicians then are kind of wrapped right into that as well?

Respondent: I think some are. I don't think all, but I do think some are. When a general surgeon cannot do an incision parallel to the milk ducts because of how that breast may look afterwards, the concern is with the form and not the function. (P12, hospital, 536:540)

A pediatrician acknowledged that her male counterparts are generally "embarrassed" about breastfeeding, and while she sympathized with them, she also believed that they need to develop strategies to support breastfeeding mothers, rather than dismissing them. She said,

I think in general that guys are supportive of breastfeeding but they feel like they have to stand outside the room in all these discussions because it's about breasts. Culturally, it's an uncomfortable thing for them to go in and talk to a mother about her breast. I agree with them. I would feel the same way like "how was your penis today," you know. That's just uncomfortable . . . They really have to work through other people. It's less satisfying to them for that reason, too and they feel like at a disadvantage. So, my attitude is — well, get used to it. That's what women feel in a lot of situations. [Laughter] So, I think it's totally okay that they feel like it's a disadvantage but that they should find a way to work through their staff. Just what I ask is that they recognize the issue as important. (P27, pediatrician, 513:517)

While cultural differences in social norms were described in several interviews, geographically-based attitudes were only mentioned by a few participants. Specifically, a hospital-based, WIC-based, and private practice IBCLC from the panhandle part of Florida believed that their area of Florida is very different from the rest of the state with regard to breastfeeding attitudes. No other IBCLCs described attitudes as being geographically defined. Their comments follow:

I've moved around a lot but when I got here to this little corner of the panhandle it's a bit - I might call it about ten years behind the rest of the world. It's very conservative, very conservative and when you come across a whole group of pediatricians still saying this stuff, it's amazing to me. I could understand that in 1988 but not now. So it's been an eye-opening experience for me moving here and staying here working. (P12, Hospital, 376:388)

Not being from here I can say that I don't know why someone would choose to practice here and I don't see - it's not a place for movers and shakers, not a place for liberal, open-minded and that just doesn't fit here. And we have some wonderful physicians, don't get that wrong, and some of them probably come because of their husband's military experience because there's an awful lot of people that come here because they were here with the military and liked it . . . (P12, Hospital, 440)

Then we do have a small pocket of resistance that is anti-breastfeeding or significant others that are anti-breastfeeding. There's more ignorance as to how it works rather than active, negative support because the breastfeeding rates in this county have been traditionally some of the lowest in the state. We're very much - our culture is very much deep south, not like the rest of Florida; it's not just the time zone that's different. The culture's really different here. (P25, WIC, 108)

I think being geographically isolated is an issue – the geographic isolation and the lack of good quality healthcare providers . . . I think I know that the military hospital has a very high initiation rate, so the 90%, but how many of those babies are exclusively

breastfeeding when they leave the hospital? Those numbers are way lower than they need to be. I don't know if it's because we just have a less educated culture up here. I don't know what it is. I know that for [Hospital], it's not very progressive when it comes to labor and birth and infant care even though they've made a lot of changes. Any place that requires no ambulation during labor and 100% Pitocin for every mother is just archaic. I don't know what their justification is for their protocols. (P30, private practice, 388:392)

A few IBCLCs talked about the perception that breastfeeding is a choice and that this suggestion of choice leads providers to act more ambivalent about breastfeeding in their conversations with mothers. One participant compared breastfeeding to other safety and health behaviors that doctors do not generally promote as choices, but rather they focus on promoting the safest or healthiest option. She also suggests that this may be related to their business model focused on keeping patients:

the OB's are looking at it as the mother's choice, and the pediatricians are looking at it as the mother's choice. We would never give them that choice, if it was something to do with like car seats, or smoking, or overeating. I mean, we wouldn't say, "Yes, if you want to overeat, go ahead," and "If you don't want to use the car seat, it's up to you," because there's common knowledge that that's safer, and of course, it's a law now, too. For breastfeeding, it's still back to this I guess, social choice. If you want to, you can. If you don't want to, we'll stand behind you all the way. I do think a lot of the pediatricians and the OB's are still trying to get more patients, too though, so it's patient satisfaction. If the patient isn't going to be breastfeeding, they still want that patient. I mean, there's no one that really has specialized at all in breastfeeding, of any of our doctors. (P5, WIC, 228:230)

One of the pediatricians in this study felt strongly that breastfeeding is often perceived as a choice, when it should be perceived as a health imperative:

So it's astounding to me how few providers or how many providers have such little knowledge of the basics of what's in breast milk and the benefits of it and so the providers themselves think that this is a choice instead of a health imperative and I don't consider it a choice. I think it's a health imperative. Unless you don't have the milk to give to the baby then there will be risks just like you take the risk of taking a medication or anything else that that chemical preparation is just not going to be right for that child. (P18, Pediatrician, 152)

Professional resistance was a common sub-theme within attitudes and was represented by many examples of nurses, pediatricians, and specialists being "stuck in their ways," despite new

evidence about best practices for breastfeeding management. Some participants described the professional resistance to change as generational, with older providers set in their ways and refusing to incorporate new knowledge into the way they practice. For example, providers' resistance to thinking about the impact of tongue-tie on breastfeeding was described as being more common among older physicians. A WIC-based IBCLC explained,

It's getting better. There are some old - we have this one group that we refer to as the grumpy old men. [Laughter] They've been practicing this way for 30 years. Refuses to change. [Laughter] There are pediatric books that they have that say that it's not an issue until the child begins to talk. The breastfeeding isn't even addressed. So why wouldn't they think that way? Unless they're aware. (P25, WIC, 195:197)

A hospital-based IBCLC from the panhandle gave a blatant example of professional resistance:

Respondent: One pediatrician in town faxed me a page from his pediatric textbook. He's my age by the way so it's an old book, and it said in there that ankyloglossia rarely needs treatment. He crossed out the word 'rarely' and wrote 'never'. He faxed that to me.

Interviewer: Wow!

Respondent: I so wanted to fax back, "Do they know you've edited this book?" [Laughter] 'Rarely' and 'never' are not the same thing.

Several participants also talked about being met with resistance from hospital administrators or physicians when they tried to organize or offer educational sessions about breastfeeding to improve the knowledge base in their setting. Some IBCLCs suggested that resistance to change among nurses may be related to feeling at or beyond capacity with their other nursing duties, and leaving them with little time to consider new practices. Sometimes this resistance is situated in good intentions. One WIC IBCLC explained,

At our hospital though, we have a lot of I'd say old nurses that are from that other camp that really believed in formula and they still do. They think they are giving mothers help by sending them home with extra formula just for those times when they really need it. (P5, WIC, 103)

Participants also mentioned that providers and family members believe that formula is good enough, which leads them to recommend supplementation too quickly. The implications of resorting to formula so quickly will be described later; however, comments about providers' attitudes such as these were common,

This is still food. They make formula, it's made for babies, it's good enough. In our generation, we've all done it, we're still here. (P11, hospital, 658)

breastfeeding is not up there on their priority list; it's way down at the bottom. It's a normal function. It's nice, it's natural and it works fine, if not we give a bottle. (P12, hospital, 100)

[Pediatricians] go with what they see and they're seeing a predominantly formula feeding society. So how are they then going to know what normal breastfeeding looks like? (P20, private practice, 276)

Participants described some provider stereotypes about lactation consultants, but also, more significantly, talked about the ways in which they believe that IBCLCs are not valued. These attitudes impact the relationships that IBCLCs have with providers and families, and subsequently affect how they are able to manage breastfeeding problems. The stereotypes about lactation consultants may be residual from the early days of the La Leche League, when some of these women were perceived as militant, radical, or earthy-crunchy. One IBCLC explained that in asking her son's pediatrician to send lactation referrals her way, he remarked, "Well, maybe; but not if you're one of those militant La Leche Leaguers who make my moms cry." She then said,

So, that was a very telling response. I appreciate the truthfulness in the way that he feels about it. I don't agree with it. I think that they feel like we're very anti-formula and while personally I might be anti-formula, professionally there's a very real need for its existence and I don't know that they understand that. (P20, private practice, 400)

Another IBCLC explained that some attitudes about lactation consultants may be related to a lack of knowledge about the credential and the training that is required of them:

I'm not in the minds of the doctors, so I can't say that they don't trust LCs. I just think they don't know. They don't know. If you are a speech therapist, your doctor knows that you went to college, and you got a degree in speech therapy, and that you also got X clinical hours, and that you passed a test, right? Those things mean something. If you are an LC, your doctor doesn't know squat. [Laughter] He doesn't know if you went to school for that or not. For all he knows, his wife went to a La Leche League meeting 15 years ago with a very crunchy bend and came back and said to him, "Oh my God, these people were like..." and that literally is all he knows of a breastfeeding helper type of person. (P21, private practice, 347:349)

Other IBCLCs felt that pediatricians generally have a positive opinion about lactation consultants, but they don't always understand the extent of what they do in their work with mothers and babies.

Participants consistently reported feeling as though IBCLCs are not valued by their institutions, other providers, the health care system, and parents. Although uncommon, a few participants described fairly intense feelings of not being valued in their roles as lactation consultants. One hospital-based IBCLC in a small hospital described feeling that she doesn't fit in with the other nurses and posited that as per diem employee, the administration doesn't see her job as worthwhile, which trickles down to the nurses. Another hospital-based IBCLC expressed frustration at being excluded from attending and participating in the pediatric meetings, where she'd hoped to build rapport with the pediatricians and offer information about the hospital's new breastfeeding policies. One participant explained how the administration significantly cut the budget for lactation services, leaving her and her colleagues feeling as if they are no longer valued for their skills. Later in the interview she suggested that lactation may not be valued because it does not bring money to the hospital. When asked about the hardest part of her job she said.

I think it's just dealing with management. I mean with just the attitude of management. I mean that's - the thing is I just feel like I'm not appreciated by them. They don't value what we do. They don't see a value because I can't put money on it. (P16, hospital, 797)

A few private practice IBCLCs described feeling as though sometimes parents do not value the services provided by lactation consultants. For example, one participant said,

Not the cost, but not recognizing the value or understanding or seeing the value. So I don't think around here, I don't think that \$125.00 is too much. Any mom will walk in here, and she'll have a \$100.00 - \$300.00 Coach Diaper bag. It's just not really understanding or recognizing that you're going to get a lot for what — do you know what I mean? You are going to save money and you're going to get a valuable service for that. (P21, private practice, 139)

Some participants also commented on perceptions of pediatricians in comparison to the lactation consultant. They explained that mothers and their family members often put physicians on a pedestal as the experts in the "white coat." One participant said, "I hate to be so cynical, but if I were to sit here and wear a white coat, everyone in the world would take what I say as Bible verse." (P20, private practice, 398) Another private practice IBCLC said, "I see a lot of moms and dads giving doctors that God complex, the doctor's always right." (P30, private practice, 240) Later in the interview she explained the implication for this attitude on mothers' sense of agency in caring for their infants:

A lot of times I think women don't take ownership for their child when they're born. It's their baby, but the hospital, and the doctor and the nurses, they're the ones that are really in charge of the baby and making the decisions for it. It's "Oh, well, the doctor said I had to supplement." Well, did you ever think about asking if you had other options? A lot of moms just aren't even in that mindset. They just automatically say, "Yes, doctor," so I think that being educated during pregnancy makes a big difference because instead of just saying "Yes, doctor," they might say, "Well, what are my choices? Can I pump or can I hand express? What can I do other than get my baby a bottle of formula?" (P30, private practice, 352)

Summary of Indirect Barriers

Combined, these indirect barriers influence more concrete or observable barriers for lactation consultants. These results suggest that breastfeeding is not valued as a social norm and is therefore not prioritized in the healthcare services industry or education, which leads to lack of knowledge about how to support and manage breastfeeding families. This lack of knowledge is

then expressed through the attitudes of providers and families which manifests as a lack of value on the role of the lactation consultant. Because IBCLCs are not valued as experts or perceived as part of the healthcare team, they must navigate through institutional constraints, an uncoordinated system, inadequate service delivery practices, and poor maternal self-efficacy to succeed at managing breastfeeding problems. Furthermore, the combined effects of social norms, inadequate knowledge, and attitudes about breastfeeding influence those individuals who comprise the social support system for the mother, which can have deleterious effects on her success in reaching her breastfeeding goals.

Direct Barriers

Direct barriers are represented by the occupational categories "institutional constraints," "lack of coordination," and "poor service delivery," and individual categories "social support" and "mother's self-efficacy." These barriers, as perceived by IBCLCs, are also often inextricable in the ways that they impact the IBCLC's ability to manage breastfeeding problems. Although these broad categories will be presented individually, their relationships to each other will also become apparent.

Institutional Constraints

Sub-themes within institutional constraints included hospital practices and policies, financial barriers, lack of administrative support, inadequate staffing and time constraints, and business practices trump best practices. Of the 13 participants who work in the hospital setting, one RN works at a BFHI hospital as an IBCLC, one pediatrician does rounds at a BFHI hospital, and the remaining participants do not work in a hospital that is BFHI-certified, although a few of them reported that their hospital is working toward the BFHI designation. Throughout the interviews, the participants described many practices that are not evidence-based and are

detrimental to breastfeeding within their institutional settings; the need to become Baby-Friendly was often considered an important starting point to adopting policies that would lead to positive changes in practice.

Hospital and/or birthing practices were described by most participants as direct barriers to early breastfeeding success. Specifically, IBCLCs explained that some of the interventions used during labor and delivery impact their ability to manage breastfeeding problems. These included the use of pitocin, epidurals, forceps or vacuum extractions, and the high rates of cesarean sections. According to several IBCLCs, these interventions generally require the use of IV fluids, and the edema associated with these fluids artificially inflates the amount of weight loss in the first few days, delays lactogenesis II, and makes latching difficult due to swollen and stretched areolas. A hospital-based IBCLC remarked,

The other thing that's being identified in the literature right now is the fluid overload that some of these moms get in labor and then the babies have this really large weight loss so there's 8% to 9% in the first 36 hours that most likely is fluid loss and not true weight loss but difficult to convince the pediatrician for that. (P12, hospital, 192)

Another private practice IBCLC explained,

Well, with the hospital births, there's delayed lactogenesis, II. You're going to see delayed milk coming in. These women oftentimes have an awful lot of edema. Sometimes they're referred to me because the baby has lost more than 10% of the birth weight but nobody has taken consideration that the mom was on IV fluids for 24 hours before she even had the baby and that the baby's weight was maybe exaggerated by the baby taking on a lot of IV fluids, too, because the baby looks great and is actually doing great. Definitely when I see more hospital births, I see more problems and more problems early on because there have been a lot of interventions. (P3, private practice, 223)

A few participants described how the number of friends, family, and other hospital employees coming into the room (e.g., people coming to do labs, take photos, fill out the birth certificate) can be very disruptive. One participant commented,

A huge barrier here too is the families. This hospital has the approach of "The more relatives that come here the better," because we want them to see how wonderful we are as a hospital. So bring it on, the party. So breastfeeding is not priority, it's not like the

moms have privacy or downtime. I think there's probably an average of a hundred, maybe 150 interruptions within 24 hours. If you've been in the hospital lately with your delivery - I mean, I was just down there working with this mom. She has her top off, trying to latch and "Knock, knock. Its housekeeping, can I come in? I'm Sandra." They don't wait, they just come in. "I'm Sandra and I'm here to change your trash cans." Well, fine, just come on in. Then the next person comes "Dietary, I'm here to turn your IV or I'm here to do this." There's like a thousand interruptions plus family. (P27, pediatrician, 249)

Participants also talked about how some hospital policies prevent nurses from using cups, syringes, or other finger feeding methods to avoid using bottle nipples when supplementing, or that the nurses indiscriminately use pacifiers or nipple shields. Other common hospital practices that participants felt disrupt breastfeeding include swaddling, putting babies in warmers rather than leaving them skin-to-skin with the mother, and taking babies to the nursery rather than rooming-in with the mother. Over-supplementation was one of the most common hospital practices described, especially related to concerns about jaundice or hypoglycemia that are not always founded on evidence. One IBCLC explained the spiral of interventions that occur in the hospital and ultimately impact her ability to help women breastfeed once they are discharged from the hospital. She said,

So a mother who's educated, she goes to her physician, she goes to all the classes, she learns everything she thinks she's supposed to learn because she's getting prepared to have this baby. Nobody actually could really prepare her for the shock of what that actually means. So she's going through all those things, she gets into the hospital. Now, the hospital immediately begins to sabotage - not purposely, just due to a lack of not knowing, immediately begins to sabotage her own biological responses to her infant and her infant's biological responses to the birth. So suddenly, you have this mess developed, and then you have a nurse who now is leaning over the bed for an hour trying to help this mother to breastfeed, the baby is not doing it because he's had so many different things done to him during the birth that he shut down completely, so he's not eating, mom's getting frustrated and scared, the hospital doesn't practice evidence so when the baby's not eating, they just say, "Well, let's feed the baby a bottle." They overfeed the baby, the baby sleeps, then doesn't breastfeed, the mom believes she doesn't have milk, it's just it's a whole mess, and then you get her in the end, and now she's home and she's frustrated, she can't get the baby to latch, she's not sure how this all works, it hasn't worked. She doesn't know a lot of people it had worked for. She wants to do it because she knows it's the best thing. She took all these classes, but it really doesn't fit within her lifestyle and actually, she's going to go back to work anyway, possibly in the near future

and maybe this isn't really for her. Maybe she could do both. Maybe she should just pump, and that's where it all comes from, because there's a whole biological mix-up once the baby is born. So her biology is also not working properly either, so her — it's all a mess. Now, she wants to just be back to normal, because the last thing she likes is this feeling of the whole world being turned upside down on her, which it just was and now, she just wants things to go back to normal and so she's fighting her need to feel normal, because she can't see this is normal, because culturally, there's no support, because people don't stay home with their kids, people don't breastfeed their kids.

[Laughter](P22, private practice, 106)

Several participants also commented on policies and practices at WIC that are problematic. There was a wide range of variation between the WIC offices in different counties in terms of their pump-loan programs, formula and food packages, access to peer counselors, and overall staffing capacity to meet their clients' needs. Some county WIC offices allow mothers to receive pumps even when they are on a partial formula package, while other offices do not allow mothers to borrow pumps if they are getting any formula from WIC. There is also some discrepancy across counties in the pump-loan programs for women such that some WIC offices only loan pumps to mothers who are working, whereas other offices will loan pumps to mothers who are not working as well. Two WIC IBCLCs also described a state-level health department policy that prevents them from reaching moms through text messaging or other social media. They explained that other states allow peer counselors to text and they are frustrated that they cannot reach their clients through this form of mobile communication. One participant explained,

Like our peer counselors, the barrier is in their contacting moms. If we could text, that would really help. We're not allowed to. At the health department, there's a barrier there. We can't use the social marketing and even texting; moms don't want to use up their minutes to call back. Our peer counselors will call moms, phones are disconnected, phones are not longer in service. Moms that do get our messages don't come in. This is why we hired our peer counselors fulltime and even with fulltime, there're so many other barriers that our rates just reached a plateau and we can't break through because we can't contact the moms. It's huge, so moms will tell us, "We've gotten your messages, but I didn't want to use my minutes to call back" (P26, WIC, 68)

Interestingly, although other participants described using texting and email to varying degrees, hospital-based IBCLCs did not mention any policies against texting with moms and some use this form of communication post-discharge to follow-up.

The overall lack of consistency in the way WIC works with breastfeeding mothers was often criticized and the need for stricter and more cohesive policies was discussed. The following excerpt, although lengthy, sums up several of the participants' frustrations.

Respondent: WIC needs some policy changes big time. It's unbelievable what WIC is allowed to do. I can't even believe it. Yes, I worked for WIC. I love WIC. I'm disgusted with what they're allowed to do. The lack of policies, the lack of guidance for the people that work for WIC is just – it's a tragedy, because this program should be able to do more and they're throwing stuff out there, but there's no – again, we're back to it's all haphazard. . . Well, here in X County, for example, there is no strong – there is no policy on the first month of breastfeeding. So for instance, if the mother gives birth, or let's say she's pregnant, she tells you she's interested in breastfeeding, she wants to breastfeed, if she can give birth, come back two weeks later, tell you it's not working, and you hand her a whole bunch of formula, okay. So a WIC nutritionist, if there's no policy to guide them to say you may not give them formula when they come in if they've been breastfeeding, they must be given to your breastfeeding specialist to learn about breastfeeding prior to any formula. That's a policy that needs to be there; it's not there.

Interviewer: So the breastfeeding moms are getting formula?

Respondent: Of course.

Interviewer: It's so different everywhere, so I'm learning a lot about...

Respondent: It is very different. So in [Y County], okay, they have a stronger policy here. So for them, they will see a peer counselor if one is available, because remember when there's no one available, if their nutrition staff doesn't have the skill, they're going to get formula; that's a fact even here in [X County]. (P22, private practice, 106:112)

According to participants working in hospitals and WIC settings, financial barriers sometimes significantly impact lactation departments and staff working to support breastfeeding families. Budget cuts at hospitals and WIC impact the lactation consultants because they are still expected to see the same number of mothers, but with fewer hours and less pay. One IBCLC put it this way: "Our time, our hours have been cut but they still want us seven days a week and

taking calls 12 hours a day." (P12, hospital, 200) Some IBCLCs felt that lactation departments or teams within the hospital setting were seen as "expendable" and easier to cut compared to the nurses, although nurses also suffer from reduced hours. Some participants also suggested that budget cuts were being justified because lactation isn't perceived as a revenue generator for the hospital. For example, "So it's this manager that's doing this. She wants to go look good on paper; that she's within budget. It's frustrating. It's very frustrating because it's just what they value and what they value is bottom line." (P16, hospital, 901) WIC has been facing significant cuts overall and the Fiscal Year 2014 House Appropriations Bill does not contain any set aside funding to sustain the WIC breastfeeding peer counselor program, which could lead to its termination (National WIC Association, 2013). According to a WIC-based IBCLC,

Funding for peer counselors has been cut 20% this year. The peer counselor grant process is still in Congress and may be denied at 2014, you know. How do you look for longevity in a peer counselor if you can't promise them they'll have a job next month? And that presents some challenges. Then funding for Department of Health with respect to at least 6% needs to be breastfeeding related, you know, is that pumps or is that paying for somebody's salary? Okay, so funding is always a creative thing. (P6, WIC, 256)

Some of the financial constraints within the hospital and pediatric office settings were attributed to a for-profit model of healthcare such that the business profit trumps best practices. One participant had a broad perspective of the financial constraints and tied it back into social norms that don't value breastfeeding and a lack of education:

financial becomes an issue, because your institution isn't going to put the money into it if they don't believe in it, and they're not going to believe in it unless they understand it, and they're not going to understand it unless they've been educated. So there's a huge—it's just a vicious circle of that, in my opinion. (P22, private practice, 104)

A lack of administrative support for lactation services is sometimes driven by budget, but also reflects a lack of value for breastfeeding and lactation support more generally.

No, I don't feel like my hospital is supportive at this time. They are much more supportive of our formula reps. Good example, years ago, before we had this current management,

we used to, every staff meeting, have five, 10 minutes to give a breastfeeding hint or to have people ask us questions. The formula reps now have that because they provide the food for the staff meetings. . . . We were trying to go baby-friendly until it went up the ladder and one of the very top people has — one of his friends is a formula rep, and he just shut it right down. We were going for baby-friendly probably 10 years ago. Yes. (P16, hospital, 297)

Later in the interview, when asked why the administration doesn't value breastfeeding, the participant said,

Well, I don't think that the very, very top probably didn't – probably his wife didn't breastfeed. He's friends with the formula rep. I can't -I just don't -I don't know if my nurse manager breastfed her kids. I think she said she did, but was it token breastfeeding? Was it six weeks? I don't know. I have no clue. I don't know why she doesn't value it. I mean my goodness, it's mother-baby. Breastfeeding is the way babies are supposed to be fed, but they're very influenced by the formula reps. I mean it's – they get in there and they talk about the latest is lutein and it's -I mean Similac must have a huge marketing budget because Similac is putting up all these conferences, these educational offerings at the most expensive restaurants. Ruth's Chris, Antonio's, these are extremely expensive restaurants. They have huge budgets to influence nurses, and she doesn't get it. She doesn't understand. I mean I've said it multiple times that their goal is to get the nurses to push their product. It's money. It all comes – I've said to them, "The time you give him to do his educational piece times all those nurses in there what it costs per – how many minutes, you could have used that money to purchase food." Because that's what he does, he brings food and then he gets to speak. Yes, it's – it's interesting. (P16, hospital, 789)

The sub-theme "short-staffed/lack of time" was one of the most common themes and was discussed by about 75% of the participants, primarily hospital-based IBCLCs. Only one hospital-based IBCLC did not describe staffing challenges and this participant works in a BFHI hospital. Lack of adequate staffing numbers is driven by a combination of attitudes of administrators and funding barriers, either at the institutional level with hospitals and physician practices, or at Federal and State levels with WIC. The ramifications of insufficient staffing and time constraints will become more apparent in the section on poor service delivery below, but generally include role strain for various providers, non-evidence based practices, and poor quality of services and care for families.

Several participants who work for WIC described being understaffed, which was generally a direct result of budget cuts. One participant said,

So at this very moment, programs that receive Federal dollars to develop and maintain their programs in the state of Florida, will not receive any more funding past September of 2013 so that's basically one year away. So in order for us to continue at the rate that we are going here in this particular county we will have to absorb hopefully as many of those positions with the general WIC funding, which is going to be very difficult because there again WIC funding continues to be eliminated. So we already are working towards that in how many positions we are going to be able to maintain. (P4, WIC, 157)

Another participant commented that there are too few IBCLC to meet the needs of the number of women who participate in WIC in her county: "We have 10,000 people on our WIC books for [X] County. If that's supposed to be handled by one IBCLC, and a few part-time breastfeeding counselors, I think we need to have many more people to do the job properly." (P5, WIC, 266) Many of the IBCLCs explained that they need at least an hour to work with a mother on breastfeeding, and being understaffed creates major time constraints and leads to role strain because they have to make choices about who to prioritize. For example,

Well, I can either — oh my gosh, these last two weeks. I can either see the inpatients, see the outpatients, or answer the number of messages that are on my phone. Which one can I do? I guess I can't do them all. Inpatients should be my priority. These are the brand new moms. They need the information, they need the help, but if I have a 9:00, 10:00, 11:00 and 1:00, and a 2:00 outpatient and I'm only here until 3:00, and three out of those five have jaundice issues, so I've had to draw blood, so then I have to wait for the follow-up on the blood, and then report whatever that is to the doctor, and then wait to have him tell me what it is he wants him to do, and then call these people back and see when they can come back tomorrow and what time there's an appointment available and try to run and see some inpatients in between, the phones don't get any answer, period. End of subject. For a couple days, there were inpatients that we weren't even seeing. (P11, hospital, 698)

Several IBCLCs identified staffing as an issue for the nurses as well and felt that, although they should be able to provide basic breastfeeding support, they are often forced to prioritize their patients. It's easier for them to give a bottle or a nipple shield because breastfeeding takes time and patience that they don't have. One IBCLC explained,

it takes time from her assignment to then help the mother for breastfeeding if she asks for it, if I'm not there. So I will observe her feeding, help the mother with the feeding. I can be in her room for 45 minutes easily. The maternity nurses, if I'm not there, don't have that – they feel they don't have that much time to spend on one mother. (P17, hospital, 431)

Participants also suggested that these constraints for nurses impact lactation because "they call the IBCLC when things have already got real bad." (P15, hospital, 271)

Participants identified insufficient time to work with breastfeeding mothers as a problem for pediatricians as well. Because babies' needs don't conform to scheduled appointment times, breastfeeding support can be difficult to provide in the typical time slot allotted for patients in pediatric office settings. One participant said,

as an IBCLC, I feel more like a detective trying to figure out what's going on because I focus more on that. Sometimes I think with time constraints with doctors that they don't have the time to do that detective work. If there's not a test to run for it, I don't think—sometimes they can have the time. In their defense to have the time to sit down and go, "Let's see what you're doing." I mean, because I've seen weight issues corrected by just changing the latch. So it could be that simple, but nobody ever sat down with that mom to correct that latch (P24, WIC, 483)

Some IBCLCs felt that because pediatricians have limited appointment times that they often recommend supplementation. For example, one lactation consultant commented,

they're very rushed and they don't answer a lot of questions and they sort of give all mothers the same direction. In my opinion, a lot of it is that politically correct answer which is, "We'll go ahead and breastfeed but supplement with formula." Without individualizing their message to the different mothers depending on that mother's specific needs. If the baby is a late pre-term, my instructions to the mother are going to be different than if the baby's 40 weeks. The pediatrician seems to give blanket answers – breastfeed with supplement. (P17, private practice/hospital, 445)

One of the pediatricians made a similar comment and suggested that the model of care needs to change:

So I think that as a provider, I think one of the most difficult barriers is time restraints of practices. It's so much easier to just tell the mother to supplement that I think providers really are quick to respond to that and just offer that to the mother and they really sabotage mother's efforts. So I think for the provider, it would be time restraints and not having a professional that can support those mothers right there. The second one - so

that's time. The second one is worries about the child not gaining weight and having to see them back more frequently so there again is time. I think the model of care does not allow for us to speak to patients and all it takes sometimes is an extra 10 minutes to be able to get that baby onto the breast and show the mother how to do things. So it has to be a different model of care and you have to dedicate time for those. Set aside extra minutes to be able to see that parent and know ahead of time if they're having any feeding issues so it's not a surprise. (P18, pediatrician, 144)

Several participants thought that ideally, pediatric offices should have lactation consultants on staff "because if he doesn't have an IBCLC in his office, he's not providing the services that his patients need." (P22, private practice, 146) However, one pediatrician clarified why this is a challenging prospect:

the billing is so limited for IBCLCs but hopefully, that will change. I mean either you just afford one on staff and don't bill through her but you can —I don't think you can bill through the MD. You just have to — like if you have a future situation where it isn't "fee for service" and it's ACO [accountable care organization], then that is just somebody on salary just like you are. It's part of the service that you provide for newborn care. It is like you have a nurse, you have an IBCLC. If you have primary care and enough newborns, you just have to have that kind of person working with them with a big primary care group. That's not just a fee-for-service model. I mean clearly, if you have a fee-for-service model but you don't pay IBCLCs, they're dead in the water unless they're paid for by academics or public health or something that's not fee for service. That's just grant money. (P27, pediatrician, 433)

The pediatricians who participated in this study also believed that their inability to get reimbursed for breastfeeding appointments is a barrier. They explained that reimbursement for providing lactation services are either non-existent, or not "commensurate" to the time they spend to solve breastfeeding problems.

Sometimes the participants talked about how working within the context of time and staff limitations can lead to burn out, such as this participant who said, "if you're not able to really do it as well as you want to do it, it's really like a personal hit . . . How long can I do this and not really being able to help anybody but see all these evident problems?" (P9, hospital, 649) They were very aware that many mothers fall through the cracks and often expressed a sense of angst in knowing that there is nothing they can do. Another major issue for IBCLCs is the ratio of

lactation consultants to the number of mothers that need to be seen. A hospital-based IBCLC explained that there are only three IBCLCs for a combined full-time equivalency (FTE) of 2.4 for over 5,000 deliveries annually. The recently-released 2013 CDC Breastfeeding Report Card reports that nationally there are 3.35 IBCLCs per 1,000 live births and 2.40 per 1,000 live births in Florida (Centers for Disease Control and Prevention (CDC), 2013). The 2011 Surgeon General's Call to Action to Support Breastfeeding cites a study recommending 8.6 IBCLCs per 1,000 live births (U.S. Department of Health and Human Services, 2011b, p. 27). One private practice IBCLC who has worked in a variety of settings explained that the lack of adequate staffing of lactation consultants impacts their ability to adequately do their jobs, ultimately influencing the perception and level of respect for the profession as a whole. She said,

Individual respect is one thing, but respect for the profession is growing, but it's something that I think we need as an entire profession to work on, and part of gaining that respect, I think, has to do with that hierarchy and making sure it's very clear what the hierarchy is, that there are no muddy lines about how lactation works or how it should work, and it also involves the patient and LC ratio, because when the ratio is that bad, LCs are not going to have a lot of respect, because they're going to drop a lot of balls. There's no way you can't when you have a patient to LC ratio that's just absurd. So those ratios are very important for our profession, I think. (P22, private practice, 276)

Finally, in addition to staffing constraints, several participants described space limitations which often become an issue of comfort and privacy for the mother. One IBCLC in a WIC office said,

I guess in our one [office], they made a little partitioned area that doesn't go all the way up to the ceiling. Anything that that mother's saying can be heard by anyone walking through the office. At one of our other offices, they actually have a door that closes. It's pretty nice, and has a little bit more room in there to help the mother. Then, at this main office, we have the tiniest room, and kind of forgot that we might need some cabinets, and files. So our file cabinet is outside of the room, because the room's so tiny, we can't fit our file cabinet in there. You know, I'm kind of making fun of my own office. They didn't even think that those open windows, would be a hindrance to a mother that ends up coming in with a dress on. I mean, women have to come in, and truly get down to, - maybe they have underpants on, and maybe they don't. [Laughter] They're undressing to breastfeed. I mean, we have to respect their privacy. (P5, WIC, 133:136)

Lack of coordination

A lack of collaboration between providers and a lack of coordination within the health care system and in the community were major barriers for most IBCLCs in this study.

Participants described the continuity of care as disjointed, which was evident by a lack of awareness of services within institutions and in the community, poor timing of or lack of referrals, and problems with follow-up. Inconsistencies in care plans and treatment recommendations among lactation consultants, nurses, pediatricians, OBs, and other physicians seem to further exacerbate the lack of coordination and create challenges for the IBCLCs and the families they serve. One participant described the system as "broken" because of the lack of coordination:

However, now you're relying upon the mother leaving the hospital, calling that private IBCLC, you're relying on the nursing staff to give her the referral information, which may or may not occur. If that doesn't occur, you're relying on the pediatrician to recognize this mother has a problem and refer, and we don't have that happen. So our whole entire system is broken. So when a mom comes out, it's broken. Right off the bat, it's broken. Mothers who are not WIC participants can't go into WIC to get help, and some WIC offices have really great support. So hopefully, the mom knows that and can go get the help, and very frequently they do, but still there's a huge amount that drop off because of that vulnerability issue. So the barriers are the system is broken. It's a broken system. (P22, private practice, 214)

Several IBCLCs commented that there is not a lot of awareness about lactation services and support within the hospital setting, WIC setting, or private practices in the community. Those working within WIC gave examples of various providers not understanding the services WIC provides, including the pump-loan program, lactation support, and access to specialized formula when needed. In addition, most problems arise during the gap in continuity between leaving the hospital and accessing WIC services. Several WIC-based IBCLCs specified the need to be in better communication with the hospitals so that they know when their clients have given birth and can reach out to them. One participant explained why this timing is so critical:

I know the first 40 days is the time of greatest intensity of needing to just really make sure that the baby's nursing frequently enough and that you're recovering and just incorporating the baby into your family. That's the most intense parenting time that you have the baby. (P26, WIC, 108)

A few of the private practice IBCLCs discussed a sense of job insecurity due to an inconsistent client load from month to month. They believe that despite efforts at reaching out to hospitals, OB practices, and pediatric offices in their community, their services are still relatively unknown. Many participants explained that once the mothers do finally get to them, "they're usually train wrecks," meaning that the problems are much worse than they would have been had they received support earlier. They described really needing to work together collaboratively to best support mothers who are having breastfeeding problems. The following quotations exemplify this concept:

Sometimes the doctor will make a suggestion and then I will just – I actually really care about not just outright disagreeing with him, but there are times when I do feel like whatever their suggestion is, is not the right suggestion for that baby, but there's no teamwork. There's no communication back and forth. The doctor's not saying, "Hey, let's talk about this baby and figure out if we can make it work." (P30, private practice, 288)

I don't know enough about OT, I don't know enough about respiratory therapy, but we ought to be in dialogue when a baby can't nurse, if it can't breathe, we need to do the respiratory before we do the feeding. So we need to be in dialogue. (P6, WIC, 464)

The lack of dialogue between providers translates to fragmented care, which is problematic when working with a dyad such as the mother and baby. One IBCLC explained that because providers are not collaborating and are generally not focused on the dyad, they may not recognize when a breastfeeding problem is related to the health of the mother, as compared to the baby. For example,

baby hasn't regained birth but mom has never gone to have her follow-up with her OB after the Cesarean because she's been so busy with bringing the baby to the doctor, yet she was going to here [pediatrician's office] and her OB was here. Why could they have not coordinated a visit so she would have gotten her care and the baby's care at the same time? . . .my advice is if you're bringing a mom in that many times [laughter] for weight

gain issues, know that she needs to get seen and so you should make that appointment for her or help her coordinate and have an OB appointment at the same time. The mom is neglected because of the baby needs and the mom has symptoms that's very – it could be an infection, like different things happening that she's totally neglected because they're focusing on the baby. (P9, hospital, 495)

Another participant described the pediatrician and OB as "two different critters" who are not providing collaborative care. The following excerpt explains how this dilemma sometimes leads lactation consultants to offer surreptitious ideas for mothers to get their needs met.

Respondent: I would really like when baby has thrush that the pediatrician treat the mommy, too. That the babies the pediatricians and the breast to the OBs, that to me just drives me nuts.

Interviewer: Tell me a little bit more about that.

Respondent: Well, it depends on who you see and it's not a dyad. It's a baby with thrush and a mommy with sore nipples. Well, I can treat the baby, but I'm not going to prescribe Nystatin for the mommy.

Interviewer: The pediatrician?

Respondent: The pediatrician. Whereas in other communities the pediatrician took care of both because it was part of the baby package. Here, we don't.

Interviewer: So what does mom do?

Respondent: She then has to go to the OB, but if she's on Medicaid and it's past six weeks then it's going to cost her. And therefore what's the answer? Use the baby's medication on your nipples and ask for a second script because it tipped over and you spilled it. That's not the way we should be practicing medicine. . . the baby and the mommy are one if there's a breastfeeding relationship and you can't do surgery on the mommy without thinking about the baby and you can't treat thrush on the baby without thinking about the mommy. And I don't, we're not there. That dyad concept needs to be taught in kindergarten, or you know. (P6, WIC, 628:640)

Although some participants did feel as though they are well-connected in their communities and are able to collaborate with other providers, most described the need for collaboration to "incorporate everyone's discipline" and improve patient outcomes. When asked about her ideal role working with other providers, one IBCLC said,

Oh, well it would be collaborative. Like I would come in, I would get report from the nurses and from the doctor and they would say, "Hey, this is what's going on with this

baby. What do you think?" or "We have done this and this and this but we're still having this issue." So we would be on the same page, work collaboratively. As it is now, I come in, nobody tells me anything. They have a board. There's a spot for breast or bottle. It's never filled out. I have to go on the computer, go through every patient and figure out by reading everything whether they're breastfed or bottle. (P10, hospital, 1035)

Participants described different levels of collaboration with other IBCLCs in their communities. A few private practice IBCLCs articulated feelings of isolation, while others felt that they had an excellent support system with other private practice IBCLCs and good communication with hospital or WIC-based IBCLCs. Similarly, IBCLCs working in hospitals or WIC settings experience a range of connectedness to other IBCLCs in their settings or communities. Some participants talked about territorialism or competition within the profession of lactation consulting. They felt that it was a problem that they don't work together and support each other more in their communities. For example,

It's kind of like my hospital just wants them to come to your lactation center. That's at a big hospital like you would say, "Come to our Lactation Center." You get funneled into your hospital and that kind of excluded the private practice people. So even within our own profession, there still is kind of like, we're not one big team and I think we should be. I still think there's a little bit of territoriality and whose job is it and all that kind of stuff. (P15, hospital, 431)

The lack of collaboration between providers has direct consequences on the breastfeeding mother and baby by inhibiting access to services and delaying care. Many of the IBCLCs talked about wishing the moms "would come in earlier" or be referred sooner. An IBCLC from a BFHI hospital described this as one of her barriers:

Respondent: Some of the moms, I wish they would come in earlier – sooner. And they said they've had the problem for three or four weeks. I wish they'd have come into the practice sooner, called for help sooner. I think that would be – that – that would be important.

Interviewer: And what about in terms of, like, working with other staff or other professionals? Are there different ways that support could be better coordinated?

Respondent: I think if the pediatricians see a low weight gain, I would – if they would encourage the moms again to come in sooner, if they would recognize that right away.

And if moms call their OB with – and I think that their – the milk supply is low to advise the mom to call for help, instead of just saying, "Keep doing what you're doing and it's gonna happen." (P1, hospital, 506:510)

Another participant explained that "If they wait too long, thinking that breastfeeding is going to get better and it doesn't, well then, it's like swimming upstream trying to fix the problem because usually the milk supply is not adequate." (P3, private practice, 181) Many IBCLCs felt that physicians resort to supplementation too quickly instead of referring mothers to a lactation consultant for evaluation, which exacerbates the breastfeeding problems. One IBCLC said,

I think a lot of times the doctors don't even think about referring to a lactation consultant. They often just say supplement formula thinking that they're helping the mom. "Oh well, we're giving her a break because she's giving the baby some formula," whatever, but then it starts that downward trend of the milk supply and then you end up with a mom who doesn't have enough milk eventually because she started supplementing and it all started because the doctor thought they were helping when really all they had to do was say, "Hey, why don't you call this person?" (P30, private practice, 248)

When asked why referrals are not happening in a timely manner, participants attributed it to providers' lack of knowledge about breastfeeding and formula as a quick and easy solution. For example,

Physicians just not being aware. Physicians very easily saying, "We'll just give a bottle." Unfortunately, some insurance companies saying, "Well, you've always got the bottle so, again, I'm not going to pay," but you know where that's an issue with the breastfeeding. A lack of knowledge sometimes with who they may be seeing, WIC or the lactation consultants out in the community, into realizing that this is a little bit more than just adjusting the latch or positioning at the breast. "I'm working six weeks with this mom, it's not going any better, now I'm going to send and refer them over." (P7, hospital, 141)

Another participant looked at her records during the interview to see when she was seeing moms postpartum and discovered that most women referred from pediatricians were coming around 14 days, compared to hospital referrals which were closer to three and four days postpartum. She explained that,

I think what happens there is that they go – they either get to the point at two or three weeks where they're like, "Oh my God. This is not getting better." Or those are the ones that sometimes the doctors sent because they're not seeing them as frequently as they

should. They see them at day four or five and then they see then again at two weeks. So they're not seeing them at day seven, at day 10 to kind of gauge in between like, "Okay, is the weight gain fine?" or "How are we doing?" (P21, private practice, 187)

There appears to be a gap in the continuity of care during the most crucial two weeks for establishing breastfeeding.

Participants also discussed problems with collaboration in terms of the disagreement between various providers on the appropriate treatment or plan for managing breastfeeding problems. Many IBCLCs expressed frustration with pediatricians and other providers who don't acknowledge particular problems (such as tongue-tie) or treat problems properly. For example, "We had issues when a lactations specialist who's helping a mom in the hospital they would identify a tongue tie and they would go to a pediatrician and the pediatrician would say, "No it's not a problem." That was a big barrier." (P15, hospital, 195). Another participant commented,

My biggest frustration is when I see a baby that is tongue-tie. I'll tell the mom - I cannot say the baby is tongue-tie but I will go about the correct wording that I have to use. She might say something like "Well, I was at the pediatrician this morning. How come he didn't say anything?" or "I went to the pediatrician and he said the baby is fine." So sometimes the mothers will believe me and will follow up but other mothers are like "Well, the doctor said the baby is fine." In the meantime breastfeeding is going downhill. So that's frustrating. The second one is Candida which is prevalent in South Florida because of the heat and the humidity. A lot of our mothers get induced before their 40 weeks. If they get induced, often they end up as a caesarean. If a mother has a caesarean, they're just going to have antibiotics, and usually it ends up with thrush. Often the doctors might not want to prescribe something for the thrush or may not want to treat both mommy and baby. (P23, WIC, 155)

Some IBCLCs believe that providers make their assessments using different growth charts or with different expectations than they use, which often results in the recommendation of formula supplementation. Disagreeing with other providers is tricky for IBCLCs because they believe they have an obligation to provide evidence-based information and care to families, but do not wish to undermine the authority of the pediatrician. One hospital-based IBCLC commented,

It could be a variety of things but the problem is that if you're taking care of that mother and baby dyad and that's your provider, how are you going to be able to be an advocate for your family when that provider is not open for communication? (P15, hospital, 295)

Furthermore, the disagreement between providers is frustrating for mothers who generally want to make the best choices for their babies. The following quotation exemplifies the struggle for IBCLCs in providing the best care to their clients amid different (and sometimes non-evidence-based) recommendations from pediatricians who are perceived as the experts by parents:

Just the idea, I don't think, had occurred to her that doctors might make a recommendation other than what was best for their child, not because they want to cause them harm, but because that's the way they did it with their children or that's the information that they read when they were going through medical school and they haven't done any continuing education since. I like that I stay up to date as much as I can on information, but I'm constantly butting heads with pediatricians in my area who are still recommending cereal in bottles or cereal for reflux and things like that that evidence just doesn't stand up to anymore. I wish that we were all on the same page. (P30, private practice, 240)

One private practice IBCLC summarized the lack of collaboration between IBCLCs and other providers in this way:

after they get home from the hospital, the real issues start. It's not when they're in the hospital and they have constant access to care; it's when they get home and they're by themselves, and just by simply saying, "Hey, here's the name of a lactation consultant, she might be able to help you" versus "Why don't you give your baby some formula?" So it's just changing their way of thinking and I'm not really sure how to do that. At least in our area, the pediatricians don't consider lactation consultants to really be part of the healthcare team. We're just some kind of pro-whatever, I don't know what the word is, accessory healthcare. I don't even think they consider us allied healthcare providers. I don't think that we have the respect in that profession that I would love to see us have, if that makes sense. (P30, private practice, 252)

These barriers all influence service delivery to mothers and their infants. The problems with service delivery directly impact the IBCLC's ability to manage problems.

Poor service delivery

Inaccurate, non evidence-based, and conflicting information

Many of the practices and advice that negatively impact IBCLCs' ability to manage breastfeeding problems directly result from various providers' lack of knowledge about breastfeeding and normal newborn behavior. Almost all of the participants described examples of inaccurate or conflicting information that is given to mothers regularly. Their examples highlighted a range of professionals, including pediatricians, obstetricians, hospital nurses, pharmacists, physicians working in emergency rooms, and various specialists such as speech language pathologists and ENTs. IBCLCs gave examples of nurses and physicians telling mothers that they won't be able to breastfeed because they don't have enough milk or their nipples are flat. Participants discussed how this inaccurate information undermines the mother's confidence in her ability to breastfeed. One private practice IBCLC said,

A lot of your pediatricians definitely sometimes damage, if not irreversibly damage, breastfeeding. They can put a stop to it because that's the worst thing you can hear when you are a new mommy. It doesn't matter if this is your fifth kid. If they say, "You know what, you are not making enough. Sorry, your baby is starving." That's detrimental and I can tell you, nine times out of 10, that's not the case. (P2, private practice, 117)

Many participants also described a range of other inappropriate advice about how long mothers should nurse on each side, how often they should nurse, and when to start solids. One IBCLC described a potentially life-threatening situation due to being given misinformation about the impact of a tongue-tie. She said,

I mean I had one baby who just really stands out for me who had an anterior tongue-tie and in the hospital was telling everybody, "My baby-" This is a first-time mom, didn't really understand the impact, but told the pediatrician who came to see her (who was not her pediatrician specifically but whoever was on-call), everyone there, "My baby has a tongue tie," and was told, "It's not a big deal. It's not a big deal." Left the hospital thinking, "It's not a big deal. It's not a big deal." Got to me at I believe day nine and the baby was 21% below birth weight. This baby was almost dead. I hate to say that but it's true. Then at that point was sent to me by her pediatrician the next day. So he didn't even really put any urgency on the matter. . . That particular one really angers me because

she was fighting for her cause. She knew there was something wrong with the baby's lift and no one would take care of it and then she just kind of felt like, "Well, I'm a first-time mom. Everybody's telling me it's okay. I see the milk. I see the milk dripping." I mean she was basically breastfeeding this baby like a whale. She was squirting milk into his mouth thinking that he was transferring. . . (P20, private practice, 256)

A lack of evidence-based practice was a common theme, particularly in the hospital setting. Participants explained that many of the typical hospital protocols about supplementation aren't evidence-based and the nurses or physicians are used to a particular way practicing that may not be evidence-based. When asked to describe the factors that influence their success in managing breastfeeding problems, several IBCLCs made comments similarly aligned with this one:

Respondent: In the hospital setting, the biggest barrier to me being effective in providing early breastfeeding support to the mothers is the pediatrician. The pediatricians, in my opinion, are practicing medicine and subsequently baby care the way that they learned 20 to 30 years ago in their residencies. In my opinion, the pediatricians in my [removed for confidentiality] setting are not current with the current recommendations of the American Academy of Pediatrics and they're definitely not current on the recommendations for exclusive breastfeeding.

Interviewer: Okay. Why do you say that? What makes you come to that conclusion?

Respondent: The pediatricians as a matter of routine will instruct new mothers to go ahead and breastfeed but almost "supplement" with formula for merely any reason. So their milk comes in so that we're sure that the baby gets enough because the baby looks a little bit jaundiced because the baby has lost a little bit too much weight or the baby has lower blood sugars. Let me qualify that. There are times when I feel that from a medical standpoint, children do need to be supplemented for medical reasons but I see a lot of physicians telling mothers to supplement for non-medical reasons.(P17, hospital, 120:124)

Non-medically-indicated supplementation was described by many of the participants. Some of their examples indicated a level of conservativeness among hospital nurses in interpreting routine testing results for jaundice or hypoglycemia. Similarly several IBCLCs described mothers being commonly told to stop breastfeeding when taking medications, "without referring to any of the

current literature." Other examples of non evidence-based information were clearly based on outdated advice:

he tells his moms that they should never nurse more than ten minutes on each side. Any longer than that, the baby is using you as a pacifier. They also tell the moms to put grape jelly on the nipples if you're having latch problems. The baby will latch when they taste the grape jelly. (P12, hospital, 376)

One IBCLC was explaining how the physician at her hospital seems to find reasons to supplement every baby, which results in overfeeding and spitting up, subsequently requiring additional unnecessary testing and interventions.

Respondent: They're making the baby ill. No, this is formula, but they're making the babies sick. Because if they spit up, they can't go home.

Interviewer: They can't go home?

Respondent: They are not allowed to go home if they spit up because they're not tolerating their feeding.

Interviewer: So do they have to not spit up for a certain number of hours?

Respondent: They can't spit up. No, they're not allowed to spit up. If they have a random one here or there, but if they spit up after their feedings, they cannot go home. They have to stay. We shall do a full septic workup on them. She makes them all sick.

Interviewer: Wow.

Respondent: Okay, and then so...

Interviewer: The parents – they don't know that level of detail?

Respondent: They don't know. She'll come in and tell them something horrible. So, see, so they have to. They have to supplement with formula if their blood sugar – see, this is normal blood sugar. This is okay, but they have to be supplemented according to her. This is not evidence-based practice at all. (P10, hospital, 581:597)

An IBCLC based in a WIC setting explained that misinformation directly "undermines my ability to carry out my care plan that I worked on with the mom because of the non evidence-based support that they are giving." (P26, WIC, 224) Participants reported getting feedback from mothers that they are frustrated by conflicting information because "everyone is telling me

something different." The conflicting information that is given also impacts the lactation consultant in terms of her credibility and rapport with the mother. For example, one participant explained,

once what you're saying is pitted against what they're saying, this is where everyone is kind of stuck in the middle, most importantly the mom. I'm used to it, but what is the mom to do? Whose advice is the mom to follow? I cannot tell her to follow my advice because what if something happens? Now I'm liable. (P20, private practice, 550)

Formula: The Quick Fix

Many of the participants reported that pediatricians are so focused on the "numbers" related to weight gain, blood sugar, or jaundice that they are unable to look at the whole picture. They focus on short-term solutions, often resorting to quick fixes such as formula supplementation rather than taking the time to solve the breastfeeding problem. A few participants believe that some physicians superficially support breastfeeding, but don't seem to trust in a mother's ability to succeed at breastfeeding, as indicated by giving them formula "just in case" or recommending supplementing after every feeding. A few IBCLCs were critical of doctors' use of "order sets" with standard instructions for mothers such as "breastfeed on demand and feed formula 1.5 ounces afterwards" because they do not address the individual needs of each dyad. Some felt that physicians don't consider the impact of birthing practices such as the use of IV fluids which they believe leads to edema and artificially inflates the amount of weight that the baby loses in the first 24 hours. Others mentioned that they recommend supplementing even when they baby is doing well, but not gaining as quickly as the physician would like, or that the physician is expecting unrealistic formula-based growth patterns out of breastfed babies. One IBCLC explained the unintended consequences of focusing so heavily on early weight gain:

the biggest thing is the pediatrician's negative impact on the mother's confidence in breastfeeding. If I have to pick the biggest issue, to me it's that the pediatricians push the

early weight gain and I don't quite understand it because officially, babies have two weeks to get back to their birth weight. That's the official recommendation but in my opinion the pediatricians push that early weight gain extremely fast. It's extremely close to delivery. They put a lot of fear in new parents because they make them come back or they check every two days until they're satisfied that the baby is on an upward trend, that mothers are panicking that their babies are not getting enough and that they're not going to gain weight fast enough. I believe that breastfed babies put their weight back on at a different rate than formula-fed babies and I wish that the pediatrician could be a little bit more understanding and lenient when it comes to an exclusively-breastfed baby's weight loss and subsequent return to birth weight versus a formula-fed baby's. That is probably to me one of the biggest factors in the hospital and that's that first 48 hours. The pediatricians are already on these mothers about the baby's weight loss. . .I have heard pediatricians repeatedly encourage mothers, to me is the politically-correct answer, "We'll go ahead and breastfeed but supplement until your white milk comes in" and that boggles my mind. (P17, hospital/private practice, 300:304)

When probed further about why the pediatricians are so focused on weight gain, she said, "I think it's a fear on pediatricians' part. It's a fear of a baby becoming dehydrated . . . if he should be readmitted, it's a black mark against the pediatrician." (P17, hospital/private practice, 308) Another participant also wondered about the possibility that pediatricians are anxious about weight gain due to concerns about liability:

Respondent: I hate to generalize but I don't think they are huge advocates for it. I think their role is, "Okay, if this is what you really want to do, I'll give you some time to do it." There's always a time limit. There's always a time frame. So I don't think they really truly see a value in it so I don't think they're truly – they have no vested interest, I don't think. I really don't.

Interviewer: Which providers do you have in mind when you say that?

Respondent: The pediatricians. They want really fat plump babies really fast and no matter what the cost is, they don't care. I don't know if it's a liability for them that -I mean, sometimes I wonder if they're on some kind of liability time frame. Okay, if this baby is not really huge really fast, I'm going to be sued on this day and time. I know that sounds ridiculous but I've often wondered why they don't truly see the value of breastfeeding and the importance. (P2, private practice, 349)

Concerns about accountability may also lead nurses to be overly conservative about supplementing when following protocols for checking blood sugar or jaundice. One IBCLC said, "Oh, actually early on, the first 24 hours sometimes the nurses and the lactation

department will disagree on what hyperglycemia is, so the nurses want to cover themselves and supplement quicker than we would." (P12, hospital, 192)

The recommendation to supplement with formula by physicians and nurses was described as a major source of frustration for most IBCLCs in this study. They often commented that in recommending supplementation as the answer to every problem, the pediatrician is not really supporting a mother's decision to breastfeed. For example,

Pediatrician should be supportive to the mother's decision to breastfeed, and I don't think they should solve every breastfeeding problem with, "Give a bottle of formula." That's how a lot of them solve a breastfeeding problem. And I learned that from a mother one time, years ago, probably 15 years ago. She says, "Why when I call the doctor with a breastfeeding problem, they tell me to solve it with formula?" She says, "Why don't they help me with the breastfeeding problem?" (P1, hospital, 276)

IBCLCs explained that the focus on supplementing can undermine the mother's confidence and also negatively impact milk supply. Participants were also critical of the lack of follow-up when a physician recommends supplementing (with pumped milk or formula) because they don't give the mother clear guidance about how long she should continue to supplement and when she can resume exclusive breastfeeding.

The overuse of supplementation is evident in the hospital setting as well. While most participants believed that the majority of nurses are supportive of breastfeeding, they explained that due to a lack of knowledge about breastfeeding, nurses often recommend supplementing with formula which, while given with good intentions, has the negative consequence of undermining the mother's confidence in her ability to provide enough milk for her baby. In the following excerpt, one participant described how the mother's self-confidence, which may already be low, can be shattered by the nurses' recommendation to supplement:

Respondent: I always feel like the parents are going to be the experts and instilling confidence in the parents and in the mother, that's huge. That's huge. That's one that I need all the nurses and everybody championing because the mom – many moms either they come in with low self-confidence or they just don't think it's going to happen

because of pre-conceived myths that "Oh, I'm not going to have milk. My mom didn't have milk. My mom and me have the same type breasts and she didn't have any milk so I don't think it's going to work." [Laughter] It hasn't even started yet. So yes, self-confidence, trusting your body and overcoming those unrealistic expectations [Laughter]

Interviewer: What do you think makes it hard to instill confidence in these women?

Respondent: I think it's what the woman perceives so the baby is waking up for frequent feedings and if that's not normal for them, right, so it's perceived as abnormal when it's a normal function. [Laughter] The staff coming in and maybe adding to that perception that mom is having like, "Yes, you're right. You don't have enough colostrum. You need formula." That just breaks it. That's going to break it. Then the mom is crying and the nurse may say, "Well, I'm helping her to get a little bit of rest." Because it may happen that she gets more rest if she does that but what was her intention? How did that comment or how did that one bottle, whatever you want to call it, influence her? (P9, hospital, 371:375)

Later in the interview, this same IBCLC remarked, "It looks like, right now, all we're doing is trying to save the babies [laughter] and the moms from the staff. [Laughter] I really feel like it." When asked to expound on this comment, she explained that instead of connecting with mothers, who are often unsure of their feeding decisions and face a range of barriers to breastfeeding, nurses further undermine their confidence in breastfeeding. She said,

Respondent: A lot of the nurses have the ability or could have the ability to make that connection and provide that mom with not only advice and, of course, just evidence but in way that she really buys in [laughter] and we don't like to command the mom what to do. We want to provide her evidence to support and resources so she can make the best decision for herself and for her family and being okay with whatever she decides is best for her family. [Laughter]

Interviewer: So you're saying they could make the connection but they're not?

Respondent: I don't think they're – they feel like – this whole breastfeeding thing, so it's confidence in the mom being able to do it, right? Nobody's mentioning the baby's confidence, okay? [Laughter] The baby's out of the question, but then you have the nurse and does the nurse feel confident enough to help this mother? Because they didn't get it in nursing, right? We didn't get that training in nursing and its showing. Maybe a lecture because you're talking about everything and everything on and every other bodily function, right, they review and everything. (P9, hospital, 419:423)

Another IBCLC working in a hospital also described some of the nurses as barriers when they don't provide evidence-based care such as skin-to-skin and rooming-in. In particular, many

participants talked about the problem with night nurses, who supplement the babies during the night because they believe they are helping the mother to rest, or they use nipple shields because they don't have the time to work on proper latch. For example,

the LCs in the hospital will tell me that it's at night. Their nipple shields disappear at night. I don't know if it's because they don't have as much time at night and there's only a skeleton crew of nurses at night. Maybe that it's like, "Okay. You're having breastfeeding difficulties. Here, take this. I don't have the time to sit here and work with you on breastfeeding." I don't know if that may be – I think a lot of it is time. I think, honestly, a lot of it is time and time constraints for nurses. (P24, WIC, 529)

One of the pediatricians explained that nurses are constrained by time and there are not enough lactation consultants available around the clock. She said,

Well, our problem right now is they tend to solve problems like they just have 24 hours to get this work so they put them on a nipple shield. So there's a lot of - I think probably one in three moms goes home on a nipple shield. That's amazing. That has to just do with "Look, I can't get this kid to latch and I can't spend enough time with this mom because I got all these other things to do. I'm a nurse on the floor." They don't have much time. The LC is not here because they forgot to schedule one for this day, they just don't know - on weekends, especially, they might have an LC come for three or four hours but that's it. So they're just soft on nipple shields, they use a lot of like quick fix and no follow-up. You should call the LC but it doesn't happen and by the time they get too far down the road they quit. (P27, pediatrician, 247)

IBCLCs explained that the problem with non-evidence based practices, recommendations, and advice leads to a cascade of problems that impact breastfeeding and the ability of the lactation consultant to most effectively manage problems before the breastfeeding is unsalvageable. Once IBCLC put it this way:

They're not little robots. They don't work on a time schedule. I've even had some doctors — moms go, "The doctor said three or four hours." Now, we got a weight issue. So now, [laughter] those kind of things that are still there or that their milk doesn't come in to about three to five days, so if they don't nurse much in the first couple days, it's not a problem. If we want a better milk supply, we need to nurse more frequently in these first couple of days. Like I said, at the drop of the hat, everybody wants to supplement with formula because it's always breastfeeding's fault where in it's not always breastfeeding fault. [Laughter] So yes, everything they think — and then when formula doesn't solve the situation, then we've already ruined breastfeeding. So we have that downhill spiral. So yes. (P24, WIC, 539)

These practices that negatively impact the breastfeeding relationship are indicative of a fragmented system of care. Although not specifically defined as such, comments provided by the participants in this study often exemplified a lack of family-centered care in hospitals, physician offices, and WIC clinics. The focus tends to be narrow, rather than holistic. For example,

The pediatricians are looking at the baby. They're coming in, they see the jaundice, they see the low weight, they see — whatever it is. I don't think they all see the factors involved in that, meaning the mom but also the grandma. If there's a father or husband/spouse, how supportive are they in all matters? Going in and spending five minutes in a room, you're not going to get the dynamics of that family at all. (P15, hospital, 335)

In contrast, participants believed that IBCLCs' professional standards of practice emphasize family-centered approaches to breastfeeding support. Many of them described the importance of "looking at the whole picture," which also includes the mother's social support system.

Social Support

Most participants identified a lack of social support as a barrier for mothers because it directly impacts her self-efficacy, or perceptions of her ability to succeed at breastfeeding. Single mothers, teen mothers, working mothers, and second-generation immigrant mothers were perceived to have inadequate social support, whereas mothers from stable families and who recently immigrate may have better support systems for breastfeeding. One participant also described middle and upper class mothers as having challenges with social support because their extended families were less likely to live with them or close by. Interestingly, mothers who have more family involvement do not necessarily have better social support systems related to breastfeeding. Primarily, the fathers of the infant and the maternal and paternal grandmothers were described as the most problematic for mothers in terms of interfering with breastfeeding. Examples commonly included descriptions of extremely influential grandmothers undermining

the mother's confidence by telling her that she doesn't have enough milk, minimizing the importance of breastfeeding, and pushing her to feed the baby they same way they did. The following excerpts represent some of these challenges:

I really encourage all moms to come to the group. And especially the moms that will call that they're not getting any support at home. Their mother and mother-in-law or they have no friends who breastfed. So we really encourage that but that can be a stumbling block because when you have someone saying to you, "Oh, the baby's crying again. You don't have enough milk." It makes mom begin to self-doubt. You know they put that doubt in her mind and then she starts to question herself. Especially brand new moms, they question themselves. So a support system that's not there could be just as detrimental to the success of a mother-baby dyad as a healthcare provider giving incorrect advice. (P1, hospital, 120:122)

one of the deterrents to mothers getting some education and assistance they could get when they're still in the hospital is the fact that they have so many family and friends come and visit and they spend time visiting and they spend time allowing family and friends to hold their baby instead of learning to take care of their baby themselves or learning breastfeeding basics in that first 48 hours. They want to appease their family members. I have to tell you in my opinion, the mothers and mother-in-laws are the new moms. They're powerful. After discharge, they are telling the new mothers how to take care of the baby the way they did. I butt heads frequently with the grandmothers about current recommendations for the babies. This is in regards to breastfeeding, positioning in the bassinet or the crib, water supplementation, and burping everything. If mothers, if the grandmothers, if they did it a certain way, they want their daughter or their daughterin-law to do it the way they did. Offer a water bottle after a breastfeeding. That's an old tiny thing. Burp the babies, put along their tummies. That's before 1994/1993 recommendations. They impart their desire for the mothering part of it on to the new mother. A lot of new mothers can draw a line in the sand and say, "No, we're going to do it the way we want to do it" and other new mothers are so vulnerable that they succumb to the influence of their mothers or their mother-in-laws. I find this dynamics hugely interesting and I'm amazed at the impact that grandmothers have on mothers. (P17, hospital/private practice, 457)

Spouses were also described by participants as barriers, sometimes by being controlling as one participant explained, "occasionally I get a guy who just really doesn't want his partner to breastfeed. That's rare. Like occasionally though you get one of those guys that say something like, 'They're for me. They're not for the baby.' Yes." (P29, hospital, 191) Other times the spouses may have good intentions, but their solutions unfortunately undermine breastfeeding. For example, one participant said,

dads are fixers and they want to fix the problem and they don't like seeing the mom, their wife, get upset. A lot of moms are struggling and they cry a lot while they're breastfeeding because they got their hormones running and they're frustrated and sometimes they feel like failures even though they're definitely not, and so that's often I think that just by giving a bottle of formula is giving their wife a break and they think that that's helping. (P30, private practice, 211)

A few participants described the lack of support for breastfeeding as indicative of larger relationship or marital problems. These were particularly challenging for the IBCLC because the patterns of behavior are so ingrained in their lives and the scope of the lactation consultant does not include marriage counseling. One IBCLC explained it this way:

From the dad, I really have to say it's mostly if the needs of the child infringe on the convenience of her partner. That is the only way I can describe it. "Nursing takes too long. You're always feeding the baby. My friends at work said their kid sleeps all night and he drinks 8 ounces of formula. I think you should give the baby 8 ounces of formula so I can get some rest. I'm tired." Typical marriage crap. Breastfeeding isn't really the problem. Their marriage is the problem. Breastfeeding is just a symptom of the rest of the problem. (P19, private practice, 453)

This participant went on to explain how the combined pressure from several family members further erodes the mother's confidence:

So family, not just husbands and partners, but grandmothers especially if it's - the dynamic of the family is that the maternal influence is high, whether it's on his side or hers, it's a lot. So you're a brand new mom with a brand new baby, everybody in your environment tells you what you're doing is wrong. "It's a waste of your time and it's not important. A, you're bottle-fed. Your husband was bottle-fed. All his siblings were bottle-fed. All your siblings were bottle-fed. You all turned out fine. You turned out fine. You have sore nipples. The baby has a tongue-tie. Why are you wasting your time with this? You're a new mom and you're in pain." (P19, private practice, 453)

As an outsider, the IBCLC is not part of the intricacies that are rooted within family dynamics. Building trust amid the forces of established and influential family members was described by participants as difficult for both the IBCLC and the mother. For example,

some of it starts with family members here just continuously saying to the mom – these are people she's known all her life and they're telling her to just give formula. "Give a little bit, you'll be fine. Give a little bit," and when she starts eroding that "I can do this breastfeeding thing," it just erodes further. There's the people who've known her all her life. Who's she supposed to believe? Me whom she's never met before? I'm giving her

this concept that she may not totally absorb yet or the people who've known her all her life, and her husband who's worried about her because she's crying and upset, and — "We'll just give formula. Just feed the baby and then it'll be okay." (P11, hospital, 662)

A lack of social support often has a negative impact on the self-efficacy of the mother and creates challenges for these IBCLCs because they must negotiate their role in supporting the mother within her individual family context.

Participants also described the importance of having their own sources of social support as health care professionals. The perception of administrative support and a sense of connectedness with their peers and other providers shape the way these IBCLCs approach their roles in breastfeeding support. When they do not feel supported or valued in their professional environment, they feel constrained in their ability to provide the best care possible.

Alternatively, those who believe that they are supported by administrators, well-connected with other providers, and valued for their expertise were more positive about their ability to best manage breastfeeding problems.

Private practice IBCLCs in particular described the need for social support with other IBCLCs in the community. They commented on the importance of being able to reach out to other IBCLCs for advice, mentorship, and help with problem-solving difficult or unusual breastfeeding issues. Although a few participants described some competitiveness in their communities, many described effective relationships with their peers in other settings or in the community. One private practice IBCLC desired more networking opportunities for IBCLCs to strengthen working relationships with each other. She also felt that there should be a more structured mentorship process so that less experienced IBCLCs can learn from more experienced IBCLCs and have better access to social support from these mentors. Another private practice IBCLC explained her perspective about having a "network of support" among IBCLCs:

The most important thing I think if you're going to be an IBCLC in private practice, the most important thing is you have to have a network of support for yourself. I don't necessarily mean healthcare providers for your mommies and babies, I mean for you as a professional. You burn out, you're emotionally drained because the worry that you carry when you leave the house, if it's a real issue . . . That way when I have a baby whose below the birth weight at three weeks and I need to make sure that the baby's gaining weight, and I go to bed at night and thinking, "Oh God, please give that baby an extra two ounces every feeding. Please tell me she didn't care if it was for... [formula]" I mean, that piece, I need to be able to have a support for myself, for me, that, "Oh my gosh, I'm worried sick about this mom." You need a network of support of other professionals; they're your colleagues, your friends, your work world. You don't have to work together. You just have to be able to support each other. The barrier to being successful on professional level is the quality of support you get from your colleagues, more so than anything else. Because even if every doctor sucked and never helped and they were completely useless, at least you wouldn't be alone with it. You'd have all your friends who have the same complaint and you would be able to manage that. It's that piece of it is the only thing that I would add. As IBCLCs, we need to have support for each other. (P19, private practice, 957)

IBCLCs who practice in more urban areas described having established beneficial connections with other lactation consultants in the community through local coalition groups that bring together a range of breastfeeding support providers to work on projects such as advocacy and continuing education.

Self-Efficacy of the Mother

In addition to the institutional, health care system, and provider-related barriers presented, IBCLCs in this study also identified the mother's self-efficacy as an important aspect in the successful management of breastfeeding problems. Self-efficacy was described as being shaped by a combination of the factors previously described: social norms; knowledge and attitudes of mothers, providers, and family members; social support; institutional policies and practices; the coordination (or lack thereof) of the health care system; and various influences directly related to the delivery of care that mothers receive from a range of providers. Mothers' lack of confidence in their ability to successfully breastfeed may be partly explained by the compartmentalization of how women generally receive health care services during and after their

pregnancy. The focus of prenatal appointments is on the growing fetus and the mother's health. While some OBs and midwives do provide education about breastfeeding prenatally, they don't often examine a mother's breasts. Some IBCLCs talked about the need for anticipatory guidance so that mother's are better prepared with information about breastfeeding, know where they can access resources if they need help, and identify any possible physiological barriers to breastfeeding early. For example, while it is important to recognize insufficient glandular tissue that may indicate a hormonal imbalance and complicate breastfeeding, some participants felt it was equally important to build a mother's confidence that her body is well-suited for breastfeeding. One IBCLC said,

As a healthcare provider, the first OB visit ought to be a head-to-toe exam. You know, you listen to heart, lungs, breasts. You'll look at the whole body. "Did anybody ever look at your breasts when you went to your OB's office? Did anybody look at your breasts at the last month? We do a pelvic every week or we're paying them more attention down there. Did anybody look at your breast at this point?" No. We're compartmentalized. So, yes, we're only looking at uteruses, not at breasts even though the breasts are part of the pregnancy process. And I ask that question and moms tell me boldly, "No one ever looked at my breasts." Could I? Your equipment is just great. And I used to work with OBs where I'd say to them, "Do me a favor. Tell every mom she's got great equipment. It'll take you 30 seconds. It will save me four hours on the other end." Because our culture has given us such misconceptions as to what we're supposed to be. I'm too big. I'm too small. I'm too fat. I'm too short. I'm too - yes. (P6, WIC, 712:720)

Another participant described the impact of providers' lack of sensitivity on mothers' self-efficacy.

I see a lot of moms who come to us and they're very sore and very uncomfortable in the mode of giving up. It's because the nurse said the latch looks fine but the nurse never asked them, "Does it feel okay?" They never acknowledge that there might be an issue going on just because I don't think they really know how to help. That's frustrating. Or they'll say things that they're not thinking about how the mom is interpreting this. They'll say "Well, baby's mouth is small and your nipples are big," which are totally irrelevant. They'll say things, "Well, you must have fine nipples." Moms interpret all of that kind of stuff as something wrong with them. I think very personally if somebody who's worked in the hospital, that's a lazy response. If you can't get help that moms get the babies to latch, it's a lazy thing to say those kinds of things whether true or not because it isn't helping the situation. I don't think many professionals think of it that way. They want to give an explanation as to why it's not working. They don't realize — I wish we could do a

lot of education about, "Do you know what the patient hears when you say this?" A lot of nurses don't know. (P25, WIC, 231)

IBCLCs also identified the mother's perceived barriers about breastfeeding as challenging factors they must consider when managing breastfeeding problems with families. Some of the barriers perceived by mothers include going back to work, making time to breastfeed while caring for other children, not having enough milk, and fearing nursing in public. One of the most common barriers mentioned by participants was mothers' perception of insufficient milk to feed their babies. One IBCLC remarked, "They don't trust their own bodies to provide for the baby." (P12, hospital, 376) Several participants commented that mothers say they are going to "try" to breastfeeding, suggesting that they expect problems prior to even starting. For example,

Most women come to me and say, "I'm going to try to breastfeed." It's not like you're going to try to get through childbirth, you're going to get through childbirth. Breastfeeding is a big unknown. They're insecure about it and very unsure of themselves and their body's ability to do this. So they're very vulnerable when it comes to breastfeeding. (P17, hospital/private practice, 475)

Many participants provided examples of unrealistic expectations of the mothers and their impact on self-efficacy when those expectations aren't realized. For example, a few IBCLCs discussed mothers' often unrealistic plans to only pump and feed expressed milk or to breastfeed and pump from the beginning. Without understanding the physiology, these methods can be problematic because, "if you do both from the first day, the chance that you're going to do both for very long is very low because your supply never really establishes." (P29, hospital, 191) Women who have had augmentations and breast reductions also have unrealistic expectations, which is a source of frustration and hopelessness for lactation consultants. For example,

Women who were not told that when you go from a G to a B, you might not be able to breastfeed, and were actually told, "It should be no problem. The fact that I removed your areola and tattooed it back on in a new place, that shouldn't really be a concern," so that when they're 20 years old, making these decisions, they don't really wrap their

head around it. Then when they're 30 years old, having a baby, nobody said that this might be a problem. I don't like those things. Those things upset me. (P19, private practice, 593)

Another participant commented similarly:

A number one challenge is augmentation. I know that this would be confidential but that makes me feel hopeless. It really does. Tight frenulums, even the labial frenulums, any of those things don't challenge me really. I think that's a quick clinical fix. You can't go undo an augmentation and women are so misinformed. Their doctors tell them they can breastfeed but I can tell you 98% of them cannot. Maybe in the first three weeks, but at the third week, I can tell you their milk supply drops so significantly that it's unbelievable. I don't see a difference in areola, the incision at the areola or behind the muscle underneath the arm. I don't see any difference. (P2, private practice, 181)

A few participants felt that mothers have a false sense of security about the ease of breastfeeding if they've read books or taken classes. In addition, if problems aren't resolved quickly, they may switch to formula more easily. One lactation consultant explained her perspective on these unrealistic expectations,

I'm often asked when I'm going to write my book and I tell parents that I don't know if I'm ever going to write a book because there's too many of them out there and most of them need to be in dumpsters, but I have a name for the book. The name of the book will be "Roller-skating for Dummies." Now, do you think you could read my book "Rollerskating for Dummies" and then just magically go out there and skate wonderfully without putting on the skates and getting on the rink and practicing? What I'm trying to help mommies see is that classes and books may give you some knowledge about how the body works and how some things work and help them learn a little bit about babies but until you get that baby in your arms and you practice breastfeeding, I think a lot of times they're getting set up for thinking that because they got prepared, it's going to go perfect. Then they're disappointed that it didn't because there are some little bumps on the road and they give up easily because, "Well, I did everything I could do." No, you didn't practice. It's like the kid that never does his math homework. He's not going to do as well on the math test. You have to practice. You have to find your groove with your baby and get to know your baby and they can't learn it from a class or from a book. That's a barrier I think because I think there's this false sense of security that, "I took the class. I read the books and I should be able to do it." I think that's a false sense of security for moms which becomes a barrier, as well as the mom who has a lactation person in the hospital or a nurse or lactation consultant spend five or ten minutes with her instead of staying there for the entire feeding and teaching her how to assess a nonnutritive suck as opposed to a nutritive suck once you put the baby off and on several times and practice latching. Otherwise, she's given this false sense of security that even the lactation consultant helped her and I still have problems because momma's perception is that if she gets help, "Even if they're there just for a short time, then I'm going to know how to

do this and then it will work." I think we're probably losing a lot of mommies who have had some help in the hospital for a brief time, again, before the milk came in, before the breast changes and becomes firmer and harder, and her perception is once she gets home, "Well, even the lactation consultant helped me so it doesn't work, so I must be hopeless." So she moves on to formula because formula is really easy. Mommy wants a quiet happy baby, not one that she feels like she's fighting with and that she's not – the baby doesn't like this because the baby's fussing at the breast. That's her perception; she wants her baby to be happy and its needs to be met and if those don't get done instantly – we're living in this generation of everything's instant with the microwave and the cell phones and everything's instant. So mommies don't have this – if it doesn't work, then we move on to something else. (P3, private practice, 261:265)

Finally, the motivation of mothers was also described as a barrier by some participants.

Although the nurses may undermine breastfeeding by supplementing or taking the baby to the nursery so that mothers can rest, mothers also sometimes send their babies there with the expectation that they can work on nursing during the day and the baby can have formula at night. A few participants expressed frustration at working with mothers all day on latching, positioning, and frequent nursing to help them breastfeed more successfully, just to come in the next morning and find out that the baby spent the night in the nursery receiving bottles.

Summary of Research Question 1

The indirect and direct factors presented in this section highlight the primary emergent concepts from this study. These concepts are interconnected and ultimately impact the ability of the IBCLC to manage early breastfeeding problems and support breastfeeding families. The indirect factors described by participants in this study (social norms, knowledge, and attitudes) influence factors within 1) the occupational context (institutional policies and practices, coordination of care, and service delivery) and 2) the individual context of the mother's self efficacy and her social support system. These factors within the occupational and individual contexts directly impact the ability of the IBCLC to perform her perceived role in managing breastfeeding problems. The role enactment of the IBCLC is also shaped by social norms and her knowledge and attitudes about breastfeeding. In results for Research Questions 3 and 4, the

impact of these barriers on the role of the IBCLC will become more apparent. To better understand the relationships between the factors associated with management of breastfeeding problems by IBCLCs, a conceptual model was created. See Figure 5. A brief explanation of this model follows with further interpretation in Chapter 5.

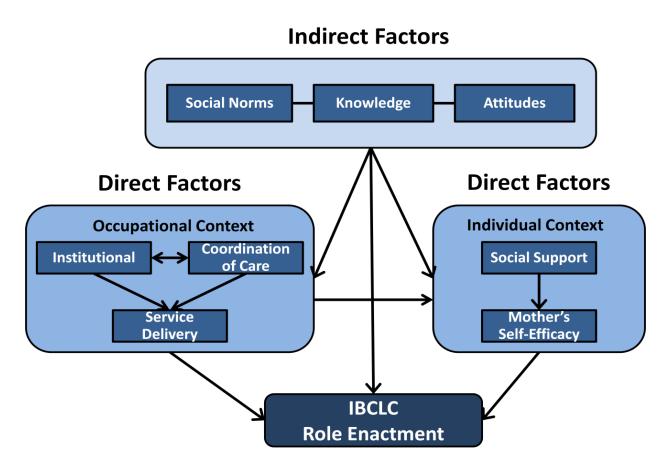


Figure 5 – IBCLCs' Perceived Influences to Managing Breastfeeding Problems

In Figure 5, the factors associated with managing breastfeeding problems are represented by indirect and direct categories within an interconnected framework. These have primarily been described as barriers in answering Research Question 1; however, both barriers and facilitators may be represented within each category. The dynamic nature of this framework is illustrated in Chapter 5. The indirect factors identified in this study include social norms, knowledge, and attitudes, all of which are interrelated and have an impact on the occupational and individual

direct factors in the model. The occupational direct factors are also interrelated and include those within the health care system such as institutional policies and practice and coordination of care, which in turn, affect service delivery. For example, hospital policies that require nurses to follow a prescribed set of tasks within limited hours frame may prevent them from taking the time to collaborate with other providers to solve breastfeeding problems. This lack of time and collaboration may lead some nurses to supplement babies with formula, which can undermine breastfeeding. Unnecessary supplementation is representative of poor service delivery, which often impacts IBCLCs' ability to succeed in their role of managing breastfeeding problems. In addition to the barriers that arise in various practice settings, individual barriers related to the social support of the mother and her self-efficacy also impact the IBCLC's role enactment. Participants often commented that grandmothers and fathers are extremely influential on the mother's breastfeeding success. The type of social support was described as having an impact on the mother's self-efficacy with breastfeeding and is important in determining the strategies that IBCLCs will use to best support breastfeeding families.

The arrows indicate the direction of influence of each category as they related to each other. Each of the direct barriers (individually, and in combination) impact the IBCLC's role enactment, such that she may or may not be able to adequately address particular breastfeeding problems. Although not visually represented in this framework, specific examples and subthemes within each of the direct barriers often differ by the IBCLC's practice setting, credentials, and the context of the breastfeeding problem. This framework is presented again in Chapter 5 with an interpretation of the results of Research Question 1 and the implications of this research.

Research Question 2: How do the perceived barriers to managing early breastfeeding problems vary by the type of breastfeeding problem?

The researcher asked participants to describe the common and infrequent problems that they see and work to resolve, as well as whether the barriers for managing various problems differ by the problem. The barriers for lactation consultants in managing breastfeeding problems were presented in Research Question 1 results; however, specific breastfeeding problems definitely have some distinct challenges for lactation consultants to manage. Findings suggest that lactation consultants face a variety of challenges when managing different breastfeeding problems, but that their practice setting and other credentials also determine what some of these challenges may be. It is important to remember that the indirect and direct barriers previously described apply to these specific problems. This section highlights some of these problems and explains the differences in barriers for the participants in this study, with specific examples of issues related to practice setting and/or other credentials. Common and uncommon problems reported by participants are presented in Table 12. The ✓ indicates that IBCLCs in this study mentioned these problems specifically one or more times. Participants in various practice settings also may address problems that do not have a \checkmark , but did not they comment on these in this study.

Table 12 - Common and Uncommon Problems Reported by IBCLCs by Practice Setting

	Hospital	Private Practice	WIC	Doctor Office	
Common Breastfeeding Problems					
Sore nipples	✓	✓	✓	✓	
Latch problems	✓	✓	✓	✓	
Slow weight gain or weight loss	✓	✓	✓	✓	
Perceived or actual insufficient milk*	✓	✓	✓	✓	
Tongue-tie*	✓	✓	✓	✓	
Separation (NICU, nursery, work, school)	✓	✓	✓	✓	

Thrush*	√	✓	✓	✓	
	▼	✓	✓	▼	
Pacifier/nipple shields			•	·	
Mastitis/plugged ducts*	√	√	,	√	
Edema in breasts	✓	√	✓		
Medications for mother*	✓	✓	✓		
Reflux*	✓	✓			
Augmentation/Reduction		✓		✓	
Disorganized suck/poor state	√				
regulation*	·				
Very tired moms	✓			✓	
Supplementing for hypoglycemia or	√		√		
jaundice*	•		•		
Sleepy babies	✓				
Engorgement	✓				
Less Common Breastfeeding Problems					
Hormonal (IVF, thyroid, IGT,	✓	✓	✓		
PCOS)*	•	•	•		
	✓		✓		
Down syndrome*	✓		✓		
Cleft palate/lip*	✓		✓		
Tongue-tie*	✓		✓		
Oral/motor issues or swallow	✓				
disorders*	V				
Torticollis*	✓				
Inverted nipples	√				
HIV+ mother*	✓				
Delayed lactogenesis II*		✓			
Gastric bypass*		✓			
Abscess*		✓			
Reflux*				✓	
*Sometimes requires medical oversight, diagnosis, or treatment from a physician or ARNP					

Some of these breastfeeding problems require medical oversight, diagnosis, and treatment from physicians or ARNPs who have a broader scope of practice that may include prescribing, some surgery, and the ability to order lab tests. Other problems can be managed solely by lactation consultants although coordination and communication with other providers are often

important for the family to be best supported. Common breastfeeding problems such as thrush, mastitis, tongue-tie, insufficient milk production, reflux, and insufficient infant weight gain can be challenging for lactation consultants to manage because they sometimes rely on other providers to treat the problem. Other common problems related to latch, soreness, supplementation, pumping, and perceived insufficient milk present different challenges for lactation consultants.

Thrush and Mastitis

Thrush is a fungal infection (*Candida albicans*) that can affect the mother's breasts, the baby's mouth, and cause a severe diaper rash for the baby. Thrush thrives in warm, moist areas of the body and can be passed back and forth between the mother and the baby. White patches in the baby's mouth; sore, red, and itchy nipples; and sharp, shooting pains in the mother's breasts are some symptoms of thrush (Walker, 2011). A few IBCLCs explained that even though some babies or mothers are asymptomatic for thrush, both the mother and infant need to be treated because it is so easily passed back and forth. Participants working in all settings described treating the dyad as challenging because the mother needs to see both the pediatrician and her OB to get medication for herself and for the baby. However, some participants said that in their communities they have had pediatricians who will treat the mother and the baby. All the pediatricians in this study reported that they write prescriptions for the mother as well as the baby for issues like thrush or mastitis. One pediatrician explained,

I can't with all consciousness just know and diagnose that this mother has this problem. A lot of times, I'll have her call her obstetrician and say, "I just saw the lactation consultant or the pediatrician. I just need a prescription for such and such" but if they won't do it, I don't want her to have to go for another trip, another couple of days suffering or an early mastitis or something without taking care of it myself. I just don't think that it's – I don't feel that it's ethical to leave her alone like that. (P18, pediatrician, 76)

A few IBCLCs also expressed frustration about physicians giving mothers the wrong dosages of oral medications for treating thrush because they are used to treating yeast infections. Some participants described trying to provide evidence-based information to physicians, but don't often feel as though their clinical assessments are taken seriously. One WIC-based participant explained that mothers on Medicaid would suffer more when the pediatrician would refuse to treat the mother too:

Sometimes the doctor will say, "I don't see anything."... Where I was in the health department, my office was in the pediatrics and the pediatricians would refuse to do anything about thrush. When you have a WIC mom that doesn't have insurance, she only has Medicaid, it was very hard to find a provider that would agree to treat. So we talk about using vinegar and water and decreasing the sugar and adding acidophilus to her diet because that will help until she can get a doctor to do something. Often mommy is in so much pain that unless she is very determined, she gives up. (P23, WIC, 171)

The following excerpt from a hospital-based IBCLC summarizes the barriers related to thrush that were also identified by other participants:

if [the docs] do not see actual thrush in the baby's mouth, they will not treat the baby. They say the baby doesn't have it. And mom is suffering and mom is using her Nystatin cream, if they've given her that, they've given her Diflucan. .. Because the pediatrician really should not be writing medication orders for someone that's not his patient. . . . obstetricians should not be writing Nystatin orders for a baby because that is not his patient. So when there's a problem like yeast, you have two separate people. You have a dyad of mother and baby that are together, but you have two separate entities that need treatment in this together dyad. You have two different healthcare providers you're dealing with. So that could be difficult when someone will not give treatment. . . I have a - a patient right now who has twins. One of the twins has thrush. The pediatrician is treating that baby with Nystatin. And mom got Diflucan from her OB and the Nystatin ointment for herself. I said, "What about the other twin, your other daughter?" "Well, she's not getting treatment." Mom's getting worse. So I explained to mom that they're all in this together and all have to be treated including the baby that presently does not have thrush in the mouth. That does not mean that the baby is not harboring yeast. So getting the – that one actually was easy. . . "Oh! I didn't know. Okay. I'll write for her.". . . And some of the healthcare providers are very receptive to new information. Others are not. It's like when they treat mom's breast yeast systemically with one Diflucan pill like vaginal yeast. And trying to - so we are pretty good in this community, getting that education out to our OBs how to treat that breast yeast differently. And one certain group said, "No, they were only gonna do it with one pill and that's all." And their mothers suffered greatly and quite a few of those mothers left practices because of that. One of their own female OBs had a baby and got yeast on the breast and she called me and I

said to her, "This is what you need." And went through all the information with her. She says, "I've never treated it that way." I said, "That's why they don't get rid of it." She, you know, got one of her own docs to write the prescription for her and she – she did great. Got rid of the yeast, they were treated together. She had her 14 days of Diflucan. She did wonderful and she said, "All the things I've done to my patients," she says, "I never knew it." (P1, hospital, 90:112)

Alternatively, one pediatrician said that she has had mothers come to her with a self-diagnosis of thrush but the mother and baby don't show symptoms and she needs to work with them to find the actual problem which may be a poor latch. She also mentioned that for the mothers who do have thrush, affording the medication or getting a prior approval from the insurance company can be barriers.

Mastitis is inflammation in the breast that sometimes becomes an infection. Symptoms are similar to the flu and include fever, aching, chills, nausea, pain and swelling in the breast, and redness and heat in the breast. Plugged ducts, restrictive clothing, engorgement, stress, and nipple damage are a few of the common precipitating factors for mastitis. Mastitis is treated with recommendations of for rest, fluids, pain medication, hot compresses, frequent nursing or pumping to empty the breast, and often a course of antibiotics. Untreated mastitis can lead to a breast abscess, which requires surgical drainage (Walker, 2011). Similar to thrush, participants reported that OBs don't always prescribe the correct course of treatment for mastitis. One private practice participant talked about having to ask mothers to call their OBs to request the proper dosage of antibiotics. If the OB refuses, the mothers often do not get better and have to go back to their physician for more treatment. In the meantime, milk supply can drop, leading to other problems. In contrast, the pediatricians in this study felt that they could either write the prescription for the mother themselves, or call her OB and have the OB write the prescription. One pediatrician talked about the need to coordinate with OBs so that she can be compensated for the time she spends treating mothers for problems like thrush or mastitis. Although the OBs

are very busy, which she identified as a barrier to collaboration, this pediatrician offered some important insights into the possibility. Some excerpts from that interview follow:

Respondent: I treat the mom all the time without being compensated . . . I might start to but it is hard. The patients don't like that. I think I will have to. I think I have to think of how to get the obstetrician to refer back to me. It is nice to work with the obstetrician. I'm thinking it's just another project that I would like to do is to work with the obstetricians because I think all the physicians are supportive. It's just it's hard to coordinate that and get compensated for it because they are very busy.

Interviewer: What would that look like if you were able to work with the OBs more? What do you envision?

Respondent: Yes. I would envision that they can write a script for the mom to come to me to get the lactation consult. You know what I mean? So that I can – because I examine the mom. I have to know what medications she's on. This is the luxury for me is that I can actually treat the mom. Is she – depression even if I think – I don't always treat for that but if I spot that, I can send her back. Sometimes they need to see a psychiatrist, not even their doctor. I would like to get a consult from their doctor. Then I can do an exam on the mom for her specific problem which I feel comfortable with especially an infection. Then engorgement versus plugged ducts, whatever. Then I can send a report back to the obstetrician. . . I'm a licensed physician and I'm board certified in pediatrics so there are complications. It makes me liable. I want to see the patient only for the breastfeeding problem and yes I will have, sometimes I may have problems getting reimbursed for my work if I don't get that referral. (P28, pediatrician, 307:315, 327)

The rapport between the pediatrician and the OB as physicians may facilitate this coordination of care between them. In contrast, IBCLCs who do not have credentials that allow them to prescribe as part of their scope of practice often struggle to manage breastfeeding problems like mastitis and thrush because they are not able to collaborate with physicians as easily, yet rely on them for treatment. For example, one private practice IBCLC commented,

If I had a backup OB... just somebody that I can call and say, "Okay, this mom has mastitis. It's in her left upper quadrant. She does not have an abscess." and feel confident that we know what we are talking about. We have the education. "Can you please call in," because obviously I cannot write a script. "Can you please call in the appropriate medication," which we already know these medications. (P2, private practice, 169)

Many of the IBCLCs described challenges in working together with other providers to manage breastfeeding problems that suggest they feel undervalued and not respected as professionals. Because thrush and mastitis require medical care, and the scope of practice of the IBCLC does not include prescribing responsibilities, they must rely on other providers to treat the mothers they are supporting. In addition to the pediatricians in this study, a few IBCLCs were also ARNPs; these lactation consultants reported having more autonomy as providers because they are able to prescribe medications.

Tongue-tie

Ankyloglossia, commonly called "tongue-tie," is a congenital anomaly characterized by a short lingual frenulum that restricts tongue movement and sometimes causes difficulty with breastfeeding (Hazelbaker, 2010; Notestine, 1990). Tongue-tie can cause several breastfeeding problems that impact both the mother and the infant, including sore nipples, neonatal dehydration, poor latching/sucking mechanics, poor infant weight gain, and consequently, early weaning. Treatment for tongue-tie consists of dividing the frenulum (with scissors, a laser, or electrocautery) to free the tongue and increase mobility (Hazelbaker, 2010). Several studies have demonstrated frenotomy as a safe, quick, and effective option for division of tongue-tie, resulting in improvements such as ability to obtain a proper latch, a decrease in nipple pain, increased breastfeeding duration, and increased maternal satisfaction with the breastfeeding relationship (Dollberg, Botzer, Grunis, & Mimouni, 2006; Geddes et al., 2008; Hogan, Westcott, & Griffiths, 2005; Khoo, Dabbas, Sudhakaran, Ade-Ajayi, & Patel, 2009; Srinivasan, Dobrich, Mitnick, & Feldman, 2006). Tongue-tie was mentioned by all but one participant in this study and was generally identified as a common breastfeeding problem. Two WIC-based participants in northwest Florida identified tongue-tie as an uncommon problem, although two hospital-based and one private practice IBCLC from the same part of Florida said that they frequently see tongue-tied babies. Several private practice IBCLCs reported that tongue-tie is the main problem they see in their practices. One participant joked, "The tongue-ties are top of my list. The joke in my world is if I saw a mom and a baby who didn't have a tongue-tie, I'd write that down." (P19, private practice, 549)

The barriers for participants related to managing tongue-tie ranged depending on scope of practice, location, referrals, and relationships with other providers. Like thrush and mastitis, when tongue-tie is causing breastfeeding problems, it must be treated by a provider who is able to clip the frenulum. Getting a tongue-tie clipped early is also important because if it's not clipped, it can lead to other breastfeeding problems such as painful nipples, low milk supply, and poor milk transfer which can impact the baby's weight. Various parts of Florida seem to have different levels of acceptance about tongue-tie in their communities and access to providers who will refer and/or treat tongue-tie. Several participants explained that some providers will now diagnose and treat for anterior tongue-ties, but are still unfamiliar with posterior tongue-ties.

Private practice and hospital-based IBCLCs who work closely with breastfeeding-supportive pediatricians are better able to help mothers get tongue-ties revised quickly. A few participants commented that finding providers to clip the tongue-tie has become easier over the last few years and they believe that attitudes, education, and training are improving around diagnosing and treating tongue-tie. For example,

Respondent: we've actually gone from pediatricians who didn't look at it or didn't believe that it needs to be dealt with to nurse practitioners and some physicians that are willing to bring her in. Yes, bring her in because it makes perfect sense. If mom is having an issue, that she get this done so that we could prevent further issues and get that mom and baby off to a good start. So that's changed.

Interviewer: From when to when?

Respondent: I'd say in the last three years. (P9, hospital, 315:319)

However, in many communities lactation consultants continue to struggle to find a provider who will treat a tongue-tie. One WIC-based IBCLC said,

It's not the easiest thing to have happen in our town, where in some towns it seems like there's many people that will clip a tongue, and it gets diagnosed - maybe over-diagnosed and here, I think it's very under-diagnosed. As far as doing much about it, I think those are the mothers that nobody's recognizing it; even the pediatricians don't do much about it. . . We're kind of, I would say in the backwoods here with that. (P5, WIC, 302)

A few participants believed that tongue-ties should be resolved prior to discharge from the hospital. Sometimes the resistance was described as coming from the family who may not feel comfortable with the procedure. One IBCLC commented,

It's interesting to me, nobody has a problem with supplementation before they leave the hospital but we can't get the tongue clipped and some of them will say, 'Oh, we don't want him to have any unnecessary surgery.' Look, are you planning on a circumcision? 'Yes, yes.' Well, that's a lot more cutting than a tongue tie. (P12, hospital, 248)

Another participant described in more detail the challenges for many mothers in getting tongueties treated in their community. Provider attitudes, referrals, and insurance coverage all impact a mother's ability to resolve the tongue-tie issue as evidenced by the following excerpt:

Respondent: Very frequently, IBCLCs are having a very difficult time finding someone to assess and possibly clip a tongue tie when it's creating feeding problems. So it can happen in private practice and it can happen in a hospital setting. So an example is in one of our hospitals here – and it seems to be there are a lot of tongue tie issues here in [southeast city], and I don't know if there's a high cultural issue because of cultural and whatever. I'm not really sure, but in a hospital setting, you can have a Medicaid mom present with a tongue tie baby and everybody knows the baby's tongue tied, and the baby's having a very difficult time latching - can't, a matter of fact. Instead of clipping it right then and there, taking care of it in the hospital setting, which is what needs to happen, that mother is sent home, given a referral, and if she has transportation and the ability or the wherewithal, she can return to a specialist to possibly get the tongue tie clipped, and that's only if the person she goes to see is supportive of that.

Interviewer: Insurance – and will cover it under the Medicaid?

Respondent: Yes, for the most part, but if you can't get it done in a timely fashion in breastfeeding, will you succeed?

Interviewer: So what about in the hospital?

Respondent: They're not doing anything and the truth is they could get insurance to pay for it, so I don't understand why they would not call somebody in to do it, because it would be a quick fix, everybody would be happy, and all would be done, but it doesn't

work like that. In some hospitals, I believe they're doing it, but for the most part, it's not happening . . . if I have a mother who's educated and has good insurance and good transportation, she's going to go do it. It's not going to be a problem. We're going to get her taken care of; but that's not our majority, that's our minority. So the people that need the help aren't able to get it so easily. (P22, private practice, 134:142)

Several participants also commented that they are careful about how they talk about tongue-tie because they believe that their scope of practice does not allow them to diagnose. One IBCLC explained how she approaches this issue in her hospital setting:

I have never seen so many tongue-tied babies. I don't know, but I've seen a lot of babies with a really short tongue and they have trouble breastfeeding. Well, they give mom really sore nipples. So I had some issues with that. Now we do have a really good ENT just down the road who will clip the tongue, but I'm not sure what hoops the parents have to go through to see that doctor, if they have to have a certain insurance, if they have to be referred personally or I've been told here, I and the nurses, we are not allowed to mention the word tongue-tie or we'll be fired. That's what I was told. . . So, I may not say the medical term but I will say, "Well the tongue..." and then I show it to them and they can see it. It's as plain as day. It doesn't take a rocket scientist to know that the tongue is a little short. So they're like, "Oh" and then they understand. They put two and two together and then they see – now I tell them, "See how the tongue can't come out? It can't cup the nipple to extract the milk and that's on the tip and that's why you're getting sore nipples." and then I proceed to tell them how they could go about fixing that. I refer them to [a provider in the community] because she can do some exercises with them. They can do tongue stretching exercises. I teach the parents how to do that as well and then I say, "If you continue to have pain or issues, then I think it would behoove you to have a second opinion by your nose and throat doctor." I say, "It never hurts to get a second opinion." Most pediatricians, the ones around here, are not trained in tongue clipping and so they're not going to touch it within a 10-foot pole and most of them will say, "Oh, it's okay" because they don't understand the full implications of it. (P10, hospital, 749:765)

The pediatricians and ARNPs in this study are able to do frenotomies and do not face the same barriers as the other IBCLCs. One pediatrician explained how she handles tongue-tie:

I'll do the frenotomies in my office. I'll do it as a home visit. I will do it in the hospital where I have permission to do it. I don't like to waste time if I feel that that's impeding healthy breastfeeding but there are a few specialists. So there's an ear, nose and throat specialist that I work with in town that will do it for the children if it's a posterior, complicated – more complicated case and I also have a dentist that I work with who will work with the infants if there's something that I can't get to or that I need – they need a laser because of the risk of bleeding or something for the lip frenums. (P18, pediatrician, 116)

One of the participants in this study was able to compare how her barriers to managing tonguetie changed when she gained the credential as a nurse practitioner. She explained,

We had issues when a lactation specialist who's helping a mom in the hospital they would identify a tongue tie and they would go to a pediatrician and the pediatrician would say, "No it's not a problem." That was a big barrier. I felt that when I was the lactation consultant on the post partum floor. I felt that they were barrier if they didn't carry through. As the nurse practitioner lactation consultant I didn't feel it was a barrier because I knew that I could correct it. I could see when the specialist would identify a problem and they can't obviously, if you're a lactation consultant you can't be doing that. They would go to the baby's doctor and they would not see that it would be a problem. (P15, hospital, 195)

Finally, a private practice IBCLC described how fortunate she is to have a community of physicians who value breastfeeding and don't hesitate to clip a tongue-tie.

I probably have at least 10 pediatricians, who do it in their office without even a second thought. I even have some who don't need to be told. They will go, "Oh your baby is tongue-tied. Are you breastfeeding? Do you want me to fix that?" Oh yes. I'm very lucky. I'm saying I'm lucky. I know him. I read other people's information all over so I know I'm lucky. I'm afraid to jinx it because I know I'm really lucky, [laughter] but I'm really lucky. I know I'm really lucky. I don't have a lot of barriers because I have a community where people value and do what they're supposed to do. So it makes it much better as an LC to not be up against things all the time that you're beating your head about. (P19, private practice, 393)

Scope of practice is clearly important for IBCLCs who are working with families to access treatment for tongue-tie. Because it is less common for an IBCLC to also have a nurse practitioner or physician credential, her ability to refer and/or coordinate with providers in her community is critical. In fact, issues related to the referral process were mentioned in connection to tongue-tie more than any other problem. Although many participants reported challenges in finding providers who understand the connection between tongue-tie and breastfeeding, and are willing to treat it, other participants noted improvements in access to resolving tongue-tie in their communities.

Insufficient Milk Syndrome (Medical)

Actual insufficient milk syndrome is uncommon, though perceived insufficient milk is one of the most common reasons cited by mothers for weaning or supplementing with formula. However, some women do have medical conditions that impact milk production, many of which are hormonal. Some of these include hypoplastic breasts, thyroid disorders, polycystic ovary syndrome, diabetes, and mothers who have used assisted reproductive technology to become pregnant (Walker, 2011). The barriers for lactation consultants working with mothers who may not be making (or transferring) adequate milk to their infant were primarily related to a lack of anticipatory guidance from OBs or other physicians and a lack of coordination between IBCLCs and other providers. One IBCLC commented,

At a very basic level, it would mean a lot to me if healthcare providers could understand that there are very real reasons why mothers can't produce enough milk and trying to squirt a mom's breast to see if she squirts milk from across the room isn't a good indicator of milk [laughter] supply and that they can do a good job by referring prenatally. In those cases, referring prenatally is very important. When a mom has thyroid issues, when a mom has had gastric bypass, when a mom has had any type breast surgery, when a mom has had lactation failure whether perceived or real in a previous pregnancy with a previous child, I think knowing that — that would be the time. The same way that they would refer to a perinatologist if the mom was on antidepressants or that kind of thing. So just to be recognized as part of the team, very simply put. (P20, private practice, 482)

Several participants talked about needing to be in communication with OBs to do testing for a potential hormonal cause to the milk supply problem. One participant explained how important and helpful it is when OBs are proactive about testing for these kinds of problems so that mothers have a better chance to succeed with breastfeeding. She said,

Oh my God, an OB who will figure out why that mom isn't making milk and to take the extra steps to do the extra blood work and try to figure it out with her is awesome. There are a few OBs out there that when a mom isn't making milk they say, "Look, I don't know what it is but I'm going to write you this prescription. While you're taking that, we'll figure out what's causing this and then we'll fix that part, too." Before you even talk to the mom, "My OB has me on this medication but it's not really helping, what else do I need to do?" Definitely without a doubt, the OB's being aware that milk supply can be hormonal

or thyroid and being willing to look at that picture is huge. Being willing to write the prescriptions so the moms could get the meds they need to help them make the milk, that's huge. I think you can successfully breastfeed without any medical help but there's nothing wrong, but if there's something medically that needs to be fixed, you can't do that without their help. (P19, private practice, 915)

Participants expressed some frustration that mothers who have had in vitro fertilization or other conditions have not been told that they could have some difficulty breastfeeding as well and need early monitoring to make sure that their milk supply is maximized. One IBCLC explained that

it depends on the reason for the low supply. I mean I would say that if it's IGT, it's not even knowing that that's a possibility or even knowing that there's a risk factor there and a mom never really having her breasts assessed in that way. (P21, private practice, 195)

Another participant said,

Mommies that have had trouble getting pregnant, if they had in vitro, those should all be referred because if they can't get pregnant because the hormones aren't right, then a lot of times the hormones aren't going to be right for lactation. So we need to augment things or get on board with doing all we can to maximize things early on, not wait until the baby's several weeks old and we find that the baby has failure to thrive. (P3, private practice, 185)

There is also a psychosocial component to insufficient milk production that can be challenging for lactation consultants. One participant reflected that it's easier to tell women that they cannot make milk when there is an obvious reason such as breast surgery, compared to a problem with her reproductive system:

All of my breast surgeries - and this is South Florida, so this is breast surgery capital of the world - and I want to say that goes into the milk supply moms, because depending on her surgery, they're connected. I'd rather have a mom with surgery than the other moms who it's - no breast growth during pregnancy at all. "Fourteen years of IVF before I got a baby" - I'd rather have that because at least I can say, "Your breasts are there and now they're not. [Laughter] You went from a G to a B. There's not much left that works. I'm really sorry." [Laughter] That's easier than explaining to a mom, "This part of your reproduction wasn't working, and now, this part of your reproduction isn't working." She's already dealing with one. I don't like to be the person who makes her have to deal with the other. For me, personally, what's hardest on me is the mothers who really, really want to breastfeed and have struggles that cannot be fixed because that's the hardest. They can't all be fixed. (P19, private practice, 585:589)

Another lactation consultant talked about the importance of being able to identify when insufficient milk production may become a problem and how to discuss the issue with mothers tactfully. She said,

Then the other ones are the wide-spaced, coned-shaped breasts indicative of insufficient development and production. When the mom opens that gown up and you see that for the first time, do you say to her right up front, "Hmmm, I don't know if this is going to work because you look like you don't have enough" How do you say, I still teach, "Okay, this is how we get the mom there." This is — and then see how are they doing and listen for audible swallowing. I always teach them about audible swallowing. I rarely will say anything to those moms on their first visit about that. Especially, if I'm back tomorrow and I know they're going to be here tomorrow because on the second day then I will ask them, "How did the baby do last night? Here are some of the things I'm thinking." Some moms, who have breasts this shape, do not produce full volumes of milk, but I've learned to never say never because I would have been wrong with several that I've seen over the years. (P11, hospital, 382)

In sum, breastfeeding problems such as thrush, mastitis, tongue-tie, and insufficient milk production generally require some degree of medical attention and are most easily resolved when lactation consultants are able to work with or communicate with other providers. The barriers for lactation consultants also vary depending on their scope of practice and their practice setting. Ideally, better communication between providers and better coordination of care would eliminate some of these barriers to managing lactation consulting.

Latch, sore nipples, weight gain, perceived insufficient milk, and supplementing

Other early breastfeeding problems don't rely on physicians specifically, although physicians and other providers may still create barriers for lactation consultants. Problems such as latch, sore nipples, weight gain, perceived insufficient milk, and non-medically indicated supplementing with formula are intricately related and sometimes one type of problem will create a domino effect and lead to other problems if not addressed early enough. In particular, insufficient milk can be caused by the mismanagement of breastfeeding, which may include the use of pacifiers and nipple shields, limited feedings, poor latch, unrelieved engorgement, and

formula supplementation. Maternal self-efficacy is one of the primary factors related to perceived insufficient milk. Mothers may be concerned that increased frequency of breastfeeding or crying indicates that their baby is not satisfied with breast milk alone. Mothers may also lack knowledge about the normal quantity of milk consumed by newborns (Walker, 2011).

Participants commented that some problems are easier to manage than others and often the issue is timing. Adjusting latch and positioning can resolve issues of sore nipples and slow weight gain due to inadequate milk transfer. Many of the participants considered this to be the responsibility of primary bedside nursing care and felt that these issues should be resolved before discharge from the hospital. The problems become more difficult to manage if they are not resolved in a timely manner before discharge because maintaining a milk supply becomes more challenging, especially once mothers begin supplementing with formula if they are not consistently pumping. They often described this problem as a "downward spiral" or "snowball" effect because one problem leads to another, ultimately creating more barriers for the mother and the lactation consultant. The IBCLCs in this study consistently said that mothers do not get referred to them early enough and that this was a major barrier for a range of breastfeeding problems; this was particularly true for private practice and WIC settings. Participants also described frustration with physician resistance to making appropriate referrals or doing testing to better diagnose potential problems that may require medical attention. The mother's level of commitment to breastfeeding and her access to affordable pumps and medications were also described as barriers to some of these problems.

WIC-based and private practice IBCLCs felt that timing was a significant factor in their ability to successfully manage some breastfeeding problems. They explained that when

breastfeeding is painful or when the problem begins to impact milk supply, mothers are more likely to give up breastfeeding sooner if they are not receiving lactation support. One private practice IBCLC explained,

Some problems don't have easy solutions but definitely the sooner you get to working on a problem, the sooner you're going to be able to solve the problem. Mommies that are having to suffer through problems for a long time – breastfeeding, when I hear mommies say to me, "I'm dreading the next feeding. I'm really dreading every feeding," she has got a significant amount of pain and problem going on. The thing with childbirth, this could be a mommy that had a natural childbirth but childbirth is one time in that baby's entire life. Feeding the baby is eight to ten times a day so if she's having a really painful problem or a problem that's so uncomfortable that she's dreading feedings and she has got to do this eight to ten times a day, that needs to be addressed early on. The mommy that comes to me with sore nipples and the baby is three or four weeks old, maybe the baby is doing fine because maybe the baby is getting milk but the mommy is in all this pain. I say, "Why didn't you come sooner?" She says, "Because I thought my nipples would just toughen up and it would get better." Well, no. If they're having a problem, they need to get it addressed. (P3, private practice, 247)

The mother's level of commitment to working through breastfeeding challenges also seems to be different for various IBCLCs depending on their practice setting. The private practice IBCLCs felt that their clients are generally more dedicated to breastfeeding because they are actively seeking help from a lactation consultant. One IBCLC who has a private practice and works in a hospital made the following comparison:

I believe that yes, some of the barriers are different because if it's a little bit of a complex issue, it takes more effort to work through them and many mothers are not willing to work through some of the challenges that come with early breastfeeding. . . In my private practice, again, I'm going to say there's less barriers because the mothers that contact me for support are in my estimation much more dedicated to breastfeeding and want it to work out, and if they have an issue, they contact me and if the issue doesn't resolve or if another issue comes up, they re-contact me so they utilize me for ongoing support once we've established that rapport or that rooting and I do truly try to make myself available once we've had a class together or a consultation together. I pretty much give them access to me once we've established a relationship so I want to provide them ongoing support. (P17, private practice/hospital, 380:388)

However, helping mothers to break patterns of supplementing is also a challenge. One participant explained that helping mothers to move from the convenience of supplementing to

the convenience of exclusive breastfeeding takes time and dedication from the mother. She commented,

A lot of low supply is just not an optimal start. So then again, you've already been supplementing . . . so I would say that some of the barriers to that are – the older the baby, the more the mom is kind of established in the routine that she has come to kind of accept good or bad. So if she's gotten to the point by three weeks, by the time that she calls at three weeks or is told by the doctor, "Well, the baby needs to be gaining a little bit more," by that time whatever routine she's established which usually includes bottles and formula and sometimes pumping, it's kind of hard for them to break out of that. . . I don't like this barrier. I don't like any of them, but I find that once moms have given bottles that typically go along with other people feeding the baby and it's almost like they've had a taste of convenience before getting to the point where breastfeeding itself is convenient. Does that make sense? So it makes more difficult to basically consciously choose to do more work in their mind. [Laughter] So I think that exclusive breastfeeding is difficult in the first few weeks in the context of adapting to having a baby in general, in the context of just our cultural expectations and our own lack of preparedness for what babies actually need. If you kind of push through just doing it for a few weeks, obviously, you get to the point where it's easier to do. Then eventually you get to the point where it is the easiest thing to do. [Laughter] . . . it's hard for them to let go of that idea, "My husband has been giving him the 2:00 AM bottle." (P21, private practice, 195)

For some problems the amount of time needed to observe and assist with the breastfeeding can be a barrier, especially if the IBCLC suspects there may be a more medical problem that needs to be addressed. This was particularly true for IBCLCs working in the hospital setting. For example, one IBCLC said,

Well, time. I think if I have a baby who I suspect has a swallow disorder, a lot of those babies have already been breastfeeding; they might even be bottle feeding. I spend time watching the breastfeeding. I'd watch the bottle feeding. I don't dare leave the room because I really want to see everything. So the time with those — and that's a huge problem because I don't have the time to spend with them. It's not a quick fix. They are going to come back multiple times. I do a referral usually to a speech therapist or occupational therapist. I'll order like a swallow study. It's more complicated. (P15, hospital, 247)

Another participant explained how some physicians don't take some breastfeeding problems seriously, even when they are medical problems that require an evaluation from a medical doctor. She commented,

Some physicians are more resistive to listening to the suggestions. I had a GI physician tell me she was the specialist and I wasn't to diagnose reflux so, [laughter] okay. In being very careful so that I'm not stepping on toes in how I talk about different things that I'm seeing and how it can impact so that they're physicians being proactive in that when you're seeing those other soft signs and going on and doing something proactively about it. I've had physicians be resistive to doing swallow studies. The baby is choking, coughing. Parents are talking about life-changing events occurring at home . . . They're not taking it to the urgency where maybe necessarily it needs to be looked at and how it's interfering or potentially interfering with what's going on. Going back to reflux, the baby's not going to do well on a bottle either or mom just pumped and put it in a bottle because they're spitting out as much as what's going in or as soon as they get that half ounce in then they're pulling off the nipple, and arching, and crying, and fussy, so a lot of times, too, I'll tell parents, "Let the videotape on your phone. Record this feeding here so you've actually got it to show the physician," because a lot of physicians don't see the feeding going on in their office. That's been helpful for parents to do. (P7, hospital, 187:193)

Supplementation was also described as a significant barrier for IBCLCs for many of the more common and infrequent breastfeeding problems and in all practice settings. Sometimes just getting to the mothers before the nurses start supplementing is a barrier for lactation consultants in the hospital. One IBCLC commented,

Sometimes, some of the nurses are very quick to give a bottle if the baby doesn't feed in six hours or seven hours. They are very quick to jump to that. So if we can get in there early enough, we can say, "Well, let's do some hand expression. Let's give the baby – do more skin to skin. Let's get you pumping" – there are some times when we feel like if we could have just gotten in there a little bit earlier – but they're very quick to give formula, very quick. (P16, hospital, 423)

Several IBCLCs commented that pediatricians and nursing staff are too quick to supplement for issues like jaundice and hypoglycemia. One participant said,

Hypoglycemia, that actually starts with the nursing staff. There are protocols for checking blood sugar. If there's an LGA or these different times that they check blood sugar and they're not supposed to supplement unless the sugar is under 40. Well, frequently it will be 43 or 44 and they're supplementing because it was "trending towards 40" and that's a quote, "trending towards." I don't think that's what the protocol is. (P12, hospital, 256:260)

Other participants expressed frustration with the recommendations for supplementing because physicians do not always communicate to the mother that she needs to pump to maintain her milk supply.

Cost was also described as a barrier for mothers who may need a good pump and cannot afford one or access one through WIC or for mothers who cannot afford medications or galactagogues to support their milk supply. One ARNP felt that WIC uses unfair discretionary criteria to determine which mothers can have access to a pump. She said,

sometimes I can't convince WIC that a woman could use a pump. Or what happens more likely here is that our WIC people, they decide who's worthy of a pump. If they think that the mother is unreliable they won't give her one of their pumps. (P29, hospital, 223)

Furthermore, she described challenges with accessing effective galactagogues due to cost, side effects (of Reglan), and lack of FDA-approval for domperidone (which is most effective). Several participants also talked about mothers getting inaccurate information about the safety of breastfeeding while taking certain medications. The participants found this to be a barrier because they are not always able to communicate with the various prescribing providers or convince them to use evidence-based information to guide their recommendations.

Breast Augmentation and Reductions

Breast surgeries such as augmentations and reductions can impact milk production or milk ejection. Depending on the type of surgery and the incision site, mothers may have problems that include painful engorgement, increased risk for breast infections, nerve damage, loss of glandular tissue, and insufficient milk production (Walker, 2011). Examples from participants follow:

Breast surgeries, we live in Miami. They're so rampant and the way that the doctors here do the incisions. . . Reductions are always tricky; but enhancements, they tend to do the periareolar and they're cutting the fourth and fifth intercostal. They don't necessarily have a problem with supply if the surgery was enough years back. . . They have tons of problems with engorgement, which then leads to mastitis, and no matter how much you're

on it and you're treating it, there just isn't room in the breast cavity to be able to expand [laughter] the way that it needs to naturally, and they tend to suffer. Once they've got the mastitis, their supply takes a huge dip while they're treating it. And this is another thing. Now you have mastitis. The pain that they had to forego, they just don't – it's hard and not to say that - I have to say that as cynical as I'm sounding and as negative Nellie as I'm coming off, man, we have some dedicated mamas who really do – who do everything and jump through all the hoops. I am in awe of them. (P20, private practice, 260:264)

I should say one more thing is breast surgery. Many of my patients have had augmentations. I think it's a big population and many of them don't say it that that they have had it. They're embarrassed so I always have to ask. If you have reduction but may have had augmentation and that causes a lot of problems when they're breastfeeding even though their surgeons tell them they didn't cut any ducts or how do they know? So, they have more problems with engorgement. Those are the ones that really need to pump to relieve the engorgement and when they don't have a pump, it's harder. So those patients we have to follow a little more closely. (P28, pediatrician, 371)

Participants talked about the need for women to be "working with someone and it shouldn't be waiting till we find out that the baby's in trouble." (P3, private practice, 185) In this case, anticipatory guidance for these mothers is critical so that they are appropriately monitored and can address milk supply issues before there is a larger problem. A few participants were also critical of surgeons who told mothers that their breast surgery would not impact breastfeeding and commented that addressing the mothers' expectations were sometimes difficult. One participant explained,

Women who were not told that when you go from a G to a B, you might not be able to breastfeed, and were actually told, "It should be no problem. The fact that I removed your areola and tattooed it back on in a new place, that shouldn't really be a concern," so that when they're 20 years old, making these decisions, they don't really wrap their head around it. Then when they're 30 years old, having a baby, nobody said that this might be a problem. I don't like those things. Those things upset me. . I would like enhancements to have before-and-after pictures. If they have a before-and-after picture for me, or I'll bring my atlas and we'll look at pictures of breasts together, and I'll say, "Find me your breasts in these pictures. Which one belongs to you?" (P19, private practice, 593:597)

Finally, a few participants commented that sometimes partners or other family members are unaware that the mother has had breast surgery. Because this is important information for

lactation consultants to be able to properly support breastfeeding, they must be thoughtful in how they talk to mothers about breast surgeries. One participant said,

Listen, sometimes their mothers don't know they had implants, so I'm looking at scar tissue and you're sitting there, checking off you've never had surgery, I'm like, "Who doesn't know you've had those implants because, sweetheart, those are not your breasts. I need to know really quick - who doesn't know?" [Laughter] I have been where the husband didn't know that she had breast surgery because she did it when she was younger. Ten years later when she met him, she just didn't mention it. I can't tell him . . . Then I have to be really careful how to explain to her what to do next if he's going to sit in the room the whole time and he didn't leave, but it depends. (P19, private practice, 607:611)

Summary of Research Question 2

Research Question 2 results identified some of the more common and infrequent breastfeeding problems that IBCLCs manage as they work to support breastfeeding families. The barriers to managing these problems is determined by the degree of medical oversight needed, the scope of practice of the IBCLC, the practice setting of the IBCLC, and her professional relationships with other providers. A lack of collaboration with other providers is problematic for IBCLCs who rely on physicians to diagnose and treat more medical problems such as thrush, mastitis, tongue-tie, and true insufficient milk syndrome. Other breastfeeding problems related to latch, weight gain, and supplementation do not necessarily require medical oversight; however, if communication between providers is lacking, the IBCLC may face challenges when mothers receive inconsistent or conflicting information. The results presented in this section offer insight into the consequences that may arise from a lack of inter professional collaboration, such that problems become compounded and more difficult to manage.

Research Question 3: What are the roles of various health care professionals in providing breastfeeding support and management of early breastfeeding problems, as perceived by the IBCLC?

The researcher asked participants what they perceived their ideal role to be in providing support and management of early breastfeeding problems. Participants were also asked to compare the ideal roles to the actual roles of other providers who work with breastfeeding families, such as pediatricians, obstetricians, and mother-baby nurses. IBCLCs' perspectives of these various roles are described in this section. Major themes are presented in Table 13.

Table 13 – IBCLCs' Perspectives of Providers' Roles in Breastfeeding Support

Table 13 – IDCLCs Terspectives of Froviders Roles in Breastreeding Support							
IBCLCs	Pediatricians	Obstetricians	Mother-Baby				
			Nurses				
Educator	Basic Breastfeeding	Basic Breastfeeding	Basic Breastfeeding				
	Knowledge & Skills	Knowledge	Knowledge & Skills				
Breastfeeding	Support Mothers	Anticipatory	Support Mothers				
Expert		Guidance					
Member of the	Know When to	Know When to	Know When to				
Health Care Team	Refer	Refer	Refer				
Emotional Support			Communication				
			Liaison				
Holistic Approach							
Empower Mothers							

Role of the IBCLC

IBCLCs perceive their role in supporting and managing breastfeeding problems to be multifaceted. They discussed the roles that IBCLCs should play and also explained how these roles are often different from their realities. As described previously, many of the participants became lactation consultants because of their own challenges with breastfeeding and their desire to support other women to meet their breastfeeding goals. Perhaps because of their own experiences, they placed a strong emphasis on the need for lactation consultants to be a source of support for mothers and to provide them with accurate and current information. The following

quote represents the perspective of many participants in this study in terms how they perceive their roles:

I have had such horrible experiences that I wanted to help prevent these and help women understand what they could do and to know breastfeeding is the norm and to help empower them to make choices with information that I could provide and the support that I could provide, that hopefully they would choose to breastfeed. Of course, supporting women regardless of their choice, but also to make it possible for them to have a choice by providing them with factual information and the support that is so important in order to help women continue, not only my support, but also support in the community. (P26, WIC, 12)

IBCLCs also see themselves as problem solvers and experts in breastfeeding management and desire to be valued as an important member of the health care team by other providers, although this remains a struggle for many.

Scope of Practice

In describing their roles in managing breastfeeding problems, most IBCLCs in this study considered their scope of practice to be highly important. This section begins with a summary of findings related to their perspectives on scope of practice, which provides a useful framework for understanding their perceived roles. The majority of IBCLCs (without MD or ARNP credentials) commented that diagnosing and treatment are not within their scope of practice, although one private practice participant commented that diagnosing is not explicitly prohibited by her scope of practice, and several participants gave examples of being asked (though not directly) to diagnose in working with other providers.

IBCLCs who do not practice under a credential which would allow them to diagnose described finding creative ways to explain breastfeeding problems to mothers by describing symptoms and stating observations. Remarks like this one were common:

That's the law that you had to be a licensed physician to write a prescription. Does that mean we can't refer mommy to get a breast pump or tell mommy about over-the-counter products that might be of benefit to her? I think it depends on how we phrase that or how we share that information. If you say, "Many mothers have found that this is helpful to

boosting milk supply," I think we can do that ethically and legally, but I can't prescribe antibiotics for a mom who's sitting here with a breast infection. I've got to send her to her obstetrician or her midwife. (P3, private practice, 353)

One participant expressed frustration with the limitations of her scope of practice imposed on her within a WIC setting. She explained,

we've gotten in trouble for telling mothers anything about Fenugreek, or the mother's milk tea, we're not allowed to even say the words anymore. It's almost like the whole system is against the breastfeeding, so we better not be doing what I consider part of my job, would be to be noting, "Oh, low milk supply. Here's 27 things to do, but I can only tell you really, use seven, because otherwise..." To tell them about Domperidone and to give them information from Dr. Jack Newman that would be almost like prescribing. If we ever do say anything of that manner we will hand the mother a pad of paper and a pen, and then we'll spell out the word to her, so that it's in her handwriting and not ours. She's going to hear that we're saying a word that's foreign to her, Fenugreek, or Domperidone, or Reglan, and let her write that down. I don't know if that even helps, but so far, I haven't gotten in trouble for that. [Laughter] (P5, WIC, 318:320)

IBCLCs in this study reported a conscious diligence to abiding by their scope of practice and thus, also emphasized their reliance on connections with other providers in the community who will formally diagnose and treat problems when identified by the lactation consultant. One participant explained,

there are a couple of family practice doctors that are more than happy to clip that frenulum if it's necessary. I'm very grateful for that because some of – in the past, I've dealt with doctors that, "Well, let's give it a month and see what happens." It's just like we can't wait that long, not for this particular problem so – and because I don't diagnose, I'll either tell the nurse that it looks like that frenulum might be closed and I'll tell the mom, "Ask the doctor about what he thinks about this little tongue." Just to kind of put a spark in their thoughts that maybe that might be why it's hurting, but I try really hard not to – "Yes, your kid is tongue tied." (P8, hospital, 519)

Another participant described role clarity in her clear understanding of her scope of practice and its limitations. She commented.

"This is where my limit is, and this is where you need to go and see somebody else." I don't do tongue-tie releases. I'm not picking a pair of scissors to a baby's mouth. I can see that this is the problem, but I'm not solving it for you. I can only tell you what the problem is, what are some things you can do to solve it, but I can't solve that problem for you. To me, that's clinical - that it's a tongue-tie that requires a surgical procedure, it's definitely clinical - but my need to be able to do that doesn't exist so I don't see how - I

have to be able to recognize I can't grab a pair of scissors and do it. I need to be able know my law and I need to know that, but I don't think I need to know the clinical aspect of it. I just need to know it's not my job. (P19, private practice, 787)

In addition to working within the parameters of her scope of practice, she also expressed her autonomy as a private practice IBCLC and emphasized the need for her clients to be responsible for their own health care. She said,

When IBCLC was first doing the scope, one of the things that we were having a discussion about was the requirement to work under a physician and a requirement to tell a physician and a requirement that if we saw a baby, we had tell the doctor what we saw. A lot of us in private practice balked at that more than the nurses. The nurses are used to it. The nurses are used to never saying anything and they answer to a doctor. I don't answer to a doctor. I answer to my mom. The mom is my client. She pays me; I work for her. I give her everything. I tell her, "You're going to see a doctor tomorrow. Take this with you. Take your care plan with you. Show your doctor what you're doing. If your doctor has any questions, he can call me or she can call me." There is something underneath on the little care plan too that says, "I am responsible for sharing my care plan with my healthcare provider. If it differs from anything my HCP tells me to do, it is my responsibility." That's me. I personally think that you own your healthcare. It belongs to you. You decide who knows what's going on with it, and you decide how much they know. I don't think it's my right to share that even if you give me consent. That's very - unless there's a real problem. (P19, private practice, 655)

Another private practice IBCLC similarly explained that she has more autonomy than IBCLCs who work in the hospital setting. This participant spoke specifically about the issue of "diagnosis" which she believes to be more "charged" in the hospital because of the relationships between MDs and RNs. By building trust and rapport with other providers in her community, who often refer to her for her professional opinion, she feels more latitude in what may be considered "diagnosis" in other settings. She explained,

the nurse IBCLC that works in the hospital is really in a very different position than the private practice IBCLC as I see it. Okay? With few exceptions, I think they are much more restricted in what they can say, what they can recommend, really – things that – where – I personally don't feel those restrictions that much. I don't. I mean I – in my scope of practice, it does not say you cannot diagnose tongue tie. It doesn't say that at all. Now, there are some really old-school thinking I think coming from La Leche League because this is how this profession started, which is very clear on like what you can suggest, you can recommend, you can advise. Also coming from the medical, the RN versus MD type of role in the hospital setting where that term "diagnose" is very

charged with a specific thing. I don't feel those restrictions and the way that the pediatricians in particular that I have built relationships over the years, the way that they treat me makes me feel even more strongly about that. Because the ones who do refer, they're sending the mom to me for me to tell them. [Laughter] "Yes. This is the problem here." So what their feedback to me is, "I think I saw something there." They are recognizing that I have an expertise in that. (P21, private practice, 251)

One participant who became an ARNP described how her scope of practice changed and afforded her better access to working as a part of the healthcare team, enabled her to treat tongue-ties, and gave her permission to write prescriptions for other problems. She explained that if lactation consultants were truly respected and accepted as part of the health care team, that physicians would be more likely to work collaboratively with them. In this way their scopes of practice would complement each other and mothers would receive better care. She commented,

I think because as a nurse practitioner, my scope of practice includes diagnoses. I can order labs and I can write prescriptions. I can write referrals to occupational therapists. I have the license to do those things and it's appropriate. When I'm just an RN, I am relying on another healthcare provider to do those things. When you are truly a part of the team and your doctor or even a nurse practitioner values your experience and your assessment, they would then carry out what suggestions that you have so that the mom and baby get what they need but some physicians, they don't maybe — I don't know, there's probably a lot. Maybe they don't know who this lactation consultant is. Maybe if she's private practice lactation consultant in the community, these pediatricians never heard of them before. They may not want to do what they say because they don't know who they are or it could be that they don't know enough of breastfeeding. So many physicians don't know breastfeeding that you tell somebody it's tongue-tie and they looked and they only know anterior, and they still think that they're crazy. They're not going to go and refer to have it clipped or anything like that. So if the lactation consultant was a part of the pediatric practice, then that doctor and the nurse practitioner, or the lactation consultant will have a different working relationship. They're going to trust each other and they would be able to have better communication and then the moms and babies get served better. (P15, hospital, 315)

One participant provided a detailed example to illustrate the expertise of the lactation consultant and her frustration with not being taken seriously by other providers. While this comment demonstrates the limits of her scope of practice, it also highlights the need for providers to trust each other and work together.

We are the first to diagnose and to recognize a lot of things and yet, we need to bite our tongues and refer out to people who aren't taking us seriously. That's our biggest barrier right there. On any issue, that's exactly what it is. Again, to give you an example, I had a mom text me a picture of a clearly infected nipple, who came here. We have some of the best OBs in the county in South Florida. I can say that with all certainty. The white, puslooking thing on her nipple was scraped off and she was given medicine for thrush. Why was she not given Dicloxacillin? I then had to text the doctor and very diplomatically say, "Are you sure that wasn't a bacterial infection? It sure looked like a bacterial infection." And still three doctors saw the nipple. Three doctors went with thrush. Not one went with bacteria. Three doctors can't be wrong yet the one person who couldn't do anything about it knew it was bacterial. It happened to be one of these mothers who because I don't wear a white coat, what I say means nothing, "My doctors told me..." To then get a text a week later, "Oh guess what, they cultured it. I have a staph infection." Duh! So that's very difficult for me.... (P20, private practice, 494)

Participants' reflections on their scope of practice provide a framework for exploring the emergent themes identified in relation to their perceived roles in the professional management of breastfeeding problems.

Educators

Participants often described themselves as educators. Most of the participants explained that they assess feedings, identify potential problems, educate parents, and support their decisions. They emphasized the importance of providing mothers and families with evidence-based information so that they can make informed choices that work best for their families. One IBCLC said that she feels it is her job

to really make sure the moms are well informed of their choices and their options and let them choose. I'm not the one who decides. The mom chooses how she wants to correct whatever intervention needs to be done, but she can't do that if she doesn't know the options. (P3, private practice, 141)

Another participant commented that her role is to

assess what it is that's going on that doesn't look like from the outside is a problem, but there is a problem and to try to figure out what that is, and to see what the nurses have told them regarding breastfeeding education and if there's something that needs to be either corrected or added for information for them, clarified for them, because many times this is all new information for them. (P11, hospital, 586)

One pediatrician also believed that her role includes educating families about the importance of breastfeeding. She said,

I talk a lot [laughter] but I love to share research so anytime I hear anything new or there's something new and exciting that we didn't know about anything but especially about breastfeeding, I will share that with parents. There is just so much research on what the benefits of breast milk are but also just for mother and the baby and how the baby's intestines and immune system can develop through the process of getting that breast milk to the baby. Once the parents get that, it's just hard to turn away from it. (P18, pediatrician, 204)

A few participants also talked about educating nurses or peer counselors as well. One IBCLC said, "So I really feel maybe that's the biggest role that I can play and education of staff because I'm not the only one there." She explained further that she and another IBCLC will often bring nurses into the room when possible to have them observe so that they can learn and improve their skill set "because we're not there all the time and we're stretched thin, so they can help as well." (P13, hospital, 142) Another participant discussed the need to teach peer counselors and other staff at WIC how to better support and encourage breastfeeding mothers. She commented,

Now, in our WIC, we're trying to teach our staff. Many other staff, they're an automatic pilot. When the mother says, "I want to do both" - a mother that is formula feeding will get 10 cans, so they usually, automatically, give the mother five cans when she's doing both. Well, we are trying to train our staff that if the baby is doing both, "Okay. So how many times was the baby breastfed? How many ounces of formula does the baby eat?" then give the mother that amount of cans. Maybe it's just one can instead of five because with five cans the mother is just going to do a little breastfeeding, and by the end of the month, breastfeeding is gone. (P23, WIC, 227)

Many participants in the hospital and WIC settings commented that they do not feel that they should be doing basic breastfeeding education, latch and positioning as these should be the role of the bedside nurse or peer counselors. A WIC-based IBCLC who also does lactation rounds in a local hospital said,

I'm not supposed to manage early breastfeeding problems. Early breastfeeding problems most of them are solved by the bedside nurse. It is skin to skin in the first hour. It is Latch 101, it is how do I make enough milk, how do you I know baby's getting enough, what happens on day ten when my breasts are soft and fluffy again? The IBCLC's role is

to take care of the cleft lip palate. The multiple babies, the babies that are in the NICU to continue to encourage the mother and the pumping process. The nurse is looking at her pumping log. The IBCLC is dealing with the 'I need a little more support' or 'my milk supply is going down what can I do?' (P6, WIC, 392)

Breastfeeding Experts

Not only to IBCLCs feel as though they should be educating mothers and other providers, but they believe that they are the experts in breastfeeding and should be acknowledged as such by the health care community. One participant said,

My role. Breastfeeding and the IBCLC credential needs to be promoted much more extensively. I believe because of our depth of knowledge we are truly the infant-feeding experts. I truly wish that there was much more promotion of breastfeeding and the IBCLC credential and with acknowledgment from all pediatricians. (P17, hospital/private practice, 409)

Several participants acknowledged that pediatricians are (and should be) the experts in infant and child health overall. However, they also felt that pediatricians don't have the time or the training to be breastfeeding experts to the extent of the IBCLC. One IBCLC explained,

I definitely don't see us as equals, oh my God, I mean they know a thousand times — I mean I do know - but when it comes to breastfeeding knowledge, oh yes, I know more than they do. The rest of them don't know anything in comparison. I tell them, "Look, listen. If you're going to ask me what vein that goes to, I got no flipping clue. But I'm going to tell you that when that baby's latching and the mother's nipples look like this after, that's what's causing it, but I can't fix it. I can just tell you what it is." (P19, private practice, 893)

They recognized that various providers all have an area of expertise and felt that the expertise of the lactation consultant needs to be valued. One participant explained how sometimes IBCLCs can help to identify potential problems that would require medical attention because they are familiar with how the normal infant behaves and appears. She said,

An IBCLC knows the basics, knows how to deal with real clinical problems, knows how to deal with the sick mom and baby, knows how to deal with anything that somebody else may miss or can't figure out, which takes a lot of experience, because very frequently, you can miss things; it's really easy. So a lactation consultant with experience, like as required by IBLCE, can recognize problems that other people may miss completely. So whenever there's a question, an IBCLC should be involved. If someone's not sure, they

need to call the IBCLC in, because sure is what you need to be when you are hearing patients, right? So I know IBCLCs that they recognize problems with the baby that the doctor never gets that has nothing to do with feeding, but recognize it because the baby is having a feeding issue and they know what normal looks like, and this isn't normal and they know it and can easily refer that baby on. I can't tell you how many babies I've had to refer to a hospital setting because something is seriously wrong and everybody else missed it, and I'm not a doctor. I don't know what's wrong; however, I know something is wrong and this isn't normal and we're sending you on; and always there's a problem. So that's when an IBCLC needs to be available and that comes with experience. (P22, private practice, 200:202)

Although IBCLCs believed that they are the breastfeeding experts, they also clearly understand the limits of their knowledge. For example,

We have one mission, and that mission is the mom and the baby. We all share it so we don't feel like I own it. If I can't do something or I see something I'm not sure of, in a heartbeat I'll say, "You know what? This is new to me. I know who's been doing this for a lot longer. Go see her and ask her what she thinks. Tell her to call me and I'll tell her what I think." We do that. We don't think anything of it. Other than that, practitioners, I have surgeons I like for tongue-ties, dentists I like who use laser, and pediatricians I like who won't give horrible advice. Pediatricians I don't like who do give horrible advice. Midwives I like. OBs I like. I mean pretty much across — I mean for all the healthcare professionals, there's somebody that I refer to if I see something or somebody that they refer to me. I have pediatricians who refer to me directly. (P19, private practice, 231)

In knowing the limits of their knowledge, IBCLCs generally feel comfortable referring to other providers when they are unable to solve a particular problem, when the expertise of a different provider is needed, and when the resolution to the problem is outside their scope of practice (e.g., surgery, prescribing).

Members of the Health Care Team

Participants were cognizant of the limitations of their scope of practice and were explicit about their reliance on other providers' expertise to best manage some breastfeeding problems.

Many of them described feeling frustrated that other providers either don't include them as part of the healthcare team or don't practice within a team-based model of care. The following comments highlight some of the participants' responses:

So I do find that not being able to do things yourselves – not that I would want to be clipping tongues or other things. I don't think I would. It's really difficult because you're relying on other people to actually be part of the team. They don't see you as part of the team or they don't see even – they don't have a team mentality or they don't see these kinds of problems so they don't recognize that that we're not just – that just because they don't understand why you want to know something is – means that they should say no. (P21, private practice, 239)

The IBCLC should be part of the discharge planning team for moms that go home from the NICU, part of a team to talk about post partum depression or maternal health issues. Part of the team with making new pharmacy policy and making, you know, part of the OR team that's evaluating something that's happening. Yes, part of a team, yes. (P6, WIC, 392)

I think that they would be a very important member of the team. I still think of care for these moms and babies as a team. I think that IBCLC is extremely important because they see things that maybe the regular bedside RN doesn't have. Even if you have an RN and you give them a day to shadow you and you teach them about latch position, they are not going to pick up the same thing as an IBCLC. The RN just as well as like physicians they could miss a tongue tie or they could miss seeing the mom with a hypoplastic breast. So I think the IBCLC is really important. The problem is that usually there are not enough of them in the hospital so what happens is they call the IBCLC when things have already got real bad. If everybody got to spend as much time as they needed, as many times with an IBCLC I think you would have less problems because they are going to pick up the issues. (P15, hospital, 271)

I'd also like to see IBCLCs respected as members of the healthcare team. Oftentimes I will send a report to a doctor or I'll call a doctor's office and I don't get the time of day from them. That's frustrating. (P30, private practice, 268)

Many of the participants seem to grapple with the idea that they need to be part of the health care team to best fulfill the role of the IBCLC, yet are constrained because other providers often don't work with or refer to the IBCLC for management of breastfeeding problems. One participant expressed her desire to be taken seriously as a professional and work in a collaborative manner with other providers:

I don't know how to fix a lot of things. I need my Obs. I need my peds. I need my team, but I do know that when I say, "You need to look into this because this is what I think it might be," that that should be taken seriously. As seriously as if the pediatrician calls me and says, "This baby is not transferring. I need you to do a really good assessment." Not that I would ever do anything less, but that my word should matter as much as theirs. Understanding that I have different roles and that I'm limited in what I can do, as they are. They are limited in what they can do. They don't have a scale that has a two-gram

variant in order to be able to do a pre and post. They don't have the time to do that. We are their allies. We're not their enemies. (P20, private practice, 526)

Some participants discussed licensure as a way to better incorporate the IBCLC into the healthcare team. When asked what her job would look like if she could reinvent the rules, one participant said,

The IBCLC would be licensed. She – or he, which would be strange - would be a primary care provider for the breastfeeding mom. She would be responsible for feeding disorders. She would have the ability to make necessary referrals in a sense where the doctors were willing to see them and trust that she knew what she was talking about instead of just, "You don't need to see that person." They would be a valued member of the medical team. (P2, private practice, 201)

However, not all participants shared this perspective. Another participant explained why she felt that licensure would not move IBCLCs into the realm of a health care team:

See, that's what the people from the licensure side would say, "If we were licensed, then the healthcare provider would have to recognize us as part of your team," and I don't think that's true. They don't recognize midwives as part of their team, and they're licensed. So, I don't think that that's true, but I can see where that's part of the argument that it's, in a way, we do have to be able to communicate with them which is why I think we probably should not enter into this work without some understanding of the medical world - their language, their terminology - because you can't communicate with them. They speak their own language. You have to know enough of it to have a conversation, at least as it relates to what you do, and you have to know when it's no longer a breastfeeding problem - it's a maternal health problem - and you need to be able to step back and pass it on. (P19, private practice, 783)

This participant also expressed concern that licensure could make it illegal to provide breastfeeding support in some states if IBCLCs are not licensed or if the state does not license them. She emphasized the importance of standardized education for IBCLCs and staying within one's knowledge base so that the role on the team is clearly delineated.

A few participants also described the role of the lactation consultant as a communication liaison, or bridge, between various providers and the mother. For example,

[Laughter] She's like the missing link between the pediatric and OB, [laughter] truly, because they can be very focused and I think we are very global. [Laughter] Even though breastfeeding is breastfeeding and milk transfer is huge and all this stuff, I just

think that – yes, and I guess the more years you're doing this, the more you realize how you're just not one of the other, but it's how the mom and baby are functioning, how the family is supporting them in this and, yes. Because the disciplines really sometimes do not talk to each other and what the pediatrician may be ordering may be something that's totally unrealistic for the mom given her conditions or different, you know what I mean? (P9, hospital, 459)

By perceiving themselves as members of the health care team, IBCLCs recognize the need for better collaboration between providers to best support breastfeeding mothers and manage any problems that arise.

Emotional Support

Many participants also described part of their role as providers of emotional support for mothers. They talked about supporting mothers through their individual challenges by giving them encouragement and reassurance. Comments from participants in this study suggest that they are attuned to the emotional aspects of breastfeeding and adjusting to caring for a newborn. Many participants also noted that mothers are sometimes also dealing with financial, family, or other issues simultaneously and felt that being sensitive to individual needs of each dyad is important. Several participants commented that some mothers lack confidence in their ability to breastfeed, and believed that they are in a position to provide the emotional support to reassure these mothers. Participants said,

You're dealing with delicate hormonal balances of women when you talk to them and you're dealing with women who were very hard on themselves. Women want to do everything right, want to do everything perfect and you're a mom and your expectations for yourself are so high. And I think part of the role of the IBCLC is to help the mom see things realistically while giving support at the same time. (P1, hospital, 178)

I feel that a lot of what I do for new mothers is emotional support and encouraging them that they have the ability, the mechanics, the anatomy to breastfeed their babies and so a lot of my work is educating them about some basic principles of breastfeeding and also a lot of emotional/moral support to try to encourage these mothers that they are able to do this. Most mothers really doubt themselves and doubt their body's ability to do this and they do so much better if they see a good number on the scale. If I encourage them or if I tell them their baby looks good or feeding is going well, they're very much encouraged.

They sometimes need my moral support as well as my educational experience to succeed. (P17, hospital/private practice, 260)

One participant described her role as "mothering the mother" and "nurturing the family unit:"

I think that lactation consultants, there's – my philosophy is mothering the mother and helping her understand, and supporting her through those long nights and that sort of thing. I feel like that's my role because that's such a big part of breastfeeding. There's a major emotional factor that goes along with the ability to breastfeed. I think if you don't address that and support that then you're going to lose that mom. . . I think that it needs to get back to the whole midwife concept where you help mom get through labor and deliver and then just nurturing the family unit. Not just the act of breastfeeding, but the gift breastfeeding. (P8, hospital, 413:421)

The comment, "Not just the act of breastfeeding, but the gift of breastfeeding," suggests that this participant views breastfeeding as more than just the physiological act of delivering milk to an infant. She wants to help mothers access this "gift" of breastfeeding.

Participants also described being committed to providing continual practical and emotional support because they perceive their role as working with each family to meet their goals. One IBCLC explained her approach:

So I often look at people, I say, "Look, I got to make sure that in this whole list of things I'm giving you to do that you do not melt down at 3:00 AM and wish you never heard my name." So we got to figure out how we're going to make that happen so that this all will be okay." So in those scenarios, it is mostly me that it is doing that, that visit with them but it has to be done with that kind of sense of you got - there is a definitely a chance for a woman to just throw everything away here because it is just so stressful, but also that reassurance piece that comes from "Look, I'm a firm believer that a little bit of breast milk is better than none but I'm also not here for me, I'm here for you. So I'm here to help you meet your goals. When you tell me you're done, it's fine. We can walk away from this. It's not about what I expect you to do; it's about what you want to do. I'll jump through every hoop you want me to as long as that's still your goal." So I mean it's been very good that way. I think we had more successes than failures as far as that goes. (P29, hospital, 519)

One participant talked about how she offers support to mothers who don't succeed at breastfeeding by sympathizing with them, validating their feelings, and acknowledging what they have lost. This level of emotional support was only mentioned by a few participants; the following excerpt was the most powerful:

but the piece of it that I don't like from the breastfeeding itself is when the mother wants to breastfeed so bad, when it's all she ever wanted and she in her whole life thought that when she grew up someday, she'd be a mom and breastfeed her baby and for whatever reason, she can't. I hate that. I think sometimes I cry as much as she does. I've been known to sit next to moms and cry with them [Laughter] because I'm just as sad as they are. I tell them, I know that you're going to tell most people this and they're going to tell you, "So what? Breastfeeding doesn't matter" but I'm going to tell you, "You lost something." That I think is the hardest of all of my work is when it's not going to be what they want it to be because it can't be. It really can't always be and I get really frustrated when people tell women just try harder because — I'll smack you on the side of your head because it's just not easy. Ten thousand years ago it wasn't either, sweetheart. We died. [Laughter] (P19, private practice, 943)

Holistic Approach

IBCLCs spoke often about including family members into education about breastfeeding and considering the family as part of the picture to better understand the dyad's specific needs, support system, and barriers. One IBCLC said,

I think that in our training, we don't just see the baby, we see the mother and the baby together and then we see the father of the baby if he's around. We see the grandparents and then also, the community. It's very much intertwined and you get that right from the very beginning. (P15, hospital, 339)

When asked what the role of the IBCLC is in managing breastfeeding problems, a hospital-based IBCLC commented,

Determining the whole picture. What does the mother want? How does she want to proceed? Things that the IBCLCs have to have remember is they can't it want it more than mom. [Laughter] What does mom want and help mom to succeed in what she wants to do. The IBCLC needs to do an assessment of the mother and baby and make sure that the baby is transferring milk and help to give the mom confidence in what she's doing. And to leave it open that the mom keeps comfortable saying, "I don't understand this." Or "I don't know how to do this. Or can you show me this again?" So it's to have a comfortable relationship with that mom, to sit actually in the room and talk to the mom and not stand over her, become like a partner with the mom. (P1, hospital, 174)

This comment demonstrates the need for IBCLCs to build rapport with mothers so that they will feel comfortable sharing potentially important information and their goals with the lactation consultant, which is critical for considering the whole picture. When probed further about what is included in her comment about seeing the whole picture, another participant responded,

It's not just what they're doing when they're at the breast. It's what did mom do to prepare herself, what is baby doing, baby's state level, what's going on elsewhere at home, mother's interaction with baby, baby's developmental state, and what's going on. So all those things kind of come into play and I think that's what makes a better therapist instead of "Oh, you're here to see me because you have feedings and so that's all I'm going to look at." Really, you can't do that because there's so much more that goes into that whole thing. (P7, hospital, 409)

Another participant expressed frustration with providers who do not consider the whole picture in advising mothers about breastfeeding.

Pediatricians make it very difficult sometimes. You'll have a baby that has not met birth weight in two weeks and they're telling mom to go home, take baby off breast, pump, and see how much she is getting. That is absolutely absurd. Unless you have a baby that is staying below 10% of their body weight and not gaining at all, it's absolutely absurd. A lot of breastfed babies gain 1/2 ounce a day very slowly. You're looking at genetics; you're looking at all kinds of things. You got to look at it holistically and not look at it from just cut and dry, black and white. It's not like that. (P2, private practice, 117)

Other participants also reported that physicians will recommend supplementation or blame the breastfeeding, whereas they feel that the lactation consultant is more likely to consider the whole picture when it comes to breastfeeding

Empower Mothers

Empowerment was commonly described by participants either directly or indirectly. Participants acknowledged that their role in supporting breastfeeding mothers requires time and cannot be done adequately without taking the time to "become a partner with the mother." One participant said that every mother should see a breastfeeding specialist in the first three to five days postpartum "For at least an hour, hour and a half because you can't – anything less than that, you're doing what I call Band-Aid Lactation and the mother doesn't need a Band-Aid. She needs to be empowered." (P3, private practice, 281) A few participants also discussed their role as helping mothers to find the confidence to breastfeed by teaching them without touching them so that they can succeed when they go home. Many IBCLCs described the importance of giving

mothers accurate information and connecting them to resources so that they can advocate for themselves and be in control of their own health care. For example, one participant commented,

I will not, cannot tell you that your doctor is wrong. I will empower you and give you resources and make you smarter than your doctor and I tell them all the time, "Your job, mommy, is to be smarter than your doctor, smarter than your nurse and smarter than your lactation consultant." I need to be an advocate and an educator is probably where I come from. . . They need to be in charge of their healthcare. . . I think moms are doing it. I think if you empower them and give them some understanding of what's going on, and they really want to know. They really want to know about the drug they're taking or the potential risk of this drug. They really want to know. I think they are intimidated by the medical system. I think we do things to women. (P6, WIC, 276:280)

This same IBCLC described the importance of breastfeeding for some new teen mothers in particular to feel empowered to make decisions for themselves and their babies. She commented that grandmothers are often eager to feed the baby and her advice for the mother was as follows:

Teen moms, I say to all the time, "You know what, the only thing you can do that your mother can't do is breastfeed your baby. That gives you some power." Okay and I say to grandmas all the time, "You can hold this baby. The more you hold it the less it's going to cry so hold the baby for the first six weeks and you can do whatever you want. Mommy gets the last word on what the baby eats and where the baby sleeps." You can spoil all you want, whatever that word may mean. Mommy gets the last word on food and sleep, and it helps them choose their boundaries and gives them the ability to negotiate who's doing what. Especially when I think about the teens, you know, it's really hard. It really is because mothers take over – Grandmas take over. (P6, WIC, 696)

A few IBCLCs who have positive working relationships with other providers in the community noted that the role of the IBCLC in empowering mothers benefits pediatricians as well because they share the value of prevention and wellness. One IBCLC talked about the pediatricians valuing her work as a lactation consultant because they know how important it is for mothers to feel empowered. She commented,

. . . even if the breastfeeding isn't perfect, even if she has to supplement, but you can make her feel good about that instead of feel like a failure — I don't ever want a mother to leave my office feeling as a failure, because her failure means that she puts that in the context of what kind of mother she's going to be in the future. I never want a mother to feel like she's not capable with being a good mom. So I'm always going to put things in its nicer package and context, and make that mom feel as good about herself as she can, while we're working on resolving her problem. Then she's going to go back and tell the

pediatrician what a nice lady that really helped her feel better, even if it isn't – if the outcome isn't 100% breastfeeding. That the mother's view of herself as a mom and her confidence as a mom has got to be good, I mean that's just the fundamental fiber of our society. Mommies are going to do a better job if they feel like they're doing a good job. . So that's another thing that what doctors I worked with know that I'm going to nurture their mothers . . . It takes a lot of time. (P3, private practice, 425:431)

Several participants also described empowerment as a part of the larger role that the IBCLC has in changing the culture overall to better support breastfeeding mothers. One participant explained,

The role of the IBCLC is to empower women to have the choice to breastfeed, and to meet their breastfeeding goals, and to work with the rest of the community in which the woman lives, and other health professionals in making that choice possible, . . . and to be a professional part in creating a society in which breastfeeding is the norm and is seen as the norm for human beings, and to be a part obviously in providing that support as well as being a network and helping that to happen. (P26, WIC, 164)

The role of the IBCLC described by participants requires extensive training, teaching skills, problem solving skills, collaboration, humility, flexibility, patience, and compassion. They play a variety of roles simultaneously as they work to provide evidence-based information and care to families, build relationships with other providers, and offer emotional support to mothers. One participant reflected on the diverse role of the IBCLC:

We're spending two hours with these moms trying to figure out what's going on. We're counselors. We're marriage counselors. We're therapists. We're lactation professionals. [Laughter] We're everything in those two hours. (P20, private practice, 426)

Role of Pediatricians, Obstetricians, and Nurses

The majority of participants believed that it is the responsibility of pediatricians and mother-baby nurses to have basic, and current, evidence-based knowledge about breastfeeding and some skills to help with basic problems such as latch, positioning, and sore nipples. They also felt that pediatricians and nurses should be providing support and encouragement to mothers. Several IBCLCs described the importance of nurses' role as communication liaisons that keep the lactation consultant informed about the mothers and problems they may be having.

Many participants also thought that the role of the obstetrician should include anticipatory guidance about breastfeeding to encourage mothers prenatally to breastfeed and identify potential problems in advance (e.g., hormonal imbalances, breast surgery). In addition, many participants commented on the need for all providers to know when their role should be to refer to a lactation consultant.

Basic Breastfeeding Knowledge and Skills

When asked what the pediatrician's level of knowledge should be, one WIC-based IBCLC commented, "Enough not to say, 'Your baby needs formula.' Enough not to say, 'You don't have enough milk.'"(P23, WIC, 535) Another participant stated, "I really feel that older pediatricians should receive new education and be held accountable for the new recommendations as far as exclusive breastfeeding." (P17, hospital/private practice, 439) These sentiments are reflective of the comments of many other participants as well. The pediatricians in this study also discussed the importance of staying current with breastfeeding research. One participant said,

It is challenging but I think if anyone can say that there's anything boring about pediatrics, they're not looking because it's out there. There's just so much information on a daily basis. You're right, it's hard to keep up with general pediatrics but that's the beauty of it that we're always stimulated and we'll always be able to learn something new and fresh but it's also a perspective on being well and that's my holistic approach. It's a wellness model, not waiting to get sick. It's preventing the illness in the first place so I have time to study because I have healthier patients. (P18, pediatrician, 208)

Support Mothers

Overall, participants felt that all providers and staff in every setting need to be more supportive of breastfeeding. A few participants were particularly critical of what they described as "lip service," by some providers who claim to support breastfeeding, but behave in a way that suggests otherwise. The following excerpt is a comprehensive example of these critiques from IBCLCs in this study:

Then the other one is just being a true advocate. So I think there are more physicians out there and more providers that are — they may be advocates and they're supporting breastfeeding but they don't become the experts in it, so they don't really help the families. That's what I think I found out a lot over the years is that they'll say, "Oh yes, breastfeeding is great. I tell moms all about breastfeeding," but they don't have an *IBCLC* in their office. They still hand out formula bags. I don't think that that's really being supportive. Supportive means you have to implement something in your practice that is going to help these moms. By just saying breastfeeding is good isn't probably going to help these moms with problems. I think it's more lip service because that's like the cool thing to do is say breastfeeding is good. You're saying that, "I'm a breastfeeding friendly pediatric office." What does that mean? Does it mean just, "Yes, we like breastfeeding" or is it, "We have people in our office every day that can help you and that we can bill insurance without you having to pay a whole lot of money" or "We have pumps" or "We have nipple shields" or "We have supplies for you. You don't have to walk across town" or "just giving somebody's card" to me is not truly being supportive of breastfeeding. I think you need to have some kind of an ethical responsibility of showing these moms how they can be successful. That means either that doctor is going to get out one of those footstools and a pillow and go through latching position. If she's engorged, then get a pump and you do the lactation management or have another person in that office, not, "Come back in three days." That's what it really means. I'm tired of these other offices saying that they're breastfeeding friendly when — handing out somebody's business card is not really being supportive. It means that you're just "passing the buck." That's all it is. It means you're either too lazy, too old, or you're just faking it. You don't really care. There's enough education now for physicians to get basic lactation management. I mean the Academy of Breastfeeding Medicine and then the La Leche League conferences for the professionals. There are enough lactation education opportunities for a lot of providers to get what they need . . . I'm tired of lip service from the providers and that's what most of them do.

In contrast to this example, one of the pediatricians in this study described her breastfeeding supportive practices:

I think every community probably has the support. Some may have more than others. It's just a matter of networking and finding those contacts quickly so that you don't lose a mom to formula because those first couple of days are so important and then the next couple of weeks are super important so that they stick with it because they're tired, they're sleep-deprived and they have outside influences but it's really just enveloping those parents in this web of caring and follow-up really that helps them to be more encouraged about what they're doing for their babies and you pat them on the back most of them. It's funny because I always tell people, "You've got a great grade today" and I didn't realize it's just something that just I was saying naturally and like 10 years later, I have parents say, "You don't realize that by you giving me that good report card that time, that kept me going even though I was ready to quit and I saw you and it kept me going." So giving them that encouragement that they're doing a great job that you recognize that this is not easy, that it may look easy for some people but it takes work but that it does get easier over time, I think that's probably the most important thing to

recognize. That it's tiring to be a parent but we didn't sign up for easy. We signed up for parenting. (P18, pediatrician, 272)

The pediatricians in this study all similarly identified the need for providers in their discipline to be more supportive of breastfeeding. They pointed out that formula advertising in pediatric offices is problematic when the providers claim to be supportive of breastfeeding.

IBCLCs also described the ideal role of the OB as able to provide basic breastfeeding support. They acknowledged that the OB spends limited time with the mother and her newborn postpartum, but suggested that they encourage more skin-to-skin, understand that caesarean sections can impact breastfeeding, and begin to normalize breastfeeding by talking to mothers about breastfeeding during prenatal visits. One IBCLC commented that OBs need to

Learn about breastfeeding, so that breastfeeding would just be a normal part of birthing. Also to have the OB, truly start to promote breastfeeding, right from the start. Maybe they're not going to go at it like an IBCLC, but at least to say, it's very important to have your baby be breastfed, and it's recommended to breastfeed for a year or two, or longer. (P5, WIC, 175)

Another participant narrowed in on the need for OBs to see breastfeeding as normal when she said,

I want them to know that breastfeeding is the normal way to feed babies. To see it like that, to see breastfeeding is normal but I also want them to see that vaginal birth is normal and mother-baby togetherness is normal and transitioning to skin to skin is normal. There are a lot of things I'd like them to see as normal. (P19, private practice, 851)

Participants felt strongly that nurses need to be supportive of mothers. They gave examples of nurses making careless comments that undermine the mothers' confidence in her ability to succeed at breastfeeding. For example, one hospital-based IBCLC commented,

Even if their own breastfeeding experience wasn't good, to be supportive. I remember I was a brand-new IBCLC and I was on the post-partum floor and this older nurse had come in and I heard her telling this young mom how horrible her breastfeeding experience was. I just thought "How atrocious." [Laughter] I was like, "That was the thing that you don't tell a new mom," but she went and said it. The bedside RN, it's very important because now they have to be supportive but they need to have the basics of

breastfeeding. They need to be able to help position the baby. They need to teach them on how to do the breast support. I think they should really know a little bit more like what the breasts are supposed to be looking like. (P15, hospital, 359)

Some IBCLCs acknowledged that nurses are time constrained, but also identified them as critically important in providing support because they have more interaction with mothers than other providers.

Anticipatory Guidance

Several participants identified prenatal breastfeeding education as important and some reported that mothers who have advance knowledge about breastfeeding tend to have better success at breastfeeding. A few participants commented that they would like to see OBs take a more active role in supporting breastfeeding. One participant explained that women's "intention to breastfeed has been shown to be so important in her duration of breastfeeding and her starting out breastfeeding, and so we have healthcare providers that's really being important in helping with that intention." (P26, WIC, 224) Another participant similarly felt that OBs need to promote breastfeeding more during prenatal appointments. She said,

Their role is encouragement to the mother to breastfeed. I think the OBs need to take a more active role in a pregnancy, with discussing breastfeeding with moms. If you ask moms, "Did the OB ask you anything about breastfeeding?" "Oh, one of my first visits, if I was gonna breastfeed. They never mentioned it again." I think OBs really need to stress the importance of why – of women breastfeeding. And they don't do a lot of discussion on breastfeeding, and care of breasts and changes in breasts or anything. I think they need a more active role. (P1, hospital, 284)

Other participants also mentioned that OBs could offer more anticipatory guidance in the form of identifying any potential breastfeeding problems that could arise due to the mother's health.

When asked about recommendations for improving breastfeeding support, one participant said,

I think another strong recommendation that I would ask for, it would be in the prenatal period, is to do a breast assessment. Maybe in that sixth or seventh month and if mom has inverted or flat nipples, there are things that we can do to help her so that breastfeeding is not such a challenge in the delivery room. (P8, hospital, 637)

A few IBCLCs also suggested that OBs consider the potential for certain health conditions to impact breastfeeding and provide the appropriate referrals to mothers in advance so that they will be better prepared.

Communication Liaison

In addition to providing basic breastfeeding education and support to mothers, participants noted that nurses can play an important role as a communication liaison between IBCLCs and families and physicians. Participants seem to value the role of the nurses and understand their constraints. The following comments from participants reflect the perspectives of many of the participants:

[Nurses] have more of a day to day role. They also know that mother a little bit better because they have more time to spend with her. I come in, introduce myself, "Hi. How are you?" and maybe three mothers a day I spend more time mostly because their babies are having problems. So they can learn some - the nurses themselves maybe can learn some things socially or in her life that looks like it may be a barrier to breastfeeding whether it's a family member that's in there knocking it or a spouse that doesn't seem supportive. So I hear from nurses. A lot of times they'll tell me things like that. "Watch out for that grandma. All she does is talk about negative stuff," or whatever. So then at least I can throw a little something in. "Aren't you just proud of her for how good she's doing?" Just whatever, but I wouldn't have known that unless the nurse had told me. So I think it's like more ongoing support, social support. (P13, hospital, 178)

So the bedside nurse, if they're good at what they do, is a huge asset to the IBCLC because they really are the eyes and ears for the lactation consultant. When you have nurses who liked what they do and they're not overburdened with the patient assignments and then, they're the ones that would call the IBCLC because usually, the nurses would then tell the doctors and the doctors could put in a consult — or the moms could call can say, "Hey, I'm sore. Come see in the room." The lactation consultant is trying to like triage who comes first but if you have a nurse, while the lactation consultant is busy with somebody else, she could be helping them out or she could be helping set the mothers up on pumps. (P15, hospital, 359)

The nurses themselves are the first ones at the bedside, so their job is to observe, facilitate, and then if there are early breastfeeding problems with the management, to triage those as they know how, number one, because they're the first line of defense and to then let us know to communicate with us whether that's by leaving us a message on our answering line so that when we first come in in the morning, we'll know who this person was who delivered last night or passing it on to the nurses that are going to have them and they tell us in the morning, "You need to see room two first. This is what they

said was going on with her," so nurses being the first line of defense and then notifying us and then us communicating with whoever is the provider for the baby whether that's a neonatology group or the pediatricians as well so that we try to coordinate ...(P11, hospital, 578)

In describing the nurses as "the first line of defense" and "the eyes and ears for the lactation consultant," these participants reinforce the idea that every provider has a role to play in a teambased approach to breastfeeding management.

Know when to refer

Most participants felt that the role of all providers in breastfeeding support and management should be to know when to refer. Many participants responded to the question about the role of providers with comments such as these:

Well, I think there are two things. One, they need to be educated and to know how to manage lactation. That's what they need to do. If they can't create a plan of how to correct it, they need to readily refer. (P15, hospital, 323)

so one being able to identify [issues] a little bit better and then two in knowing who you can refer that out to. (P7, hospital, 301)

I don't really expect the pediatricians to be hands-on. I think they're -I kind of look at them as they do the overview and if there are any issues refer to the specialists, which would be us. (P16, hospital, 669)

I would desire for them to refer all breastfeeding couplets: mothers and babies, to me for rounding in the hospital if it was fulltime, all of them. To encourage prenatal education classes and, let's see what else, the other thing is any weight loss issues within the first two weeks of life be referred to the lactation consultant. (P17, hospital/private practice, 415)

A few participants compared the lactation consultant to other specialists to justify their perspective on referring to IBCLCs for breastfeeding support. For example,

I think that their number one role should be to refer out when there's a problem, unless they have extra training. . . I mean a family practice doctor wouldn't be doing a cardiac ultrasound on a patient that had a heart problem because that's not their area of expertise. They would refer that out and I would like to see them have respect for the IBCLC profession and I don't know how that's going to happen. (P30, private practice, 260)

Honestly, to refer to an IBCLC. You don't see a pulmonologist doing respiratory care himself. You don't see an orthopedic surgeon doing physical therapy himself. He refers you to physical therapy. He does his job and then he refers you to the next profession - to the next point of your care. I would think if I was going to pick the role of healthcare providers, it would be to refer to the person - that's their specialty, it's not yours. (P19, private practice, 719)

Participants also commented that referring to a lactation consultant generally should precede the recommendation of formula by providers.

if they have a mother that is just having a little problem or is on the fence to say, go to the lactation consultant in the hospital where you delivered, if you're on WIC go to the lactation consultant on WIC, if you can go to a private practice - just get breastfeeding fixed. Don't fix it with quitting and put formula in it. Formula doesn't fix breastfeeding. Breastfeeding fixes breastfeeding. (P23, WIC, 823)

In my ideal world, a mom would come in saying, "My baby's spitting up," and the doctor would say, "Well, are you breastfeeding?" "Yes." "Okay. Well, these are the things that I know. However, call your lactation consultant." Pain, it hurts. This is normal. Maybe the answer is yes at day five but maybe not so much at three weeks. Closer monitoring. I feel like if the doctor feels like it's a situation where they're going to say, "Here is some sample formula," instead it should be, "Here is a business card. Call this lactation consultant." Or, "you need to go rent a breast pump" would be followed with "You need to see a lactation consultant." (P20, private practice, 438:442)

A few participants also discussed the need for nurses to refer to lactation consultants; however, they felt that a disjointed hierarchical structure within the hospital setting may obscure the appropriate referral process.

Summary of Research Question 3

Participants saw themselves as educators, breastfeeding experts, and members of the maternal-infant health care team. They also felt as though they are more holistic in their approach to working with mothers and babies on breastfeeding problems than other providers. Emotional support and empowerment of mothers were also described as important aspects of the IBCLC's role. Although participants similarly believe that the role of other providers should include educating and supporting breastfeeding mothers, they also agreed that providers need to refer to IBCLCs as the experts in breastfeeding management.

Despite being somewhat critical of physicians who are not current with evidence-based breastfeeding information and practices, the IBCLCs in this study were quite conscious of the limitations facing physicians in terms of time to spend on breastfeeding guidance during appointments and other competing demands. Interestingly, the pediatricians in this study appear to have a different model of care than the providers generally described by other IBCLCs. Their model of care includes intentionally setting aside longer appointment times or seeing mothers after hours to allow enough time to work through breastfeeding issues. One pediatrician described how the role of the pediatrician should be to truly value breastfeeding as the healthiest nutritional option for babies, but described this as a particular practice philosophy that values the wellness of patients as compared to seeing more patients. She said that,

the role of the pediatrician should be to support nutrition first and foremost because good nutrition is the foundation of good health and should be the most knowledgeable about breast milk and why is - not only is it so beneficial but it's free. It's the most costeffective way to maintain health and to support a healthy immune system that exists known to man. You don't even need to think twice about it. It just has challenges because people need time to dedicate and they have to get into that mindset, to stick to it and they have to have that support but physician's role – our role is really to educate and to teach our parents how to take care of themselves or partner with parents on how to take care of their children until they feel comfortable enough that they can be more independent. That's my personal philosophy. That's not the philosophy of other people and I also feel that if you plan on going into medicine to make a lot of money then you're not in the right field and you don't belong there. So it really is a mission-driven choice to do pediatrics. You have to be a total advocate for children and I feel the way it can happen, you have to disconnect from any monetary thing. Of course, you have to pay the bills. I have to pay bills too. If your eye is just on how many patients you need to see and the focus I feel should be how many patients can I see well in a day and keep well in a day versus how many sick patients can I see in one day and be exhausted but at the end of the day, feel either satisfied or empty. (P18, pediatrician, 220)

These pediatricians also described using their broad scope of practice to treat both the mother and the infant for some problems such as thrush and provided examples of communicating with OBs on the mother's behalf. The following excerpt, though lengthy, offers the perspective of another pediatrician about the importance of providing objective breastfeeding information to

families and working to understand the mothers' breastfeeding goals so that they don't undermine these goals with over-supplementation:

Respondent: My role – so I see myself as more not always doing the hands-on work. Usually I do the initial consult but giving them a lot of information about how to overcome their problems in systematic ways - so I see myself of - how do I say it, having a larger scope in dealing with them is that I could actually treat them, give treatments, and treat the mom too. So I see that. I think that I can have a little bit easier access to the obstetrician if the mom has a problem like an infection or something like that. So, I would see that my scope is a little bit larger and I think being a figure that is a little bit more authoritative. . .

Interviewer: What do you think the role of pediatricians in general should be with regard to supporting, with regard to their role in working with breastfeeding families?

Respondent: I think they need to first have the knowledge of knowing the difference of treating many common newborn issues like jaundice, weight loss, weight gain, understand the difference between a breastfed baby and a formula-fed baby because counting the amount of wet diapers in a breastfed baby and accepting the amount of weight loss in a breastfed baby versus a formula-fed baby is completely different and managing jaundice also is completely different. So, I think that if the pediatrician is knowledgeable, they can be a lot more supportive and less conservative in telling - in knowing that threshold where the baby needs to be supplemented. . . I think a pediatrician needs to – they don't have to watch a mom per se but understand where to refer her appropriately and understanding the barriers of the mom. . .

Interviewer: So, the role of the pediatrician then is to...

Respondent: To provide the information, but it's objective because I think that's what moms want. They want objective good information because they really - I think so as a pediatrician I feel that I can be authoritative because I can tell them the facts, the evident-based facts and I can tell them, "This is how much weight your baby can lose and your baby will be okay." I think that coming from a pediatrician is a little bit more reassuring than coming from a lactation consultant where the mom only sees that person in the hospital because the moms know they can call me at night - in the middle of the night wherever, you know what I mean, and I'll take care of their baby. . . . So, I think that pediatricians need to be more educated. They need to have that in training and then they really have to get educated because that's what we do. That's the bread and butter of pediatrics. You see the newborn and you're going to make sure they get proper nutrition; you know what I mean, because that's their only source of nutrition. If you really believe that breastfeeding is the best nutrition and the American Academy of Pediatrics definitely believes that and gives their recommendation but to implement that I think pediatricians need to do more. (P28, pediatrician, 375:415)

The PI asked participants to dream up their ideal role in lactation consulting. Many of the IBCLCs described a pediatric model of care that was reflected by the descriptions of the roles of the pediatrician participants in this study.

Research Question 4: How do these roles impact the ability of the IBCLC to provide support and management of early breastfeeding problems?

After describing the roles of various providers in breastfeeding support, participants were asked about how these roles impact their ability to fulfill their role as lactation consultants. Participants often reflected on what the role of these providers should be and how that is different from the actual enactment of these roles. Sometimes the enactment of these roles was described as favorable and other times as detrimental. They also identified constraints constructed by their own roles as lactation consultants who often hold other credentials. IBCLCs in all settings described a range of relationships with other providers and varying levels of connectedness within their communities which impact their ability to manage breastfeeding problems. The predominant themes that emerged from this analysis of role impact included (1) Hierarchies of respect, (2) "We're board certified, but that doesn't mean anything," (3) Providers are influential, (4) Damage control, and (5) Role strain and role conflict. These are described in more detail in this section.

Hierarchies of respect

Respect between IBCLC and other providers was described as a major factor in how they are able to manage breastfeeding problems. When IBCLCs felt respected, many of the barriers to managing problems for the lactation consultant were eliminated and mothers seemed to have easier access to referral and treatment. On the other hand, when IBCLCs did not feel respected, they reported greater challenges in successfully managing some breastfeeding problems. They

also talked about where they fit into the medical hierarchy and respect issues related to these hierarchies.

Several hospital-based IBCLCs and two private practice IBCLCs described feeling like they have the respect of pediatricians and other providers in their settings or communities. Other participants generally reported a mix of providers who were respectful and others who were not. One participant, who had been an IBCLC for over 20 years, believed that the relationships she's formed with other providers over the years is beneficial to mothers because physicians respect and trust her professional assessment of a breastfeeding problem. She explained,

I tell the moms, "You can tell them that you were here, that you were here in this office." And that really helps because when you have that kind of respect in - in the community and the physicians, when you've worked with them a very long time that general respect goes back and forth. And that can really help a mom in explaining the symptoms that she has. But a nurse cannot diagnose. You can only say what it looks like, what it sounds like. (P1, hospital, 214)

Another participant who works in a teaching hospital also felt that she has developed mutual respect with the physicians such that they rely on the lactation team to assess the breastfeeding and help with any problems that arise. When asked if the physicians are receptive to their assessments, she responded,

Yes. I think they count on it. They're kind of mad if [laughter] we don't go when they ask us to. I think that's part of the collaboration. It may be different at different hospitals, but it wasn't like that all the time. It's grown. It's grown. [Laughter] (P9, hospital, 559)

One participant who is also a nurse practitioner felt as though her nursing credential earns her more respect from physicians and she compared her experience with that of other IBCLCs who are not nurse practitioners and may feel less inclined to tell a provider if they disagree. She said,

I think that personally, I've been a nurse practitioner for a while so I get a little bit — I mean I get more of respect. It seems that physicians will take my word but I don't think it's only because I'm a lactation consultant; it's because I'm a nurse practitioner. When I was an RN IBCLC, I would go to the doctor who seemed to be more quote "breastfeeding friendly" to ask a question or suggest something. I have worked in the past with lactation consultants at my hospital who have had run-ins with physicians. It just makes them feel

so devalued and sad. It's almost like, "Why do I even bother?" . . . So it's almost like they create an alternative plan for the family specifically because they've had run-ins with the provider that they didn't get I guess the outcome that they want. That's a lot of energies that a lactation consultant has to, not only that they have to worry — I mean I've heard of lactation consultants getting written up by physicians because the lactation consultant makes a comment about, they think it's tongue-tie and they're like, "We are not supposed to diagnose" and all this and they got written up. So then that makes the lactation consultant afraid to say anything to that doctor but then they're not really doing their job as much as what they should be with those moms and babies. (P15, hospital, 287)

A participant from WIC expressed a desire to have more respect from physicians and wondered if having a nursing degree would make a difference. She commented,

I'm a professional, I'm not a doctor and I'm not going to claim to be a doctor but I do focus just on breastfeeding. To be respected on the doctors' side as a professional. I guess that also plays into and I don't know if it's any different with the one that's got an RN behind their name. (P24, WIC, 343)

Some IBCLCs felt that they are not respected by other nurses in the hospital setting and one participant believed this was related to their resistance to any change that "impacts their assignment." (P17, hospital/private practice, 423)

Participants also described a sort of medical hierarchy and expressed a lack of clarity about how the lactation consultant fits into the hierarchy. One participant who works in a WIC setting commented that the conflicting information that mothers receive from various providers puts her in a difficult place. She said, "they're getting conflicting information from their OBs, to delivering, to their peds and then they come to WIC and now what? Where do I stand in that medical hierarchy?" (P6, WIC, 288) Because of this conflict, she focuses on providing the parents with enough information that they can make the best decisions for their family.

Private practice IBCLCs are not necessarily impacted by the hierarchy in the same way as other IBCLCs because they work for the family, not an institution. One participant explained,

If you work in the hospital, you answer to those doctors. You take orders from them. If they tell you that you don't say something, you don't say something. If they tell you that that's not your scope, that's not your scope. You work for the hospital, you work by their

policies, their protocols, and the doctors in charge. I skip all of that. I only work for one person. That's the mother and her baby. That's it. It changes the dynamic of the relationship when you don't feel you answer to somebody. I don't feel the same barriers. (P19, private practice, 893)

When asked "Does it feel different compared to when you worked in WIC?" she responded,

Oh God, yes. Yes. Different because my clients have access to what they need and I don't always feel like I know what she needs and I can't give it to her. . . Or I know what this momma and this baby need but they're not going to be able to get that in the system. That's hard. Whereas in my private practice world, I mean, most of my clients have access to whatever it is they need which completely changes what you can do and can't do but I still have the mom where my fee is a burden.

Another participant described hierarchies as a problem when there isn't a clear direction of when to refer or who to refer to, which ultimately impacts the mother's ability to access services in a timely manner. The following excerpt illustrates her perspective about the problem with the lack of a referral system that functions appropriately within the hierarchy:

Respondent: when an IBCLC is working within any realm that there is a hierarchy that's created, so that referral systems work appropriately, because so often the referral systems are broken and they really shouldn't be; and that includes in WIC, that includes in hospitals, that includes in everywhere. We need a good referral system among the health professionals' hierarchy that helps to provide services, especially lactation services.

Interviewer: Do you have an example of how it doesn't work and how it should work?

Respondent: Again you go back to policies and procedures, and very frequently you have a - in the WIC setting, you have a nutritionist who sees the patient, who doesn't have the hierarchy or the knowledge of how to refer and when to refer, so she tries to deal with the problem, delaying the mother getting help or services that she needs and possibly mother fails due to it. Then you have in a hospital setting the same setup. You've got a nurse who wants to help the mother who doesn't know when she needs to refer, or maybe doesn't have anyone to refer to because the hospital has no IBCLCs. I have hospitals with no IBCLCs and I – funny, they're very low performing hospitals. Ihave them on a chart and you can see – it's amazing what happens when you don't have an IBCLC in a hospital. So in that situation, she may or may not have someone to refer, she may or may not know how to refer. There is no hierarchy. The nurse may be trained, she may be a CLC, but she needs to be able to refer upward as-needed, and an IBCLC doesn't need to be in a hospital setting to be working on basic lactation. The nurse needs to be doing that and referring patients upward. That would help with the patient to lactation ratio, because the ratios are pathetic. In most hospitals, the ratio is beyond the ability of any IBCLC, and the ratio in WIC is the same thing, beyond the ability of any

IBCLC. It's impossible to serve the number of patients who would need lactation help. (P22, private practice, 192)

Several participants noted that the physicians are generally in charge; they have "the last word" and write orders that nurses and lactation consultants must follow. They described feeling conflicted when attempting to provide the best care for families, while restricted under the authority of a physician who may not be as supportive. For example,

Yes, and there are some providers that are really good and there are some that are not. I mean probably any hospital that they go into, everybody always knows, "Oh, Dr. so and so, you don't want to go ask him a question because they're not open." It doesn't have to just be breastfeeding. It could be a variety of things but the problem is that if you're taking care of that mother and baby dyad and that's your provider, how are you going to be able to be an advocate for your family when that provider is not open for communication? The physicians kind of run the show. They do the referrals. They do the clippings. They decide if the baby can — let's say if the baby goes to like one of the special nurseries, they are the ones that decide if they can be breastfed or not and when that baby has to have a bottle or not. The physicians decide all of that. (P15, hospital, 295)

One participant believed that the hierarchy could be beneficial if the people at the top were supportive of breastfeeding. She explained that if the OBs and pediatricians changed their policies and procedures in a way that encourages breastfeeding, that the nurses would have to also change because they must follow the doctors' orders.

"We're board certified, but that doesn't mean anything"

One of the primary themes that emerged in this study was related to the medical community's perception of the IBCLC credential. Many participants expressed frustration with a general lack of understanding about the IBCLC credential among other providers and among families, and felt that this lack of understanding contributed to a lack of respect for or trust in their professional evaluations. When comparing her ideal role to her actual role, one IBCLC reflected,

Well, I'm second guessed. I am not really seen in the medical community. I think they still view us as laypeople like we're some laypeople [Laughter] or something. There is a lot of

support out there but we are not viewed as the – in most cases, we're not viewed as we have that great education and we have focused – I mean, we're board certified, but that doesn't mean anything. That's where we're at today and that's how it's different. We can't bill insurances. I mean, not many people are really opening up a private practice to send to us for referrals. It is different in a lot of ways. You don't really have the flexibility to just pick up the phone and say, "Hey Doc so and so, I need to have a consult with you." You just don't have that. It's not available to you. (P2, private practice, 229)

When probed further about her comment, "we're board certified, but that doesn't mean anything," this IBCLC responded,

It doesn't really mean anything I think in the medical community and sometimes they don't even know what it means. I spoke with a neurologist the other day and he was like, "What does that mean?" Like, Oh, my Lord! I think that just saying that you're board certified in something doesn't really hold a lot of value really because I think people just are unaware of really what we are qualified to do. (P2, private practice, 233)

Participants commented that because other providers don't understand the IBCLC credential or respect the expertise of the IBCLC, their professional assessment is not taken seriously. For example, a few participants described sending reports to physicians in the spirit of collaboration and with the hope of increasing the credibility of their assessment. One participant said that she finds

It's frustrating, and I hate that I can't trust that my assessment is going to be trusted. I don't think it's a personal thing. I don't feel like it's, "She doesn't know what she's talking about." I think it's just an overall distrust based on, like I said, mostly training, mostly experience. (P21, private practice, 343)

One participant also noted that when she worked in one hospital as an IBCLC without an RN credential, she felt that her "opinion wasn't respected." (P8, hospital, 433) In contrast, a few IBCLCs who also hold an RN credential felt that this increased their credibility among other providers and that they received more respect from other nurses or physicians. One participant commented,

I think I get more respect from the nurses, I really do. I can push the buttons on the IV if it's beeping and annoying me when I'm in that room, or I can see that something's going on in there that I'm going to call the nurse to come in because I see your bag is empty. Not than a non-RN person couldn't do that but I guess I just feel I have more clout to do

some of those things and push the buttons. I help her to the bathroom, I make her comfortable, and then again anybody could do that. I can do a blood sugar. I'm seeing that baby be a little funky or he hasn't eaten in seven hours, I can say, "Well, that's okay. We'll just wait," or I say, "Okay, let's see how he's doing." I will say we can wait, and then I'll do a blood sugar on him myself. (P13, hospital, 368)

Many participants acknowledged that there are some providers in their work setting or in their community who are more willing to work with IBCLCs, even if they don't fully understand the credential, and others who won't return calls or respond to any efforts at collaborating.

The participants also believed that many women and their families also don't understand the credential or understand that the IBCLC generally knows more about breastfeeding (and more current, up-to-date evidence) than the pediatrician. One participant explained that it is difficult to feel like she has to inform a client that she may receive different advice from her pediatrician because it puts her expertise into question. She said,

For me more than anything having to tell a client, "Look, your pediatrician may not agree with me." There are some clients where you set them up for that and they get it, but there are others who are very skeptical of that. "Well, my pediatrician doesn't agree with you then you probably don't know what you're talking about because you're not an MD. (P20, private practice, 398)

Another participant works in a hospital where most of the nurses also have some minimal training in breastfeeding management and have "Lactation Expert" on their badges. She described this as problematic because it is deceitful to the families and minimizes the expertise of the IBCLC credential. She also expressed frustration at having to correct some of the misinformation mothers receive from these nurses because mothers don't know that she has more comprehensive training as an IBCLC and she also doesn't want to criticize her peers. Similarly, another IBCLC commented,

Respondent: Some people are open to hearing what I have to say. They understand the term "lactation consultant." Other people feel I'm a nurse. Well, I've had some people ask me, "Nurse, can you help me change my bed?" I'm not insulted by that but other people will ask me, "Are you a nurse?" They can't figure out who I am. One problem it sounds kind of superficial but one problem is I have to wear scrubs just like the nurses

do. I have the same badge that has "RN" on it just like the nurses and so they think that I'm – if they see me, they think I'm a nurse and I'm introducing myself as a "lactation consultant." In my opinion, some I think they think of me as like I'm just kind of here help you with breastfeeding but they don't understand the credential or even the title. Very few people outside of the medical field in my opinion even know what an IBCLC is.

Interviewer: So do you think that that impacts your ability to...?

Respondent: To convey information or to share our education, yes, because I don't have a white coat on and I'm viewed as sometimes as just another nurse. (P17, hospital/private practice, 461:463)

When the IBCLC credential is questioned or not valued among other providers and in particular settings, lactation consultants face more challenges in their ability to successfully manage breastfeeding problems. One participant described this barrier as an ongoing battle:

But the battle, the feeling like when you walk out the door what I say is going to be dissected and questioned and negated by the people that you now talk to. You're now going to go to your pediatrician's office and say, "Oh I saw a lactation consultant and this is what she told me." Ninety percent of the time you're going to get either categorized as some crazy hippie or something. It's either - and this might be my own incorrect perception, but I feel like it's going to either weigh negatively on the mom or negatively on me or both. (P20, private practice, 614)

In addition to feeling like people don't understand or respect their credential, participants also struggle with how to work through the conflicting information that mothers receive. They describe the challenge of providing accurate information to parents without undermining the information and advice they receive from other providers. The following comments reflect their perception of the clash between their role and that of the physician at times:

So in our role as nurses and lactation consultants, we have to politically and respectfully give information to parents without saying that their provider doesn't know what they're talking about. That's a very fine line to help the mother to be successful with breastfeeding and being respectful to her choice of doctor by giving her the informed education she needs to figure this out herself. That's – I think an important role that any educator has. (P1, hospital, 88)

let's just say there was a mixed message that was provided by a provider, I cannot go against what the physician is telling them. If they say your baby has lost six ounces, the baby is two weeks old; I don't want this baby to lose any more weight. You have to give the baby formula. I can't say stop giving the baby formula. What I can say to them is

that if your goal was to exclusively breastfeed all the time, did you express that to the doctor? . . . I cannot go against what they are saying. While it's her decision is that if it comes back that it's my opinion as an IBCLC versus the medical doctor, I will always lose even though not necessarily by certification versus degree or anything else, I have more clinical experience. I have more training than that pediatrician does. It doesn't matter. It's that they gave them a plan to follow and then the plan that I gave them didn't coincide with that. (P4, WIC, 199:203)

When asked, "How did the different roles that you've just talked about with all these various providers, the nurses, the peds, the OBs, how do their different roles impact your ability to provide support and management for early problems?" a WIC-based IBCLC responded,

If we're not all saying the same thing, it puts the client who has — may have very little information, in the unenviable position of rejecting advice that she got from someone in authority. So if she went to the doctor's office and got some kind of medication, the doctor says, "You can't use this if you're nursing." We turn around and tell her, "We really think you need to get second opinion on that." People are often — a physician or someone like that or a nurse practitioner or a nurse. If a physician — most people don't feel comfortable going against. So when they're giving that advice, it's very difficult for the client to make an informed decision such that they're scared or worried about doing something wrong, which most mothers are. So instead of easing that mother's feeling of inadequacy and providing that support for her being a good mother, she's set up to feeling a conflict that if she does what makes sense and what we're telling her, we're helping her with, she may be doing harm or just not doing what's right. . . . New mothers, especially they're very vulnerable. I just don't think there's enough acknowledgment about their vulnerability. They're very sensitive. (P25, WIC, 247)

Several participants remarked that they send articles and resources to providers or give them to mothers to bring to their providers when they are presented with a situation where the physician may not be making appropriate recommendations to the mother.

Providers are influential

Another common theme was the influence that providers have on mothers' decisions related to infant feeding. Participants gave examples of the ways in which pediatricians, OBs and nurses influence mothers. Several of them made comments about their belief that healthcare professionals "need to use the influence that they have to encourage women to breastfeed because it makes a difference when a doctor says something." (P26, WIC, 208) A few IBCLCs

felt that the pediatrician could make or break a woman's success with breastfeeding. For example, one participant commented,

Depending upon your choice of pediatrician who's usually your success or failure with breastfeeding, [Laughter] unfortunately. You know, some of them who have zero understanding of breastfeeding... and they have a mom who's unsure of herself as a first-time mom. She's highly influenced by what the doctor says. You know, if the doctor says that formula is as good as breast milk, unless this mom has a fantastic support system that has some knowledge themselves, that's - mom will not usually question that advice. So they play a pivotal role. I think their role is more influential on the success or failure of breastfeeding. (P1, hospital, 272)

One of the pediatricians said that the recommendations of the OB "are very important to the mom. They have a lot of power in influencing the mom's decision." (P28, pediatrician, 469)

Several participants discussed the lack of awareness of nurses about the influence that they have on mothers. The personal experiences of the nurses sometimes drive the support they give to mothers. One IBCLC said, "personal opinions get in there very easily or some with no experience. They have no clue. So nurses are very powerful. Things that nurses say to patients are very powerful and the way that they say things to them." (P16, hospital, 541) The following comments exemplify the impact of the nurses' role:

Nurses really run it and they need to understand and feel that and I think that they don't. I really think that they're missing that they're so important to everything . . . Really, the mom is here and what you say is golden to her and we outnumber the docs. [Laughter] So the nurses are it. Somehow, they've lost that. [Laughter] They don't think that what they say influences. So it's just bringing them back to understanding . . .It's understanding really what they say at some point to the mom and can really tip her over or she's looking for advice from her mother-baby nurse because her mother-baby nurse has been working here for about 20 years or 15 years or 10 and so mom is feeling like she's not the expert and the nurse is the expert so she's asking for this advice and the nurses are not thinking too much on what they say [Laughter] and how it influences the moms. (P9, hospital, 63:71)

Okay. I have a mom that recently had an emergency cesarean. She went into recovery. She stated to the recovery nurse that she wanted her baby right away. She's nursing her baby and knowing that you can have baby in recovery as long as you are good and stable, that's definitely a possibility. She said, "I need the lactation team." And she says, "Well, I'm a CLC and I can help you with that. So let's go ahead and get baby in here." She gets baby in there. So she was willing so that's great. That's a positive. The problem

is when the lady was uncovered with her gown and she went to latch baby, she says, "Oh, you're not going to be able to breastfeed. You got flat nipples." This woman was absolutely devastated, went to her room, didn't even call for a lactation team because what this lady had said to her and she took her word as gospel. She said, "I'm a CLC. You have flat nipples. You're not…" - she trusted that professional. Very wrong information. . . .I had a very difficult time convincing her that it was actually going to work. (P2, private practice, 103)

Finally, a few participants also discussed how mothers are sometimes intimidated by their pediatricians. The following excerpt illustrates the concern that some mothers have when they don't follow the pediatrician's recommendation:

Respondent: I've had some mothers last year then go back to the pediatrician and lie to them and tell them, "Yes, I supplemented." They don't tell them the truth. If they didn't supplement with formula, they supplemented with expressed breast milk. Because the mothers are afraid of getting the pediatricians angry or upset, so they lied to them and done what I suggested but they're too intimidated to tell the truth. They said, "Yes, I told him I supplement but I didn't tell him that it wasn't a formula." I'm like, "Okay." [Laughter]

Interviewer: Wow. Do you think they would be mad if they knew that or would that help them to understand – "Oh, look, this baby gained weight and supplement it with breast milk."

Respondent: I wish the mothers were empowered enough and confident enough to be honest with the pediatricians and say, "This is how we did it. This is what we did," and feel confident. The mothers don't feel confident. I don't think the pediatricians would be mad. I hope that would be an eye opening moment. "Oh, this worked a different way than I suggested." Some pediatricians I think would be receptive to hearing it from a mother as opposed to me but the mothers are a little nervous and intimidated to kind of – they feel like they're going up against the pediatrician, the doctor's recommendation.

Damage Control

Participants in this study provided many examples of how various providers can undermine breastfeeding with inaccurate or incomplete recommendations and a failure to follow up with the mother in a timely manner. This issue was also interconnected with the barrier described previously about mothers not being referred to lactation consultants early enough. They described the impact of this as "damage control." For example, one IBCLC explained that "Sometimes the referrals [from Healthy Start] are coming so late that by that time, the milk

supply was down so far. It was really hard for moms to put in the intensive effort needed to come back up again." (P26, WIC, 80) Their stories suggest that the delay in mothers accessing lactation support is related to a lack of coordination between providers. These issues were primarily described by private practice and WIC-based IBCLCs.

If I was going to pick a glitch, it would be that [midwives] think they can do it themselves and they wait too long. When they wait too long sometimes it makes it harder for me to repair it with the mom. . . . They spent so much time trying to do it themselves that when they get to that bad place and they can't, they've let two weeks go by instead of three days. If they would just say, "Here, call [IBCLC] sooner" then — but I understand that. That's the only thing. They don't really give bad information, they just wait too long to realize that they've stepped outside of what they really know a lot about. (P19, private practice, 309)

Sometimes this issue was also described as a consequence of no anticipatory guidance from various providers. A few participants explained that women are not always discharged from the hospital with enough information to successfully breastfeed, nor are they given the resources for when they encounter problems. Thus, many mothers may stop breastfeeding altogether, and others seek help when the problems have compounded. One participant explained,

So, getting them in the door is the biggest factor. Simple things that I feel that if they did get help, I mean how many drop off because they feel like they didn't have milk supply, which was probably an undiagnosed tongue tie, or the pain was too bad, these things. Once they're here, they're usually train wrecks. (P20, private practice, 228)

Several participants also felt that physicians' failure to treat the mother and infant as a dyad in some situations would delay her ability to access care, negatively impacting breastfeeding and potentially the health of the mother and/or infant.

Role Strain and Role Conflict

Participants described their perceptions of role strain for mother-baby nurses in addition to their own experiences with role strain. As previously described, the role of physicians is generally perceived as the most influential in the hierarchy of care for mothers and their infants who are breastfeeding. Participants felt that sometimes the role of physicians also can

undermine the autonomy of the nurses in their roles. They also noted that nurses struggle with role conflict when they know that the doctor's orders are not the ideal solution to a particular problem, but explained that they "do the best they can in the parameters that they have to do it." (P24, WIC, 527) One hospital-based IBCLC, who is severely constrained by the head physician herself, commiserated with the nurses who are even more constrained in her setting:

because of the doctor's orders. I have to do what this doctor says, but I know as an IBCLC that's not conducive to breastfeeding and that - so I'm glad I'm not a staff nurse. I told those nurses. I said, "I couldn't be staff nurse here [Laughter] because I couldn't do what the doctor says." I could not do it and they were like, "Now you know how we feel" and I'm like, "Man," I said, "I could not do it." . . . Their hands are tied. (P10, hospital, 961:967)

Participants also described how some of the typical nursing responsibilities oblige nurses into focusing on completing their job requirements, rather than allowing them to care for each dyad's individual needs. This was a common point of discussion for many of the participants; they felt as though nurses are conflicted because they are bound to hospital policies and doctors' orders. Nurses are also often under role strain due to inadequate staffing, adding additional pressure to get their charting completed in a timely manner instead of focusing on normal newborn behavior and best practices to support breastfeeding. One participant explained,

They have to and that leads me to another issue. The nurses have to chart. They have to be sure everything, all the bases are covered and when we have a sleepy baby the nurses get very upset if it's been four or five hours in the first 24 hours and that baby hasn't fed. This is an average for gestational age full-term baby and the lactation consultants are we're all saying this is a sleepy baby. Give him time. Give him skin to skin. Give the baby skin to skin. Oh, up to now he hasn't fed, it's been almost six hours now. I think we need to supplement. So the sleepy baby, understanding normal newborn behavior is something we were constantly educating the nursery staff on and I understand their objective to get everything covered in the chart. Did that baby feed? How often did the baby feed and if not, why not? So there, that can be an issue. (P12, hospital, 288)

In addition to mother-baby nurses, IBCLCs also experience some degree of role strain.

Participants identified time constraints as a major barrier for IBCLCs working in hospital and WIC settings. In hospital settings, the role of the IBCLC often also includes nursing duties,

which can detract from directing their attention to breastfeeding support, resulting in role strain. One participant described this as "blurred lines." Several participants expressed frustration about not having enough time to spend with breastfeeding mothers who need support due to patient load and charting responsibilities. One participant said, "Another frustration for me is we usually have three, sometimes four couplets and so when I want to spend time breastfeeding, I usually can't because I'm doing the postpartum thing too." (P14, hospital, 279) Another participant who once worked in a WIC setting offered her perspective on role strain for those IBCLCs:

With WIC, I wish that the WIC IBCLCs were able to spend two hours with people. God knows there's a need for it. Those IBCLCs are slammed. The amount of work that they do and the passion that they - and for them, it's charting. The charting is what really kills them because of the WIC requirements for charting and for counting your hours - hours meaning services. I definitely feel like there is need for it and I don't feel like they're supported. . . . there isn't a peer counselor in every clinic. (P20, private practice, 458)

In particular, both hospital-based and WIC-based IBCLCs experience role strain due to multiple, often conflicting role expectations and insufficient staffing ratios.

Though rare, there are some IBCLCs who work in hospital settings without a nursing degree. One participant in this situation experiences less role strain because she cannot be pulled to do nursing duties and can focus her attention on breastfeeding. She commented,

Actually, that works really well because I can't be pulled from one role to another. I was hired to be a lactation consultant . . . It worked to the advantage that when times were tough and the nurses were very busy, they couldn't pull me away from breastfeeding support because they needed help with the nursing responsibilities. So it works but I understand why they want registered nurses in that setting because maybe they can – they might understand something a little more than I do. Although, I have a pretty good understanding of what they do and why they do those things that they do. (P8, hospital, 153)

Private practice IBCLCs acknowledged that they do not share these constraints because they are not employed by the hospital. They commented:

In my setting that I'm in, I have less barriers than a hospital outpatient lactation consultant, because she's employed by the hospital and they have more medical - or a lot to be concerned about than I have. Sometimes mommies will say to me, "Well, why didn't the lactation consultant inpatient in the hospital tell me this?" or "Why didn't the lactation consultant at the outpatient after I went there tell me this?" It's because they're confined by what they can do, by the institution they work for, where I don't have that in my private practice – that confinement. For an example – and this would be so frustrating to me if I was... Okay. This is a syringe and in the hospital, they cannot take out a syringe and use it to finger feed a baby, because they're using this off-label. I can do that, because I don't have a hospital telling me I can't, and I'm still within my scope of practice. They were within their scope of practice as the IBCLC, but they are employed by hospitals, so they have to adhere to their protocols and their rules and regulations. So I have less barriers than some other people have. At the breast, that supplement babies with this tube, go into the mouth and a syringe. This is an NG tube. This is a tube to go down the nose of a baby that's a premature baby in the hospital - but still if they stick that on the end of this, then they're using something off-label. That seems kind of silly, doesn't it? But they can lose their job for doing this. So they have *more barriers than I have. (P3, private practice, 359:361)*

I think if you're a nurse in a hospital, you have more barriers to overcome than I do. I don't have any. I have no wrist-slap to fear. My job isn't on the line. I don't have to be careful what I say and who I say it to. That's what I tell them. I tell the moms, "Look, I know the nurse in the hospital told you and I know why she told you that because she's not allowed to tell you this, but I'm going to show you [photos of tongue-tie]. Now, what do you think?" "Oh my God, that's my baby." I said, "Yes, it is. Can you read what that is?" "Yes." "So can your doctor. Do you want to get a picture of that so he can see it, too?" That's the difference. (P19, private practice, 889)

These comments suggest that there may be times when the constraints faced by nurses results in inadequate management of breastfeeding problems or a delay in accessing appropriate services.

Participants also described some feelings of role conflict due to mothers getting different information from different providers. They must constantly negotiate their role between the other providers and the family. For example,

I'd say challenging to the fact when the mom is getting — the parents are getting information from the healthcare provider that is not based on researched information. That — that could be difficult because you're walking a fine line especially as a nurse and a lactation consultant to what the physician is telling the mother which is maybe it's not evidence-based information. (P1, hospital, 82)

A few participants also mentioned the possibility of role conflict for IBCLCs who also own a pump rental service. One hospital-based participant explained that she owns a pump rental

service and must be careful not to promote this service in the hospital setting. Because there are few resources in the community, her business is included on a list of places in the community that rent pumps that they give to mothers in the hospital who may need access to a rental pump. She commented,

I really try not to promote my business at work, so it's a slippery slope. . . I keep saying every year I'm not going to do it. I rarely make money on it. Every year goes by, I have 6,000 come in and 6,500 go out. It's because so many people don't pay me. They give me bad credit cards. They drop off the pump at my door and they owe me, the list goes on. You should not have a good heart when you have a business.

She also noted that she first started this business because there was a need in the community and no resources for mothers.

One IBCLC with an ARNP credential was in a unique position to share her perspective on perceptions that lactation consultants, physicians, and nurses have of each other's roles. The following is an excerpt from that interview:

Interviewer: Do you think lactation consultants know and understand the role of pediatrician and nurses?

Respondent: They may think they do but unless they actually walk in their shoes, I don't think most IBCLCs realized how many patients physicians have to see in their practice in order to make money and to keep their office open. Some places only allot maybe 15 minutes for a well baby visit and a sick visit 5 minutes. I mean they don't understand that that's what it entails or how they can function.

Interviewer: What about the pediatricians and physicians, do they understand the role of the IBCLC?

Respondent: I personally think most of them are confused because they hear the term lactation counselor, lactation educator, lactation specialist and lactation consultant. Just three weeks ago, I had a physician say to me that they talked to this person about breastfeeding and she happens to be working. They called her a lactation consultant. She's not a lactation consultant. She's a lactation counselor. I think considering how much hard work it was to become an IBCLC, it frustrates me when physicians don't know the difference. That worries me too because if they don't know what I can do, then what do they think they can do? Either they think they can do more than they can or they don't do that much. So why would I refer to this other person, they're the same. So I think role confusion is huge. Where I worked, I spend a lot of time talking to the physicians about what an IBCLC is and how to become IBCLC certified as a physician and I did that. That

was part of like the training. So they might know a little bit but the run-of-the-mill provider doesn't know. The fact that somebody who I know, they knew I'm a lactation consultant, said "She's the consultant." She's not a consultant. So if they don't know what that role is, then how can they utilize them? Frankly, they can't. [Pause] The other thing is that also with compensating them. If they don't realize all the training that we have and how we keep re-certifying and how in-depth our feeding systems are, they won't compensate us for what we do. Well, they'll say, "Oh well, just bill, have them private pay." Yes, but when you go to a pediatrician office, very few people self-pay, they want you to bill. That means that somebody is going to have to pay that lactation consultant. It takes months sometimes to get payment back when you submit a bill. So are these pediatricians going to float to salary for these lactation consultants? So I don't think they know, so that's why I think it's easier for most pediatricians just to hand out a card in their mind. They might have a super-success because they loved that consultant. They do a great job and moms loved it. They bond well. But what is the physician? The physician didn't do anything but hand that card. Do they get any pride of helping that mother breastfeed? At least they gave a card but there's so much more that they can do and maybe if they start getting in the trenches and really helping mothers and they might find how rewarding it is. (P15, hospital, 437:443)

This lack of role clarity among the various providers who may be involved with managing breastfeeding problems may also be connected to role strain and role conflict. One IBCLC described the need for a team-based approach to breastfeeding management which would require clear role expectations between providers. In describing her dream world, she commented,

In my dream world - and now I'm starting to really dream, if I want to be a child for a second and have this fantasy that IBCLCs have a practice like OBs have and the OB says, "Okay, this is out of my scope. I want you to go and see the IBCLC prenatally. I want you to prepare for this. I want you to learn and know what to expect." Then maybe that IBCLC kind of like - the OB or the midwife comes into the hospital, does a consult, works with that mom. In my ideal world, it would be that you can take and bill all insurances and pumps. I mean, it's ridiculous. We should be able to do that. For a pediatrician, that would be fantastic if they say, "Okay. I work with a group of IBCLCs and I would like you to go over there and see them today." They call out of the blue and say, "Hey, I'm going to send them over to your practice. We have a failure-to-thrive baby," and collaborate. They see us as providers. That is my dream, bottom line. (P2, private practice, 205)

When asked what they least like about lactation consulting, most of the responses from participants were further evidence of role strain and role conflict, although these also differed by setting. These themes are presented in Table 14.

Table 14 – Aspects of Lactation Consulting Least Liked by IBCLCs

Table 14 – Aspects of Lactation Consulting Least Liked by IBCLCs	
Administrative	It's having to write everything down. [Laughter] I could save a lot of time if I didn't have to chart, but that's not possible and that's not something that I can get away with, honestly, yes. (P24, WIC, 673)
 Feeling Defeated could not solve breastfeeding problem mother decided to give up 	what's hardest on me is the mothers who really, really want to breastfeed and have struggles that cannot be fixed (P19, private practice, 589)
	I spend a lot of time and then two weeks later they've quit for no good reason, for reasons that I don't completely understand. I don't judge them. I'm just trying to figure out to say how do I help the next one and sometimes I don't know. There's just a lot. I think it's a lot-some of these emotional family support and all of that but my least thing is that we'd spend hours and they quit. (P28, pediatrician, 507)
Not enough resources	not being able to do whatever it is that I'm trying to do thoroughly because I don't have time, so I have to run in and go, "Okay, how was it? So he ate three times? Okay, good. Bye." (P11, hospital, 706)
Outside influences	Banging my head against the wall. Not being able to change my healthcare providers, the culture, stupid stuff that can, you know? I do rounds and those poor mommies hear four different things from four different nurses (P6, WIC, 732)
	feeling like there's no flow - there's an uncertainty of actually being able to actually fully help the person because it doesn't rely only on you. (P21, private practice, 533)
 Emotional burnout On-call 24/7 no support network with other IBCLCs lack of respect from providers not valued by administration caring more than the mother 	I am on call honestly 24 hours a day, seven days a week, and all my calls are crises. The part that I like the least is definitely, it emotionally can be taxing. But there is a lot of reward. I mean, don't get me wrong. I don't want it to sound like I'm unprofessionally and emotionally involved but you do in a sense. I

keep it very professional and I do minimal follow-up calls meaning I don't call them a month later and go, "Hey, how are you doing?" I don't develop those kind of – I keep it very professional, but still their stories break my heart and so it can be very emotionally taxing. That's what I like the least. (P2, private practice, 393:395)

caring more than the mothers care, that's hard on me, too. When I think, oh, this baby would be such a good breast feeder, he's doing so well and look at that, but she doesn't care. She doesn't see that. I work hard all day long to see that it's happening for her and then she doesn't work hard anymore. She gives up at nighttime. Okay, I've learned that lesson that I can't care more than they do (P13, hospital, 420)

The mantra, "It's not my baby. It's not my baby. It's not my baby." (P19, private practice, 943)

Women's inability to be mothers sometimes; that kills me - their lack of a biological response. When a woman doesn't react biologically to her children and to – yes, I hate that. It's the thing I like least when I see – I don't care whether you breastfeed, like I said. There is something about responding to your children with that mother and it's sad when you don't see that, and that's the thing I don't like the most, but I can't fix it either. (P22, private practice, 286)

Summary of Research Question 4

The participants in this study were clearly influenced by the enactment of various providers' roles in the management of early breastfeeding problems. A lack of understanding about the IBCLC credential and issues of respect within the organizational hierarchy are

particularly problematic for some participants who approach breastfeeding management with a team mentality that is not reciprocated by other providers.

Research Question 5: What are the communication strategies and other processes through which IBCLCs work with a) other health care professionals and b) families to provide support and management of early breastfeeding problems?

Communication with providers and families was an important factor in managing breastfeeding problems for IBCLCs in this study. The degree of communication between IBCLCs and providers depended on the length of time they have been practicing and the professional relationships they have fostered. Participants relied on a variety of communication strategies including sending reports, speaking directly with providers, texting, and phone calls. They discussed tactics for communicating with providers to build rapport, educate about breastfeeding, and cultivate collaboration efforts. Participants working in the WIC setting were less connected to physicians and nurses in their communities than other IBCLCs.

Communication strategies with families were primarily related to educating families and supporting breastfeeding mothers within their individual family dynamic. Participants also described the various modes of communication they use with families to best support breastfeeding mothers. These findings are described in more detail in this section.

a) Health care professionals

The desire to educate other providers about breastfeeding was often the impetus for these participants in initiating some form of communication. A few participants mentioned that when the physicians themselves are seeking lactation support from an IBCLC, they make an effort to educate them in hopes that it will trickle down to the patients of these providers. Several IBCLCs work in settings where they are able to provide some education to pediatric residents. Many of the participants provided examples of reaching out to physicians and nurses in their

work settings and communities by providing the latest research articles and books about medications and breastfeeding, offering "in-services" (short educational sessions within the hospital setting) on selected breastfeeding topics, and working with them one-on-one. A few participants said that they leave brochures about breastfeeding or their business cards (private practice) in physician's offices. The communication efforts made by participants are typically one sided. A few IBCLCs who described having positive professional relationships with physicians reported that they will email physicians directly with new articles and believe that they are well-received. One participant commented that she used to send the same information and resources to pediatricians, OBs, and hospitals in her community so that they all would be on the same page. When asked what strategies she thinks work best in communicating and collaborating with other providers, she responded,

Keep sending reports. There are times, I keep a thing on the computer that says 'teachable moments' which is where a doc tells mom something that I think is completely off the wall. I keep track of the date, who said it, what the mommy told me and then there's an action column which sometimes I fill in an action so that I can do focused information to providers. In the past, I have monthly picked a topic, provided an education for the doctor and a mommy tool to all the providers. The hospital, the OBs, the peds, and I did that for about a year and a half. Okay, pick a topic. I've found that it didn't make any difference in practice and it was taking a fair amount of time (P6, WIC, 528)

Several other participants also felt that their educationally-based efforts with physicians were generally unsuccessful at motivating change. Many participants reported that they will call physicians if there is an issue that they are particularly concerned about; however, getting a response back from the physician was variable.

One participant said that she has not found any strategies that have been successful in trying to work collaboratively, but believed that her director has had the most impact on slowly getting staff involved with supporting breastfeeding. In this case policy and administrative changes would be required to foster collaborative team approaches to care. Several participants

did feel that they were able to successfully influence change in practices among some nurses, although the changes were often slow. One participant explained,

Supplementation is — there are still some nurses who — I understand that they do it out of worry that the baby is not getting enough or didn't feed well or whatever it is. It took me a long time and this was all informal . . . to teach nurses what babies' behavior is. What normal baby behavior is in the first 24 hours. . . . He's sleeping and what they know in their head is they feed every three hours if they're breast-feeders. In that first 24 hours, it's hard to teach them. That does not happen. It's the rarity that the baby will eat every two to three hours in the first 24 hours of life. So for them to finally come to acceptance — for years they would come to, "He hasn't eaten. Do I formula feed?" "No. Not yet. Not unless you're told to by a doctor, but this is why. It's the first 24 hours, normal baby behavior. Yes, that's a long time for us to wait and chew our fingernails, but it's what happens." So once they start to see this and know this, then they've become much more comfortable with that . . . they have finally, finally come around and been more accepting of that. (P11, hospital, 418)

This kind of one-on-one education with nurses was described as relatively successful by a few participants.

One of the pediatricians also described challenges in communicating with other physicians about breastfeeding and expressed that pediatricians don't like to be told what to do by their peers. She said,

I'm going to be the one who tries to just make our practice culture breastfeeding friendly. So I guess I am still always teaching [fellow pediatrician] and our nurse about the things I learned like I'm kind of the person who goes to the breastfeeding meetings and come back and shares all the exciting things I want to do now. [Laughter] I have this huge bunch of handouts and things like that and the websites so I'm always talking about it. So I kind of raised enthusiasm I think within our practice. In the hospital, I'm the big cheerleader and driver on the breastfeeding task force committee as far as the MDs go. There are other OBs but they don't show up. . . . So one of my roles I think is to try to educate my peers but boy, they don't want it from me. Doctors don't like to be told what to do, period, especially by me or my peer. I think there's that competitiveness so I have to do it. I can't do that straight up. Nobody wants to come to anything that's a breastfeeding conference or a noon lunch discussion about it. . .So I try to do that and I think that's my strategy that's working a little bit just one-on-one trying to change the power people. (P27, pediatrician, 369)

Even as a peer, this pediatrician believes it is difficult to educate physicians about breastfeeding. However, a few participants did feel that some physicians and residents are receptive to learning about breastfeeding, especially the younger generations.

Many participants described their communication strategies with physicians as partly determined by building rapport with these providers in their settings and in the community. Several IBCLCs reported that fostering these professional relationships occurred over time, but eventually led to physicians requesting their input and sending their patients to IBCLCs as referrals. One participant explained that the rapport seems to be strengthened when the provider initiates the relationship. She said,

usually it's the providers that have an open-door policy meaning they're referring out to me and they've opened the door of communication so it's easy to communicate back and forth with them. I had one pediatrician the other day call me on my cell phone on a Friday night, "[IBCLC's name], I need your help." That opens a door because that builds a confidence level in me that she is actually trusting me with her patient and she wants me to help. That is usually how the communication starts to be completely honest with you. It's the provider, it's the pediatrician, it's the OB inviting you in. (P2, private practice, 257)

A few participants felt that rapport with physicians reflected a level of trust in the IBCLC to communicate about the patient and make sure that their patient will get the best care possible. Interestingly, participants specifically mentioned that they felt it was important that the provider know that she is not anti-formula. For example,

They know I'm going to communicate with them and they also know I'm not going to let one of their babies get in trouble. So if a baby truly needs to be supplemented, they know that that baby's going to get supplemented. So I – they don't always know that about every IBCLC. I had one recently come to me and told me the IBCLC she saw in a private practice setting told her that formula was like poison. It's not poison. The child is not going to die if you give it to him. He might get sick, but in this country, there are antibiotics and all kinds of things, so they're – I mean he's not going to - likely to die. But pediatricians – if that feedback gets back to doctors, they're not going to refer to that person. . . If . . . I was concerned about that baby, I ask the mother to pick up the phone and call her pediatrician and ask them to get the doctor on the phone, and I spoke with him and told him what I was seeing. So that's how I formed this trust in the community (P3, private practice, 339:341)

I've been around a while. [Laughter] Because I can talk to them and discuss things with them so those that I deal with, yes I do feel like I have a good rapport, especially with the hospitalist. We have a very good rapport and they frequently will come up and say, "Can you go see this person?" or "Can you tell me what you think about this person?" So yes, I think we have a very good rapport with our hospitalists. . . I mean they know that we are not going to say, "Oh you can't use formula" because there are times when that has to be done. So I think just because we work there a long time and we work with them and we talk with them. (P16, hospital, 645:649)

Finally, a few private practice IBCLCs in this study explained their use of reports as a way to build rapport with physicians in the community as well as a form of marketing. One participant talked about sending general reports to pediatricians and also described sending a specific tongue-tie assessment tool, which she feels builds credibility:

Most lactation consultants aren't doing [tongue-tie assessment reports], so when they get that from us, I feel like it's a little bit of a step-up. It's a little bit of professionalism that hopefully they're thinking, "Obviously, this person observed the feeding. They have gone through with the mom what's happening. They have looked at the tongue," [Laughter] as opposed to the old, "My lactation consultant said the baby has a tongue tie." (P21, private practice, 361)

Another theme related to communication that emerged from the data was about the importance of being diplomatic with both providers and mothers. Participants described a consciousness about the language and communication styles they use with other providers and with families. For example, one IBCLC commented,

I have to remember my scope of practice all the time. I just, you know, what's my role and then I have to think about if I were a provider, I wouldn't want another provider telling a mommy to do something I told them not to do. So there's that, and since we're not working as a team, we're right and left. That's a really, that's a place I want to be careful because I as a provider wouldn't want another provider to tell somebody to do the opposite of what I told them to do. So here, what's my scope of practice, what am I allowed to say, what shouldn't I say, what's my ethical responsibility. (P6, WIC, 432)

Another participant explained from her perspective as a nurse practitioner, "if you're supposed to be this respected expert in lactation in a medical model, you have to know what to say and what not to say." (P15, hospital, 399) She explained further the importance of being diplomatic if IBCLCs are going to be accepted as part of the medical team:

let's say a mother is put on a medication and she's breastfeeding and then the doctor says, "You shouldn't really be breastfeeding because it's probably not good for the baby." The doctor never looked it up and it's wrong. How that lactation consultant talks to the mother about it is huge because if she goes, "Oh, that doctor doesn't know what they're talking about. I don't know what he's doing." Those moms will go and tell that doctor. There's another way of presenting the information so that nobody — I mean the doctor, they don't want to be made a fool of or demeaned. You just get one or two instances where somebody kind of makes you feel stupid, they're not going to want them to be a part of their team or they're going to discount them until they find somebody that really knows what they're doing or, not. It's the same say with providers. Some are really cutting-edge and they'll prescribe off-label and they'll do — there are other ones that, "This is the guidelines and to me, what's in this box and you don't go on either side." I think lactation consultants need to be really careful. (P15, hospital, 407)

In describing her communication strategies with an example, this IBCLC said,

Well, sometimes I'll just ask what they thought about the baby or how things were going just to see if they even grasp any problems. If they didn't even see a problem, then I would say, "Well, I went and tried to help that baby and her nipples were really creased. I looked into the tongue and the tongue couldn't move so it was rubbing on the nipples. I really think that baby's tongue is restricted. I think you can go back in and look." So that's how I kind of did instead of saying, "Yes, that baby is tongue-tie. I need you to clip it." I kind of went in a different way was a little bit more well received. If they had some knowledge but then they said, "No, I think everything is fine." I guess for me, I would say, "Well, she's really having questions and would you mind if we go back in together" or "Can she come back in and can you recommend that she see her pediatrician like the next day?" So I would try and kind of say what I want them to do without telling them what to do. Sometimes, it worked and sometimes it didn't. (P15, hospital, 379)

This participant felt that providers were more receptive to her suggestions when they felt as though their authority was not being minimized.

b) Families

Similar to communication efforts with providers, many of the communication strategies that participants use with families were also related to education. Participants described their communication strategies during consults as very inclusive of all family members. Several participants talked specifically about the importance of caring for the family as a unit in order to best serve the breastfeeding support needs of the mother-infant dyad. The following excerpts,

though long, provide perspective about communication and education with family members that were shared by many of the participants:

Yes, I always invite — if I'm in a house with a mom or even if I'm in a hospital room, I invite everybody. Everybody is involved. I look at everybody. I'm very careful with my body language. I address everybody in the room. I'm very open, my body language is open. I answer questions and I take my time. I want the family to feel like they have some say and importance in this as well because if I provide a family-centered type of consult, a family-centered care, I can promise you, they will support mom 10 times better if I just made it all inclusive, me and mom. "Well, this is about mommy and just let her do what she is going to do and just make eye contact with her." It doesn't work . . . anytime I say, "Do you have anybody that you want to be there? Let's make it when it's convenient. Is your husband going to be home? Your partner?" And they are like, "Oh, really? Okay. Great! You don't mind?" You'll be shocked at the people who tell me that or ask me that. If they don't, "No, no, I'm fine. It's better if he's at work," I go with that too. . . a lot of times when you are providing care, you definitely need to talk to the patient but there is never a time that I'll deny a dad or not bend an ear for a dad. We're talking about care for the family, so I make myself available basically. (P2, private practice, 341)

Well, with just mom and dad in the family, that's the new family unit, I talk to them about striving for balance and harmony, and that there's not – the baby's not the most important person in the family; it's just the most helpless person right now. So I never want to lose that sight, them to lose sight of everybody in the family being equally important and that they should be working together in harmony and balance. Then we go over whatever their unique situation is that we might be able to fine tune it and make it a little more harmonious; and the importance of families enjoying one another is very important, because when they enjoy one another, then they want to be together more and they love each other more. Outside, grandparents and things, that's a unique area where I give mommies lots of tips on how to help them see it from the other person's point of view. When I have grandmothers here, a lot of times if I say something to the mother like, "Well, the reason your mother thinks that, is worried about you getting more sleep or rest or whatever, is because you're her baby." And believe it or not, when the grandma comes into the setting, the person that she's most concerned about is her child, not necessarily the newborn. [Laughter] (P3, private practice, 435)

Participants emphasized their strategies to include fathers and grandmothers of the infant in particular. They often focus on teaching these other family members how to support the mother without feeding the baby a bottle and gave examples such as holding the baby while the mother sleeps and bringing the baby back to the mother when she sees early feeding cues. Several participants explained the importance of communicating with fathers because they go home with the mother and baby and need to be able to support her at home. For example, one IBCLC said,

"Dad, get over here and watch what I'm doing, because you're going home with her and I'm not." I say that all the time. This is what we're doing and this is why we're doing it and I spend more times talking to whoever is in the room in addition to the mommy. "Mommy, I want you to just snuggle with that baby and I'm going to talk through this." it's teaching the family, and the family gets to go home. Here's a phone number to call at 2:00 AM. I'm not telling that to mommy. I'm telling it to whomever else because she's not going to pick up the phone because she's in the middle of a crisis, and in the middle of a crisis, I'm not picking up a phone. But daddy or grandma may. (P6, WIC, 684)

A few participants also described including siblings of the baby in their consults as well. For example,

So maybe the mom's up there with the baby and the toddler wants to crawl on the bed and the dad's like, "No, get off the bed." I'm like, "No, let him up on the bed. Why don't you sit right here next to mommy" and, "Do you want a book?" or, "Do you want to hold your toy?" "Do you want to nurse your baby doll?" "Look, she's giving your baby sister mommy milk. You used to drink mommy milk," or whatever and just kind of modeling how to do that because that's not something that they've mastered at that point and maybe it's something that they've never experienced. I do a lot of like early parenting. (P30, private practice, 215)

Aside from communicating with families in-person during their hospital stay or a WIC consult, participants also communicate through a variety of modalities such as, phone calls, texting, email, Facebook, Twitter, Skype, and office or home visits. Mothers often receive information about breastfeeding support services in their communities before they are discharged from the hospital. Several IBCLCs visit with mothers before discharge to make sure they have contact information for additional support. One IBCLC said,

I point out that my cell number is on the card. They have my e-mail address. We can text. We could talk but this generation likes to text. They don't want to talk to you [Laughter]... so I just remind them that I can communicate with them any way that they're more comfortable with. So I just kind of have a goodbye visit... Make sure that they understand that I'm still available even after discharge. (P8, hospital, 269)

A few participants commented that they prefer not to text, primarily because they have some concern about giving advice that could be misinterpreted or considered to be outside their scope of practice. One participant explained,

I do text from time to time with moms but I will usually text back, "Call me," because I'm so concerned that there'll be some misunderstanding or some misspelled word or just something that would be misinterpreted through texting. I prefer face-to-face, come on in, let's make an appointment or give me a call. We can talk about it. Maybe that's my age, just not – I might text quite a bit but I'm not comfortable giving my patient advice by text. (P12, hospital, 516)

Another participant readily texts with mothers, but also noted that she informs them that her phone is not totally private:

I don't have a problem with it, but I tell them upfront, "I don't have a special system on my phone to protect you. So if you text me and my phone get stolen, people are going to see these things, and they know" so whatever. I get pictures sent to my phone. "What does this look like?" "Oh my God, sweetheart, can you do something with that because that's a really bad diaper rash." [Laughter] If someone steals my phone, it's got nipples and butts. There are no faces. You'll never know who those people are, but you're going to see lots of little baby rashes. "Does that look like yeast to you or poop?" Lots of pictures of poop. "Is this color normal?" (P19, private practice, 489:493)

This participant also explained that she does not like to Skype unless necessarily because she feels as though she can do a better assessment in person and she's not comfortable taking money for Skype consults.

As described in Research Question 1 results, at the state level WIC does not allow employees to text with mothers. A few participants described this as a barrier to effective communication with clients. One participant expressed her frustration with this policy: "this is just one of my big bugaboos because I'm sorry this is ridiculous. If you know anything about the clients we have, most of them have Boost phones and it's the way they communicate is texting because it's cheaper." (P25, WIC, 128) Another participant said,

Like our peer counselors, the barrier is in their contacting moms. If we could text, that would really help. We're not allowed to. At the health department, there's a barrier there. We can't use the social marketing and even texting — moms don't want to use up their minutes to call back. Our peer counselors will call moms, phones are disconnected, phones are not longer in service. . . It's huge, so moms will tell us, "We've gotten your messages, but I didn't want to use my minutes to call back." We have women here and they're wonderful; they connected to mothers beautifully and they can't reach them by phone. (P26, WIC, 68)

Several hospital-based IBCLCs also commented that they do not have good follow-up communication with mothers after they are discharged. While some hospitals have warm-lines for mothers to call, many times calls do not get returned in a timely manner or at all because the nurses are too busy.

Finally, IBCLCs had different perspectives about home visits. One pediatrician, one WIC-based IBCLC, and most of the private practice IBCLCs in this study reported that they do home visits. The private practice IBCLCs who do not do home visits, but rather have families come to their office, explained that they have fewer distractions and are able to see more mothers because they are not spending time driving. One IBCLC commented,

I have this space and so I have all my tools and everything at my hands. I have done home visits in the past at times. I'm not a big fan of home visits. I have debates with that among my colleagues. I think if some of my colleagues have worked in an office setting, then they'd have a better comparison because most of my colleagues feel that the home visits are so valuable because then you know the mother's home setting. I can get that information from talking to the mother pretty well. . . The problem that I have within the home, aside from the fact that I'm going to have to try to travel more distance between each mother, the travel time to me is called "dead time, down time". I don't like that. The other thing that is more important to me is having everything at my fingertips that I need to help that mother. If I have to run back and forth to my car, that takes longer. Also in her home, I have no control of the environment. I have no control of getting her focused attention because the television may be on. Children may be running through the house. People are coming by to drop off food and things and, of course, they don't want to just drop off food without seeing the baby and talking to the mom. It doesn't matter to them that the lactation consultant is there. She's there to do a job and not just to visit. I'm not the next-door neighbor. I don't have any control over the phones ringing. In my office, I have control over those things so I can get the mom's focused attention and I can do a timely – I'm not going to spend less than an hour, hour and a half with her anyway. Sometimes, if I have a train wreck, it might go two hours but I don't have control in her environment. (P3, private practice, 83)

When asked what she likes about doing home visits, another participant responded,

I'm in their environment and I can see everything that might be in their way. I can see how many swings, how many baby bouncers? How much baby stuff do they have that they're going to feel they must use that will separate them from their baby. Also, when they come to me they think my couch is magic and they feel the need to come back. . . When they're in their own chair, I make sure they can nurse everywhere - in a chair, on a couch, every place in their house. "Where else do you think you might be when he's

hungry? Okay, let's go there. Where else do you think you might be when your baby's hungry? Okay, let's..." I can't do it in an office. . . I like to be in their own world, in their environment. I think they feel the most comfortable in their own space. I think they feel like in control of what's happening to their body and happening to them when they're in their own environment. I like it. (P19, private practice, 973)

Another participant talked about liking home visits, but felt that there were some advantages to seeing clients in the office setting. She questioned whether insurance companies would be as willing to pay/reimburse for breastfeeding consults done as home visits. She felt that while home visits have more flexibility in terms of time, she could see more clients in an office setting because they are scheduled appointments and mothers tend to take them more seriously. She said, "Most people are very respectful of my role in that setting, but sometimes I don't think they take me as seriously as they do when they come to the office." (P20, private practice, 606). The pediatrician works primarily in an office setting, but mentioned that she will do home visits on occasion:

I love home visits. I don't do it as a matter of practice on a regular basis but perhaps maybe once a month or so, there'll be a special case where someone needs some help and they're just closer to my home than to the office and I won't be in the office that day or I'm heading home so I'll just visit them there. It could be a sick child that's little and I don't want to send them to the emergency room or it could be just a mom that's having a lot of difficulties. Usually, I'll just take my tools with me. It's really great. I think we should go back to home visits. (P18, pediatrician, 132:136)

Summary of Research Question 5

Although communication strategies IBCLCs use with providers and families were varied, their goals were similar. Their communication efforts with providers aimed to develop professional relationships and foster collaboration in an effort to provider better care to breastfeeding mothers. In addition, their descriptions of communication with families reflected elements of Family-Centered Care in that they were inclusive of all family members and aimed to best meet the mother's needs on her terms.

Reflections

The interviews concluded with a question about what the participants like most about their roles in managing breastfeeding problems and supporting breastfeeding families. Their responses almost always elicited a smile and a change in the tone of their voice as they expressed what motivates them in their profession. They described enjoying the problem solving aspects of lactation consulting, feeling satisfaction with helping mothers to achieve their breastfeeding goals, and a commitment to empowering women. They also described believing that their work makes an important difference in terms of health benefits, disease prevention, and promotion of maternal and infant bonding. For example,

Oh, what I love the most is working the moms and the babies. I just love the prevention. It's a joy to come to work every day and be able to be a part of decision-making in a family that's going to . . . reduce their health risks and that's going to increase their wellbeing in ways that they won't even know until they've done it for a while, so it's not just that. It's a joy. . . It's the norm for humans and to be able to help people awaken to that, and to help women feel their own power, and to see them just grow and see them feel their own power when they're breastfeeding their child and what they're doing through that and through their mothering. You see the changes and it's wonderful to be able to be a part of that, so I always love prevention. I always feel that that's where I like to be, so this is one of the best prevention things that you could be a part of. (P26, WIC, 244)

Several participants also described breastfeeding as more than food delivery but rather a biological response that becomes a form of mothering and they enjoy fostering this connection.

One participant responded that she most enjoys

The smile on a mom's face when it works. The connection I see between mothers and babies when they bond. The biological response of the mother, I love it. There's nothing better than seeing a mother biologically respond to her baby, and the fact that it helps her raise her children later, because she learns to trust herself and her own biology, and her own ability to mother, which is the beginning of breastfeeding; so that I love. (P22, private practice, 284)

Interestingly, several participants (primarily in private practice settings) believed that they are involved in a paradigm shift that goes beyond the act of breastfeeding and has important social consequences. The following comments highlight some of these reflections of social import.

why do I bang my head against the wall on a regular basis? . . . So I have been called by God to empower mothers and save babies. It wasn't what I thought I was going to do when I entered [type of] school. Dermatology would have been fun. Surgery would have been cool. I never imagined that this is where I would be 30 years ago. Why do I keep banging my head against the wall? Because one nipple at a time, we're going to make a difference for lifelong health to not just babies but mommies. And it's, you know, yes, it's one nipple at a time. It's not - and it's probably very philosophical and very lofty but it's, yes, why do I do it? . . . And I probably come from an evidence-based core philosophy. I come from an empowerment core philosophy. I come from a team approach core philosophy. And we will someday be there. Maybe not in my lifetime, okay, but it's one mommy and one baby at a time and there are good moments and then there's really bang your head against the wall moments. (P6, WIC, 728:732)

Really for me, empowering moms and empowering them to mother not to breastfeed because it really for me goes hand in hand. When a mom figures out that breastfeeding is a form of care and not a form of caloric delivery, she's raising a human being that I want my children to be in class with. I know that's really dramatic, but it's the truth. We're changing our culture. We're shifting from a very independent, "My kid wants to be held all day" to "I'm meeting my child's needs" and that starts as part of the breastfeeding relationship. Not all women breastfeed that way, but I think the majority evolve into that. That's so important for me, letting the mom - and this is probably my own personal experience that influences that heavily, but you're changing a culture. You're changing an entire culture. The moms have – maybe they didn't breastfeed their first child and now their first child is older and is realizing that babies feed at the breast and you're making this normal. I love that I watch The Voice with my children and they point out who has labial ties. [Laughter] I love that. [Laughter] I love that when we go to the beach and they see topless women, they immediately ask where their baby is, and I have boys. I mean that to me - my husband is like, "Oh please," but I love that. [Laughter] I love that. So, just helping these moms and hearing and seeing them look at their babies. I just got a text now from a mom to let me know that she's back at work and the baby's doing wonderful and she's pumping and her words literally are "It's now second nature." That gives me chills. That is so special to me because to me personally, breastfeeding is an extension of parenting. It's not food delivery. (P20, private practice, 610)

This mom and this baby are going to have the opportunity to truly bond and I'm a firm believer that when mom and baby have an opportunity to bond like that, children are less likely to be abused in this country. I think all babies and moms deserve to have that time so that, to me, if I can help facilitate that anyway, that's my job. That's what I do. (P2, private practice, 389)

Respondent: I like to see the mommy smile and enjoy her baby. Daddies like that, too. Because when mommy's not happy, nobody's happy. I've been doing this for so long and that in my younger and more naïve and more maybe tunneled vision years when you looked at all the properties of breast milk and if you think of it just from that standpoint, but when you look at society as a whole and you look at what's happened over the 35 years I've been doing this, family's pretty much becoming close to an endangered species. . . we went from seeing hyphenated names to just everybody has a different name. They're not getting married, they're not staying together, and there is no family, and yet family is so important to that child. So getting that mommy to be in a happy place has now become just as important in my heart as the baby getting breast milk, sometimes even more important. I don't know if that's significant or not, but...

Interviewer: Yes, it certainly is.

Respondent: Yes, I think it's an evolution and watch and observing the times and how long I've been doing this, but if we don't help that family harmonize, then they're in danger of more than just losing breastfeeding. (P3, private practice, 443:445)

Respondent: I can tell you what I tell moms. I really don't care about the breast milk and I know that's kind of backwards. I think breast milk is nice, I'm glad breasts make it. What I care about is the mother-baby relationship that comes from breastfeeding and the oxytocin exchange that creates a bond that is pure biology. You don't think it, you are it. I do this for the mother and the baby to have that. In fact that on occasion they get milk too, that's good but it's not why I do it. . . I really and truly and honestly, that's why I do it and that's why I love it. Sometimes I can't fix the milk, that's the reality of my work but I can always fix the nursing. You just have to be able to be willing to separate those two in your head as a mom. These are not related. Breastfeeding is one thing, nursing is another. All babies and all mommies can nurse, not all can breastfeed.

Interviewer: So with those moms that have trouble, do you do a lot of the supplemental nursing systems or...

Respondent: No. Those moms, to them, that's just more proof that they can't be normal because we're a bottle-feeding culture which is normal to them. I teach them to do breast bottle feeding which means that they bottle feed at the breast, skin to skin. Hands to their baby tucked under a breast, no touching bottles. Bottles will get tucked inside your bra, a bottle can get tucked inside your shirt, baby's in the nursing position and babies are always fed as if they're nursing. Nobody feeds your baby but you, if you were not nursing. If you were a nursing mom, you couldn't unscrew your breast and pass it to the back of your car so you can't do that with the bottle. Anytime the baby needs to be fed, it's by the mother. . . That's what we want to mimic with the bottle and protect whatever milk supply they have if they can and make sure that nursing is pain-free and comfortable, and that the baby makes the association of comfort and habitat with mom because that was one of the things like I can tell you listening to moms, what I love hearing the most was that the mother is the habitat. I believe that that she's the habitat. She's the habitat whether she breastfeeds or bottle feeds. She's supposed to be the habitat. With the moms who are not breastfeeding, they miss that. They don't know what they're missing and they didn't feel

it. The babies know what they're missing because they were born to expect it. It's not the same but the mother wasn't so the mother doesn't recognize that she missed something. The babies do. If your biological expectation is something, it's what you expect in your brain and you don't get it, there's that part that's always not there that should've been. A mother doesn't have that. The part of her brain that says breastfeed if she doesn't breastfeed doesn't keep on going. It doesn't say, "Oh, you should've." It gets turned off and that doesn't work in her brain anymore. If you can be a bottle-feeding nursing mom, then at least you protect the baby's biological expectations as much as possible which is, "I feel you, I smell you, I touch you, you feed me." It doesn't say, "I feel you, I touch you, you feed me, I get breast milk." He doesn't even know what breast milk is. [Laughter] He really doesn't. It knows, "I felt something in my tummy and now I don't. Oh, that feels good." [Laughter] That's the only thing, that's why I do it. If nothing else, it has nothing to do with, "I think breast milk is the best thing in the world". It has nothing to do with, "I think all babies deserve..." nothing. I think it is a 100% that spark that happens between a mother and a baby when they're skin to skin and they're a pair, and they're one. That happens whether she makes milk or not. (P19, private practice, 933:939)

CHAPTER 5: DISCUSSION

This chapter includes 5 sections. Section I offers additional insight into the findings about IBCLCs' barriers to managing breastfeeding problems and provides examples from the data to explicate the components of the model conceived through the analytic process. Section II describes the importance of the findings as they relate to symbolic interactionism and family-centered care. Section III covers the strengths and limitations of this dissertation research. Section IV provides a summary of the implications of this research for public health and Section V describes directions for future research.

Section I: Applying the Model

The locations of lactation consultants in providing care to families vary and often straddle more than one setting. Thus, their perspectives on the barriers to managing breastfeeding problems differ depending on that setting and their other credentials. The training required to become a board-certified lactation consultant with the IBCLC credential is clinically technical and requires a broad base of knowledge that includes physiological and psychosocial aspects of breastfeeding management and support (International Board of Lactation Consultant Examiners (IBLCE), 2012). Often the IBCLC credential serves as an extension to their other roles in nursing, dietetics, and pediatrics. The participants in this study expressed a belief that their practice philosophy is more holistic than other typical providers (e.g., pediatricians, mother-baby nurses, obstetricians) who work with the breastfeeding dyad. These IBCLCs also placed a strong emphasis on their role in providing evidence-based information and care to families.

The "IBCLCs' Perceived Influences to Managing Breastfeeding Problems" model was developed to visually explain the barriers described by IBCLCs in this study and is presented

again in Figure 6 for ease of reference. This model is also useful in explaining the factors that hinder or facilitate IBCLCs' management of breastfeeding problems and the various pathways to their role enactment. A combination of indirect and direct barriers and facilitating factors were identified by all the IBCLCs in this study. Despite facing significant obstacles at times, they also described successful strategies to navigating these challenges and identified supportive elements that enable them to fulfill their intended role as lactation consultants. An interpretation of the results in the context of this model follows.

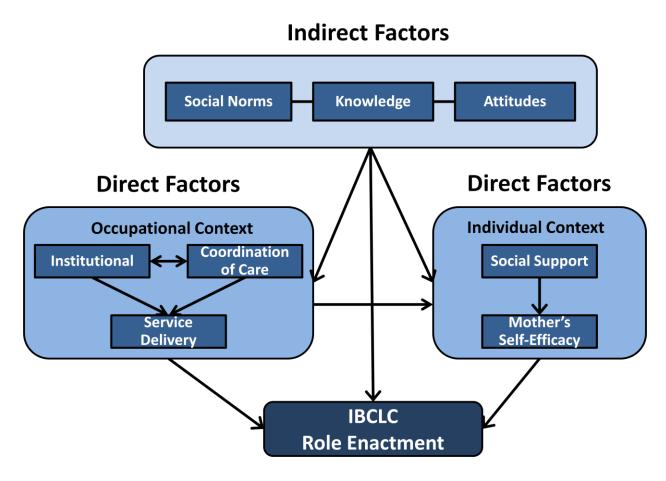


Figure 6 – IBCLCs' Perceived Influences to Managing Breastfeeding Problems

Three interrelated indirect factors (social norms, knowledge, and attitudes) emerged from the analysis as aspects related to the role enactment of the IBCLC. These interrelated factors represent broad areas of concern for IBCLCs through their influence on healthcare providers and

administrators, mothers and family members, and themselves. Two categories of direct factors (occupational and individual contexts) also emerged from the data to explain IBCLCs' perceived barriers to managing breastfeeding problems. Within the occupational context, participants identified a connection between policies and practices within institutional settings and the ability of various healthcare professionals to collaborate and coordinate care for breastfeeding dyads. These factors impact the delivery of services and the type of care that mothers and infants receive. As shown in the model, role enactment of IBCLCs in terms of managing breastfeeding problems is partly dependent on the combination of factors within their diverse occupational settings and among the range of providers involved in caring for the mother-infant dyad. In addition, their role enactment is also influenced by the mother's self-efficacy, which is often shaped within the structure of the mother's social support system. The results of this study demonstrate that the relationships between the factors presented within this model are often complex and overlapping. The following interpretation of the results from this study are grouped by the indirect and direct factors that emerged from this research and form the basis for the development of the model presented in Figure 6.

Indirect Factors: Social Norms, Knowledge, and Attitudes

Although public health acknowledges and promotes breastfeeding as the best source of infant nutrition, societal norms about breastfeeding are incongruent with our nation's health care goals. In this study, many participants identified a cultural mindset of bottle-feeding as the accepted norm, which may be indicative of a larger socio-cultural ideology whereby women's role in mothering is not valued. Historically, the lack of supportive healthcare and employment policies for breastfeeding mothers suggest that social norms about breastfeeding eclipse knowledge of the health benefits of breastfeeding. However, new laws and policies have been

enacted that support breastfeeding (Patient Protection and Affordable Care Act, 2010) and several participants felt that the culture is shifting to be more breastfeeding-friendly. For example, one participant commented,

I think our society is slowly turning, that breastfeeding isn't the "ick" that most people thought it was, "Ew, gross." . . . And breastfeeding is more on the – the - the forefront now because more workplaces are starting to support breastfeeding, where they never were before. We have a long way to go. So, understand that. We still have a very long way to go. (P1, hospital, 496:498)

There exists; however, a clear and present tension between the growing perception of a breastfeeding-friendly culture and the persistence of the formula industry. Specifically, IBCLCs expressed concern that healthcare professionals who are charged with disseminating breastfeeding support and information are sometimes learning from representatives of formula companies. Additionally, WIC currently asserts a breastfeeding-friendly philosophy, and yet according to participants, the formula industry has a powerful influence on obfuscating the communication of this philosophy to families. In commenting on WIC as the largest purchaser of formula in the U.S., one participant said, "So working at the WIC office, it has seemed to me that there was one room in the WIC office that promoted breastfeeding and the other eight that didn't. So what are the chances that the mother is going to get the message that breastfeeding is what's normal?" (P5, WIC, 91) Previous research has found that the supplemental package that includes free formula is valued more by mothers than the expanded food package for breastfeeding mothers (Haughton, Gregorio, & Perez-Escamilla, 2010; Holmes, et al., 2009; Jensen & Labbok, 2011). Several WIC-based participants described being vexed in their attempt to promote breastfeeding as the normal way to feed an infant within an organization whose mission is dedicated to infant nutrition broadly and is also a major supplier of formula supplement to mothers.

The current social norms about breastfeeding influence the knowledge and attitudes that various healthcare providers, administrators, mothers, and family members have about breastfeeding. When levels of knowledge and attitudes about breastfeeding are different among them, the provision of consistent, optimal breastfeeding support for families is compromised. In accordance with previous research indicating that pediatricians and nurses lack knowledge about basic breastfeeding problems and the skills to manage these problems (Krogstrand & Parr, 2005; Register, et al., 2000; Renfrew, et al., 2006; Schanler, et al., 1999), IBCLCs in this study believe this lack of knowledge is a barrier to the provision of evidence-based care for breastfeeding mothers.

Prior studies also describe health professionals' reliance on their own experience or that of their spouse for breastfeeding knowledge, and this experience shapes their attitudes and informs how they manage problems (Bergman, Larsson, Lomberg, Marild, & Moller, 1994; Feldman-Winter, et al., 2008; Hellings & Howe, 2004; Nelson, 2007; Szucs, et al., 2009). Although personal experiences may lead to greater knowledge, more positive attitudes, and supportive practices, the reliance on personal experiences may be problematic if the provider's experience was not positive. IBCLCs in this study posited that the personal experiences of providers sometimes leads to the dissemination of inaccurate information or the expression of negative attitudes toward breastfeeding. A recent study of 80 physician mothers found that 57% desired to breastfeed for 12 months, but only 34% met their intended breastfeeding goals. The authors reported that the breastfeeding duration of these physicians was associated with the promotion of breastfeeding to patients in their practices, although causality could not be determined (Sattari, Levine, Neal, & Serwint, 2013). The influence of personal experiences on

providers' attitudes and promotion of breastfeeding was described in the present study as having both a positive and negative impact on their patients. For example:

There's more women or pediatricians and more women have babies and they're breastfeeding and they're going back to work and they're pumping for their babies at work and . . . the mom comes to see them and she's going back to work. "I work and I have a baby and I'm breastfeeding, too." So now you have this whole new dynamic where she's a working mom and she's a pediatrician and she's a mother who's a working mom. It just changes things. (P19, private practice, 879)

The pediatricians base their advice on breastfeeding on their personal experience and/or the experience of their spouse. If we know that 80% of moms start breastfeeding, and by six weeks, only 25% are breastfeeding, those pediatricians and/or their spouses are in the majority of that category too. It's just a depressing situation. (P21, private practice, 349)

Increased knowledge about and support for breastfeeding are important because research has shown that physicians and nurses are influential in mothers' decisions about infant feeding and are associated with longer breastfeeding duration (DiGirolamo, et al., 2003; Taveras, et al., 2004a). If these professionals are better prepared to successfully breastfeed their own children, perhaps they will be better equipped to support their patients. Future research should explore the need for interventions that address the barriers for healthcare professionals to successfully meet their breastfeeding goals as working mothers. However, findings from this study suggest that educational interventions for healthcare providers are needed to ensure that they share accurate information and offer adequate support to breastfeeding mothers regardless of their personal experiences. Previous research has found that these types of interventions are effective at improving knowledge and attitudes about breastfeeding among healthcare providers and improving breastfeeding rates (Feldman-Winter, et al., 2010; Labarere, et al., 2005; Mellin, et al., 2011; Vittoz, et al., 2004).

Attitudes of providers may be shaped by a combination of factors, such as current social norms, knowledge and skills, personal experiences, and the perspectives of their peers. The belief that social and cultural norms about breastfeeding are shifting corresponds to participants'

perception that more providers are becoming knowledgeable about and supportive of breastfeeding. For example, one participant felt that knowledge and attitudes about tongue-tie have changed in the past three years. She commented, "we've actually gone from pediatricians who didn't look at [tongue-tie] or didn't believe that it needs to be dealt with to nurse practitioners and some physicians that are willing to bring her in." (P9, hospital, 315) Some participants also suggested that as more mothers are breastfeeding their infants, their physicians must become more knowledgeable to keep up with the demands of their patient base. For example, an IBCLC working at WIC commented, "I have seen that some women are leaving their doctors to go to doctors that are more breastfeeding-friendly because they want that support." (P24, WIC, 585) These changes are critical because the knowledge and attitudes of providers (indirect factors) about breastfeeding likely influence institutional policies and practices and their willingness to collaborate with other providers in an effort to provide the best care possible (direct factors).

When healthcare professionals truly value breastfeeding, they will be more likely to adopt breastfeeding-supportive practices. In contrast, if healthcare providers do not perceive breastfeeding as a "health imperative," as one pediatrician described, then their motivation to support breastfeeding mothers may be shallow and ineffectual. Some participants commented that healthcare providers may hesitate to promote breastfeeding because of the perception that, "For breastfeeding, it's still back to this I guess, social choice. If you want to you can. If you don't want to, we'll stand behind you all the way." (P5, WIC, 228:230) Other studies have suggested that physicians may wish to avoid pressuring mothers to breastfeed for fear of making them feel guilty or judged (Dillaway & Douma, 2004; Sattari, et al., 2013). The relationships between the philosophy that breastfeeding is a choice and the reluctance of physicians to

promote breastfeeding to protect mothers from feeling judged warrants further exploration.

IBCLCs noted that whether or not a physician promotes breastfeeding has an impact on mothers' self-efficacy, and in turn, the ability of the IBCLC to manage breastfeeding problems.

In this study IBCLCs observed examples of different levels of professional resistance to the implementation of breastfeeding supportive practices in accordance with the evidence base. Some of the resistance appears to be related to the age and gender of the provider, as well as his or her role expectations within the professional setting. Professional resistance of providers and administrators was described by participants as a result of a lack of knowledge about current, evidence-based recommendations for breastfeeding supportive practices. In addition, IBCLCs identified resistance among nurses who may not feel compelled to change their practices when they are already experiencing role strain. They also may not fully understand the impact of these practices on breastfeeding, such as giving a bottle of formula at nighttime, because they believe that they are proving the mothers with much-needed rest. Resistance to changing practices among night nurses has been similarly identified in other studies (Magri & Hylton-McGuire, 2013; Nickel, Taylor, Labbok, Weiner, & Williamson, 2013). It is important to understand the basis for this resistance because the continuation of sub-optimal breastfeeding practices creates additional obstacles for IBCLCs who are working to manage breastfeeding problems.

Despite facing professional resistance from other providers in their settings, IBCLCs develop strategies for managing breastfeeding problems. These strategies often include providing education and information to families in an effort to empower them to advocate for themselves. However, in addition to working with providers who resist transitioning to breastfeeding supportive practices based in evidence, IBCLCs in this study felt that their credential is not valued among other health care professionals. Perhaps because the profession

of lactation consulting grew out of the mother-to-mother support provided by the LLL, other professionals do not yet understand the extensive knowledge base behind the credential: "If you are an LC, your doctor doesn't know squat. [Laughter] He doesn't know if you went to school for that or not." (P21, private practice, 347:349) Participants acknowledged that their profession needs to gain credibility in the medical sphere so that other professionals understand that their expertise goes beyond experiential knowledge and is based in evidence.

Direct Factors

Combined, these indirect factors also influence direct factors in managing breastfeeding problems. The direct factors include institutional practices and policies and the coordination of care, which influence service delivery. These factors are different depending on the health care setting and range from positive to negative, and often include a combination of both. For example, while structural hierarchies are inherent in the hospital setting, state and federal regulations define institutional constraints in the WIC setting. Hospitals that are designated BFHI have implemented more practices and policies that are supportive of breastfeeding. These practices lead to better coordination and delivery of care to families, which facilitate the role of the IBCLC in managing breastfeeding problems. In contrast, many hospital protocols drive practices that undermine breastfeeding and inhibit coordination between providers. Lack of administrative support and budget cuts may impact staffing ratios for lactation consultants, which has consequences for service delivery and the IBCLC's ability to manage breastfeeding problems in a timely manner regardless of practice setting.

A concern for a commitment to evidence-based practices was extremely important to IBCLCs in this study. They often talked about their roles in terms of educating families and sometimes other providers about best practices and the latest research on breastfeeding. They

expressed frustration that other professionals in their settings and communities were not practicing from evidence-based research. In particular, IBCLCs had many criticisms about hospital policies and practices and often referred to the need for hospitals to become Baby-Friendly in order to address barriers. For example, "I think with the hospital not being Baby-Friendly they are recognizing some of their barriers." (P5, WIC, 115) Previous research supports the IBCLCs' perceptions that hospitals frequently do not follow evidence-based practices (Bartick, Stuebe, Shealy, Walker, & Grummer-Strawn, 2009). However, in hospitals moving toward BFHI designation, IBCLCs believed that the adoption of new institutional policies and practices facilitated their roles and enabled them to better support the mother-infant dyad: "we are on our way to becoming Baby-Friendly. We have to wait six hours now before we do a bath and hopefully they have at least two good feedings in there." (P14, hospital, 211)

Recently published research that aimed to identify the factors that influence the implementation of Baby-Friendly reported several findings that were echoed in this study. Nickel and colleagues (2013) interviewed physicians, nurse practitioners, administrators, and staff nurses working at eight hospitals. The participants reported that older, more experienced staff were less likely to be committed to implementing the Ten Steps; pediatricians opposed conducting newborn assessments in the mother's room; night shift nurses were less likely to take the time to provide breastfeeding support and believed that removing the baby offered the mother an opportunity to rest; administrative support is important to implementing breastfeeding supportive practices; visitors in the room had a negative influence on establishing breastfeeding; and staffing and training were inadequate. Each of these factors were identified by IBCLCs in this study as well, which suggests that these issues are likely representative of barriers to providing best practices in breastfeeding support by many hospitals.

Variations in policies and practices at WIC clinics were also identified as a problem by IBCLCs in this study, which was compounded by the lack of awareness of WIC services in general and negative perceptions about WIC. WIC-based IBCLCs acknowledged the need for better policies to change the image of WIC from a "formula place" to a breastfeeding place: "it's so engrained that WIC is a formula place, they don't necessarily think that we do more with breastfeeding and that, honestly, is an education thing and that's not another part of our job." (P24, WIC, 357) Future research about the perceptions of WIC and differences in policies and practices across WIC clinics could offer additional insight into the barriers faced by WIC-based IBCLCs specifically.

The amount of time needed to counsel breastfeeding mothers and staffing deficiencies have been identified as barriers for healthcare professionals (Bergman, et al., 1994). Participants in this study shared that perspective and felt that collaboration with IBCLCs would enable nurses and pediatricians to best meet the needs of their patients and provide overall better care. "There is some very good support with a few and some I think their reluctance to refer to lactation impacts the success that a mom has or the success we have in helping her." (P12, hospital, 524) IBCLCs indicated that these institutional practices, policies, and resources are indicative of the degree of collaboration between providers as well as the delivery of breastfeeding supportive services to families; these relationships are illustrated in the model presented above.

IBCLCs blamed the lack of coordination between healthcare professionals for disjointed or absent continuity of care, a lack of awareness about available services, poor referral processes, mothers receiving inconsistent or inaccurate information, and feeling underutilized or that their credential isn't recognized or respected. On the other hand, when IBCLCs gave examples of collaboration with other providers, they were more likely to have developed open lines of

communication, have effective referral processes in place, feel respected for their expertise, experience more role clarity among providers, and achieve overall better success in managing early breastfeeding problems. The following comments in Table 15 illustrate effects of either fragmented or coordinated care.

Table 15 – Impacts of Fragmented vs. Coordinated Care

	Lack of Collaboration	
Hierarchies of	They're getting conflicting information from their OBs, to delivering, to	
respect	their peds and then they come to WIC and now what? Where do I stand in	
	that medical hierarchy? (P6, WIC, 288)	
Poor referral	If they wait too long, thinking that breastfeeding is going to get better and	
process	it doesn't, well then, it's like swimming upstream trying to fix the problem	
	because usually the milk supply is not adequate. (P3, private practice,	
	181)	
Inaccurate and	We had issues when a lactations specialist who's helping a mom in the	
conflicting	hospital they would identify a tongue tie and they would go to a	
information	pediatrician and the pediatrician would say, "No it's not a problem."	
	That was a big barrier." (P15, hospital, 195).	
No continuity of	after they get home from the hospital, the real issues start. It's not when	
care	they're in the hospital and they have constant access to care; it's when	
	they get home and they're by themselves. (P30, private practice, 252)	
Positive Collaboration		
Good rapport and	We have a very good rapport and they frequently will come up and say,	
respect	"Can you go see this person?" or "Can you tell me what you think about	
	this person?" So yes, I think we have a very good rapport with our	
	hospitalists I mean they know that we are not going to say, "Oh you	
	can't use formula" because there are times when that has to be done.	
	(P16, hospital, 645:649)	
Effective referral	What one of our hospitals does is send us a list of everybody that's born	
process	that day. We find who are our WIC clients on that. Then we follow-up on	
	them. We're ahead of the game on there. Some of the other hospitals do	
	not do so. There's one hospital. That's the only hospital we're not behind	
	the curveball on. [Laughter] (P24, WIC, 119)	
Adequate process	it's usually pediatricians that will ask me, so they'll just confirm with me	
for follow-up	that I'm comfortable with breastfeeding at that time because we have that	
	little follow-up it's either 24 hours after discharge or 48. If I'm concerned	
	about feeding, I'll ask for an earlier visit. (P8, hospital, 515)	

The varying levels of autonomy for IBCLCs, combined with the degree to which they are in communication with other providers, influence the consistency and quality of information that mothers receive from each provider. When IBCLCs feel valued by other providers as part of the mother-baby healthcare team and their expertise is acknowledged, they are more likely to succeed in their efforts to support breastfeeding mothers. Although some participants are well-connected to other providers who respect their credential, for many, they describe the system of care as "broken" and struggle to provide best practices to mothers in their efforts to manage breastfeeding problems. This "broken" system can be detrimental to a mother's self-efficacy, especially when supplementation is recommended as a quick fix, further complicating the role of the IBCLC in supporting her through breastfeeding challenges. Unsupportive breastfeeding institutional practices (no rooming in, inadequate staffing, WIC policies about formula), a lack of coordination (providers not focused on dyad, ineffectual referral process), and poor service delivery (over-supplementation, delayed referrals, conflicting information) can all impact the self-efficacy of the mother which becomes an additional challenge for IBCLCs to manage.

IBCLCs described a range of poor service delivery issues as a result of the indirect barriers described above, lack of coordination, and institutional constraints. One common theme was related to supplementation as the quick fix for any breastfeeding problem. As one participant explained, "Formula doesn't fix breastfeeding. Breastfeeding fixes breastfeeding." (P23, WIC, 823) They often felt that physicians were overly focused on weight gain of the infant without considering the whole picture or taking the time to determine the source of the problem.

I wish that the pediatrician could be a little bit more understanding and lenient when it comes to an exclusively-breastfed baby's weight loss and subsequent return to birth weight versus a formula-fed baby's . . . I have heard pediatricians repeatedly encourage mothers, to me is the politically-correct answer: "We'll go ahead and breastfeed but

supplement until your white milk comes in" and that boggles my mind. (P17, hospital/private practice, 300:304)

Participants in an Australian study about the professional identity of lactation consultants also described a narrow focus of physicians on size and weight gain of the infant, compared to the holistic approach of the lactation consultant (Carroll & Reiger, 2005).

Some of the problems related to supplementation also stem from providers' lack of evidence-based knowledge and professional resistance. For example, one IBCLC explained that the night nurses don't realize that they are undermining breastfeeding by supplementing the baby with formula: "during the night, if mom's very tired, then they'll have pity on the mom and take the baby and give him a bottle so that mom can sleep." (P8, hospital, 129) A study about the adoption of breastfeeding best practice guidelines similarly found varying groups of nurses that were identified as "Eager adopters," "Fence sitters," and "The old guard." "The old guard" often worked the night shift and resisted new practices due to inaccurate beliefs that led them to fear these practices would harm the infants (Matthew-Maich, Ploeg, Dobbins, & Jack, 2013).

Factors within the individual context included social support for the mother and the mother's self-efficacy. IBCLCs were in agreement that the social support system of the mother could often make or break her success with breastfeeding by impacting her self-efficacy with breastfeeding. Research has shown that grandmothers and fathers are extremely influential on mother's breastfeeding success (Arora, et al., 2000; Scott, et al., 2006). Social norms, knowledge, and attitudes also influence family members involved in providing support to mothers. In particular cultural beliefs and practices may not be informed by accurate information, leading family members to undermine the mother's breastfeeding goals. IBCLCs acknowledge that social support can act as either a barrier or a facilitator in affecting the

mother's self-efficacy; these family dynamics are important for IBCLCs to understand in determining the strategies they will use in their provision of care.

IBCLCs also described the impact of providers on the mother's self-efficacy and felt that sometimes a lack of sensitivity or awareness about their language could undermine the mother's confidence in breastfeeding. For example, one IBCLC quoted a nurse in saying "Well, baby's mouth is small and your nipples are big." (P25, WIC, 231) She went on to explain that this observation was irrelevant and can really impact the mother's confidence. Prior studies have found that nurses and physicians underestimate the influence they have on mothers' breastfeeding decisions (DiGirolamo, et al., 2003; Dillaway & Douma, 2004; Freed, Clark, Sorenson, et al., 1995; Szucs, et al., 2009; Taveras, et al., 2004a).

Finally, the literature demonstrates that perceived insufficient milk supply is one of the most common reasons cited by mothers for early weaning (Li, et al., 2008; Odom, et al., 2013). The findings from this study indicate that IBCLCs would agree: "They don't trust their own bodies to provide for the baby." (P12, hospital, 376) Participants also described frustrations with unrealistic expectations of many mothers sometimes related to the impact of breast surgery on breastfeeding and sometimes related to a lack of adequate prenatal preparation or anticipatory guidance. These findings need further exploration in future research.

The combined indirect and direct factors described in this section are interrelated and complex. They function to either facilitate or hinder the role enactment of the IBCLC and they vary by practice setting, credentials of the IBCLC, and other factors. The model (Figure 6) may be applicable to examining the barriers and facilitators faced by other health care professionals as well. The relationships between the indirect and direct factors and the outcome of interest (role enactment) could represent a microcosm of the health care system more generally. Inherent in

the model is the flexibility to examine the ways that the barriers range from the macro level to the micro level within unique healthcare settings and among many types of providers.

Section II: Symbolic Interactionism and Family-Centered Care

Symbolic Interactionism

As opposed to a functionalist approach to studying the barriers to effective lactation consulting that would require a deductive theoretical approach, the researcher decided to take an inductive theoretical approach to the research questions. Because little is known about lactation consulting from the perspectives of the lactation consultant themselves, it was important to understand the actions of the individual actors (IBCLCs) based on their interpretations of interactions with others in their unique contexts. Grounded theory methodology, which has been informed and guided by symbolic interactionism, enabled the researcher to actively examine the phenomenon of interest such that interpretations were generated from close connection to the data, as compared to more passively applying existing theories. Through in-depth examination of lactation consultants' perceived barriers to managing breastfeeding problems and their concept of role in their professional settings, this study provides a glimpse into the experiences of IBCLCs.

IBCLCs' interpretation of various breastfeeding problems and how they are managed provide insight into the social context inhabited by various maternal and infant health providers. In the first premise of symbolic interactionism, objects have meaning for an individual which determines how this individual behaves or responds (Blumer, 1969). In the context of breastfeeding problems, the problem will have a different meaning depending on the perspective of the individual, thus, each individual will respond differentially because the problem holds a different meaning for each of them. For example, a pediatrician may believe that a healthy infant

is defined by adequate weight gain. They ascribe measurements of growth to their determination of health. If the infant is not meeting the growth standards that they have come to understand as symbols of health, they will likely respond by recommending that the mother supplement. In contrast, a lactation consultant may define the health of an infant through receipt of adequate nutrition. While certainly related to weight gain, adequate nutrition for a lactation consultant may be defined in terms of delivery of breast milk to the infant, and as such their actions will likely involve strategies that are intended to get breast milk into the infant (e.g., breast compressions, more frequent nursing, latch adjustments, referrals for frenotomies, pumping). In this way, meanings take on multidimensional definitions for various individuals involved in breastfeeding support and management.

The second premise of symbolic interactionism is that meanings arise from social interactions with others in a particular context (Blumer, 1969). How do interactions with other professionals and families inform lactation consultants' interpretation of particular breastfeeding problems and the strategies needed to resolve them? IBCLCs manage breastfeeding problems differently depending on their professional setting, the other providers that may need to be involved, and the individual family's needs. For example, the credentials of the lactation consultant, combined with their relationships within a hierarchical healthcare system may determine the strategies used for managing particular problems. As one participant explained,

It seems that physicians will take my word but I don't think it's only because I'm a lactation consultant; it's because I'm a nurse practitioner. When I was an RN IBCLC, I would go to the doctor who seemed to be more quote "breastfeeding friendly" to ask a question or suggest something. I have worked in the past with lactation consultants at my hospital who have had run-ins with physicians. It just makes them feel so devalued and sad. It's almost like, "Why do I even bother?" . . . So it's almost like they create an alternative plan for the family specifically because they've had run-ins with the provider. (P15, hospital, 287)

Similarly, if an IBCLC has collaborative professional relationships with providers who will clip a tongue-tie, for example, they may confidently refer mothers to that provider or collaborate with them in developing a care plan. In communities where collaboration with other providers is fragmented (due to an absence of social interaction), IBCLCs may provide a tongue-tie assessment report and evidence-based literature for the mother to take to a provider who is qualified to clip a tongue-tie. The settings of lactation consultants and their relationships with other providers are diverse and influence how they practice; however, they are similarly guided by the professional boundaries of their scope of practice. An ARNP or a pediatrician who is also certified as an IBCLC may interpret the management of breastfeeding problems differently because they have the training and credential to diagnose and treat the problems themselves.

The third premise of symbolic interactionism suggests that the creation of meanings is a fluid, interpretive process that develops as new interactions and experiences are considered by the actor (Blumer, 1969). Therefore, lactation consultants continue to inscribe and reinscribe how they define and manage breastfeeding problems as they interact with other professionals and interpret their role in the process. For example, lactation consultants interpret breastfeeding problems based on their clinical knowledge and capacity to manage these problems within the confines of their professional setting. However, they acknowledge that family dynamics also impact the strategies they use to solve breastfeeding problems. In managing the same problem, the IBCLC may be primarily providing education and emotional support for one mother, while offering technical advice to another. IBCLCs also describe how their practice has changed over time as they have reinterpreted the barriers to managing breastfeeding problems. One IBCLC provided an example of how her approach to breastfeeding management has changed as mothers' expectations and self-identified barriers have changed:

I just taught breastfeeding class last week and the comments are, "Well, I'm going to go back to work so I'm going to do it as long as I can," or, "I don't know how long I'm going to be able to do it." It's not, "I'm going to do it and my goal is exclusivity for the first six months." That's not their goal and I've changed some of what I say as well. There have been times when you say, "well, it's important that you really work for exclusivity. It's important. It counts. It matters." And now, it's "every drop counts — whatever you can do is going to be beneficial for your baby." Some of the attitudes of us as lactation consultants have changed. (P12, hospital, 164)

Self and Mind

In researching the perspectives of lactation consultants, the concepts of self and mind are essential to the interpretive process in constructing a professional identity. The researcher asked, what does the construction of "self" look like for IBCLCs and how does this "self," influence their management decisions? How do interprofessional relationships function within the web of interconnected constructed selves? "The self is defined from the Symbolic Interactionism perspective as a complex interpretive process that involves a continuous communication between the 'I' and the 'Me,' that is, the 'I' acts and the 'Me' defends, evaluates, and interprets the self as reflected by others" (Aldiabat & Le Navenec, 2011). The "I" consists of one's own interpretation of oneself, whereas the "Me" consists of one's interpretation of oneself through his/her perception of how others see him/her. This has been described as the "looking glass self" (White & Klein, 2008). Lactation consultants perceive themselves as the experts in breastfeeding management and providers of family-centered care around the mother-baby dyad. However, they also perceive that other providers do not always share this view of them. They described a lack of understanding among physicians and nurses about the extensive clinical knowledge and training of the IBCLC and a lack of value for the role of the IBCLC. The "self" then has the potential to become a site of contestation for IBCLCs who often rely on others to trust their expertise and respond to the breastfeeding problem accordingly. In the health care system there are many interconnected selves that are constantly renegotiated within and between

types of professionals and various settings. IBCLCs therefore must alter their strategies for managing breastfeeding problems as they interact with other providers in health care settings.

Role

The role of the IBCLC and other providers in the management of breastfeeding problems was a primary question for this research. The lactation consultants expressed their role in a way that aligns closely with their professional standards of practice as defined by IBCLE. The IBCLC credential has a particular meaning for them which demonstrates a specialized skill set, substantiates their expert knowledge, and forms the basis of their perceived identity. However, many IBCLCs described experiences of role conflict which were expressed through their descriptions of not being valued as important members of the health care team. Role conflict and role strain have been examined in the nursing literature (Brookes, Davidson, Daly, & Halcomb, 2007; Sleutel, et al., 2007), but these concepts have not yet been explored with lactation consultants. The participants in this study experience role strain similarly to nurses when they do not have sufficient resources to perform their expected role or when their expectations conflict. IBCLCs are often also RNs in the hospital setting which can create role strain if they are expected to perform nursing duties in addition to their responsibilities as lactation consultants. Role strain was minimized for those hospital-based IBCLCs who were not RNs. Furthermore, role strain was apparent when nurses who have a humanistic approach to care are asked to change their practices in a way that they feel may threaten their role identity as protectors of the mother and infant. Hospital protocols and patient load diminish their ability to provide the humanistic care that they have adopted as part of their professional identity and supported by their standards of practice.

In addition to maternity care settings such as hospitals, IBCLCs work in a variety of other settings such as WIC and health department clinics, private practice, pediatric offices, nonprofit organizations, and breastfeeding centers. In the present study, the factors influencing IBCLCs' ability to adequately meet the needs of the mother-infant dyads varied by their occupational setting and professional background credentials. A recent study examining IBCLCs' management of ethical dilemmas similarly found that context matters in that the same problem needs to be approached with differently depending on the context. In managing ethical issues, the lactation consultants in that study used strategies such as providing information to families, empowering mothers, and fostering respect and professionalism with other providers, among others. Interestingly, the authors also identified a desire by IBCLCs to avoid contradicting another healthcare provider and commented "she reasoned that the mother would be ill served if her confidence in her primary health care provider was undermined" (Noel-Weiss, Cragg, & Woodend, 2012) The concept of role conflict also emerged in the form of ethical dilemmas for participants in this present study. For example, many IBCLCs struggled with the need to provide accurate information to mothers as part of their role, but without undermining the expertise of her chosen provider. For example, one participant commented that

we have to politically and respectfully give information to parents without saying that their provider doesn't know what they're talking about. That's a very fine line to help the mother to be successful with breastfeeding and being respectful to her choice of doctor by giving her the informed education she needs to figure this out herself. (P1, hospital, 88)

Noel-Weiss and colleagues (2012), suggest that by staying mother-centered, the IBCLCs were able to manage their ethical dilemmas appropriately. Similarly, the IBCLCs in this study described strategies for providing information to mother in a way that would empower them to advocate for themselves with other healthcare professionals.

Identity

Lactation consultants also expressed a lack of clarity about the role of the IBCLC by other health care professionals. When role expectations are not shared by various professionals, they may not respond to each other in a manner that enables adequate role enactment. When physicians, nurses, and lactation consultants are in agreement about each others' role in managing breastfeeding problems a higher quality of role enactment is possible and role strain may be avoided. Comments from participants in the study such as "we're board certified, but that doesn't mean anything," indicate a lack of role clarity within many settings where IBCLCs work. Despite this lack of role clarity, IBCLCs in this study expressed an eagerness to work with other providers and share their knowledge in an effort to promote evidence-based practice, consistency in the provision of information and care, and the implementation of best practices that are most beneficial to each individual mother-baby dyad and family.

The researcher was also interested in understanding how identity influences the way IBCLCs manage breastfeeding problems and how their strategies further define their identity. The concept of identity is flexible for lactation consultants because they move between biomedical and humanistic models of care, which requires a multiplicity of the self that engages differently depending on the social context. Lactation consultants described themselves as holistic problem solvers who provide education, emotional support, assessments, and recommendations. They consider the psychological and physiological (mind/body) needs of each individual dyad in their provision of care. They commented that as IBCLCs they "look at the whole picture" which is similar to findings from an Australian study of IBCLCs, where the authors write, "LCs delineate themselves clearly from medical staff. They view this difference as arising not only from their training and development but as implicit in their philosophy,

especially in their ability to see the 'whole picture' from the interpersonal and the institutional to the wider social context" (Carroll & Reiger, 2005, p. 106). However their roles are socially defined within a medical hierarchy that drives their behavior and ultimately their identity as lactation consultants. The social context and the structural hierarchies also determine the degree of agency of the IBCLC in successfully performing her role identity. The professionalization of lactation consulting is such that the professional culture is continually evolving and roles remain fluid and tied to a variety of settings and professional backgrounds (Carroll & Reiger, 2005; Eden, 2013; P. Hall, 2005). The professional identity of the IBCLC will likely continue to change and evolve with the shifting of socio-cultural values and norms about breastfeeding. The role of the lactation consultant is also dynamic as IBCLCs continue to locate their position and identify their occupational boundaries between and among other health care professionals.

Symbolic interactionism proved to be an important framework with which to explore the perspectives of lactation consultants. This approach enabled the researcher to interrogate the symbolic meaning of various aspects of the role of the IBCLC that is produced and reproduced through their differential experiences within the context of the health care system. Applying a symbolic interactionist framework in this study helped to reveal the significance of interactions between professionals as critical to the provision of best practices in the successful management of many breastfeeding problems. This framework also offered an important lens with which to identify aspects of family-centered care in lactation consulting.

Family-Centered Care

In exploring lactation consultants' perceptions of the barriers to managing breastfeeding problems and the roles of various professionals in supporting breastfeeding families, an understanding of the integration of Family-Centered Care (FCC) as a philosophical approach in

breastfeeding support emerged. The core principles of FCC highlight the importance of (1) relationships between providers and families that foster dignity and respect, (2) information-sharing, (3) participation, and (4) collaboration (Johnson, 2000). As previously described in Chapter 2, FCC has been somewhat integrated into maternity care and pediatric care individually, but has received little attention in the area of breastfeeding management and support. While much of the philosophy of FCC is ideally suited to professional breastfeeding support, there are several elements that make it a difficult practice approach to fully integrate.

FCC historically arose to provide better integrated care for children with special health care needs (CSHCN) who often need long-term care and support, and thus, are immersed in the health care system for a considerable length of time. During this time they commonly have a primary physician who will maintain and develop a relationship with the family over time, and other providers with whom they may interact on a regular or semi-regular basis. This system of care has become commonly known as the Medical Home concept and requires a high level of coordination, demonstration of respect, and consistent information sharing (Kuo, Houtrow, et al., 2012). In addition to the Medical Home model of care, there has been some research on the implementation of FCC in pediatric inpatient settings in the form family-centered rounds (FCR) which have been found to be successful at improving family satisfaction with the care received (Knoderer, 2009; Kuo, Houtrow, et al., 2012; Kuo, Sisterhen, et al., 2012; Rosen, Stenger, Bochkoris, Hannon, & Kwoh, 2009; Voos et al., 2011). Although the literature is sparse, FCR on postpartum units that include the family and the medical team may also be effective (Segel et al., 2010).

The operationalization of FCC in breastfeeding support and management of problems may look different than in the typical Medical Home or inpatient settings where FCC has been

implemented. While the mother-infant dyad will generally develop an ongoing relationship with the pediatrician or family doctor, the time spent in the hospital setting and post-discharge regarding breastfeeding management for a healthy dyad is relatively brief and may consist of limited contact with healthcare professionals who have specialized knowledge about breastfeeding. In the present study, time constraints due to institutional policies, multiple job expectations, and inadequate staffing were identified by lactation consultants, nurses, and pediatricians as significant barriers to providing adequate breastfeeding support. IBCLCs frequently noted the time intensive nature of managing breastfeeding problems with families because of the need to observe entire feeding sessions while combining expert clinical knowledge and problem-solving skills with emotional support. Pediatricians in this study distinguished themselves from the typical pediatrician because they intentionally dedicate the time to observe a mother and infant nursing to problem-solve the breastfeeding issue. They believe that approaching breastfeeding support in this way is an important investment in building trust and respect with the family. For example,

It's an investment also. I look at it as, if I can make this succeed with this family, then they're in my pocket. We've got trust, we've got a good start, and we're on the same team, and it's a valuable thing for me being in practice. (P27, pediatrician, 595)

Unfortunately, limited insurance coverage for families and inadequate reimbursement policies for physicians are perceived as prohibitive of the time investment needed to implement FCC in breastfeeding support. The AAP acknowledges that FCC requires additional time, but describes this as a valuable investment which will improve care, lead to better outcomes, and minimize future costs (American Academy of Pediatrics, 2012b).

Operationalizing FCC in breastfeeding management also requires a different perspective about who is the recipient of care. Despite the intentional inclusion of family members as elemental to traditional FCC, the child nevertheless remains at the center of the care as the

primary individual whose needs are being addressed (Pettoello-Mantovani, et al., 2009). Lactation consultants in this study consistently described the importance of providing breastfeeding support and management of problems in the context of the *dyad*. The concept of the dyad in breastfeeding shifts the center from the infant, to the mother and the infant as a codependent unit. While the infant's growth and development remains a primary concern in the provision of breastfeeding support, the needs and health of the mother must also be considered. The implementation of Family-Centered Breastfeeding Care (FCBC) would require the coordination of healthcare providers who address the needs of the mother *and* the infant in the context of the family and would be individualized based on each dyad's needs. Results from this present study indicate that the lack of coordination of care, time constraints, and role strain are barriers to the implementation of FCBC. For example, breastfeeding problems identified in Research Question 2 results may require a comprehensive assessment of the mother and the infant, observed feedings, prescriptions for medications, and/or creative problem-solving solutions.

Research has shown that the provision of FCC relies on an element of role negotiation among various providers and the family, which is informally cultivated over time (Corlett & Twycross, 2006; MacKean, et al., 2005). Role negotiation is partly reliant on role expectations. Some IBCLCs struggle with role expectations, especially when their job description requires them to perform nursing duties in addition to lactation support. Physicians also may struggle with role expectations when families perceive them as well-informed about breastfeeding and in actuality, their knowledge is limited. One participant explained,

I find that pediatric residents hate not knowing the answer to a question . . . if you don't know how to answer somebody when you say to them "How's breastfeeding going?" They say "It's terrible. I'm having problems with X, Y, and Z." Well, if you don't know

what you're going to do to help that person, you don't even ask the question to begin with. (P29, hospital, 355)

In describing role expectations for pediatricians, obstetricians, and nurses, participants identified the need for them to obtain basic breastfeeding knowledge and skills, be supportive of breastfeeding, and know when to refer families to an IBCLC. Future research should explore other providers' role expectations of each other to better understand the degree of consensus between providers.

IBCLCs described the significance of their relationships with families as fundamental to their approaches to breastfeeding support. Participants in all settings provided examples of communication strategies to best meet the needs of the family. Providing their personal phone numbers and email addresses, as well as making themselves generally available to families at any time, were important aspects of providing continuity of care and fostering the provider-family relationship. Empowerment was frequently included in descriptions of their perceived roles and in particular, IBCLCs talked about "becoming a partner with the mother." Role strain leaves some lactation consultants feeling as though they are focused on service-related tasks at the expense of empowering mothers and honoring the individual family's needs. This finding echoes previous research with nurses' perceptions of the challenges to providing patient-centered care in a hospital setting (Mikesell & Bromley, 2012). Role strain appears to inhibit the development of these relationships and undermine role negotiation between providers and families, and acts as a barrier for IBCLCs whose concept of care-giving is to become "a partner with the mother" and work as part of a team with other providers.

The desire for role clarity was in part based on the importance that lactation consultants place on a team-based collaborative approach to care and a recognized need for effective communication to best serve the needs of each family. IBCLCs perceive themselves as having a

specialized skill set that allows them to claim the role of breastfeeding expert; however, they also understand and accept that others play an important role in managing breastfeeding problems and perceive the mothers as the ultimate experts on their family's needs as the breastfeeding experience evolves. Previous research indicates that the application of FCC has often been defined and operationalized by providers, rather than through collaboration among various providers and the family (MacKean, et al., 2005). According to IBCLCs in this study, elements of FCC in the professional management of breastfeeding problems are individually evident, but the co-conceptualization of roles between multiple providers and family members is generally absent or tenuous at best.

The lack of collaboration between health care professionals also serves as a barrier to the provision of FCC in breastfeeding support. IBCLCs describe frustration in not being included as legitimate members of the health care team or valued for their specialized skill set in breastfeeding management. Although some IBCLCs have developed excellent rapport and relationships with other providers in their communities, the coordination of care was more commonly described as dysfunctional and fragmented. Ultimately, in a fragmented system of care, families struggle to access breastfeeding support and services which may lead to early weaning and/or a failure to meet their intended breastfeeding goals.

IBCLCs also identified gaps in continuity of care as problematic in assisting families with accessing accurate information and support services. Previous studies have reported that families want accurate information and desire to engage in shared decision making with health care professionals (Lindeke, Krajicek, & Patterson, 2001; Smalley, Kenney, Denboba, & Strickland, 2013). Information-sharing is a key element of FCC and requires the development of trust between providers and their families for the information to be well-received (Corlett &

Twycross, 2006; Kuo, Houtrow, et al., 2012). The participants in this study often discussed the problems associated with mothers receiving conflicting information from various providers, which may impede the process of building trust between providers and families that is needed in a shared decision making model of care.

A FCC approach acknowledges that mothers need accurate information to develop the confidence to become advocates for their health and that of their families. IBCLCs often emphasized the importance of the mother's self efficacy in achieving her breastfeeding goals. Several participants commented specifically on the vulnerability of new mothers who may be intimidated by physicians or nurses and desire to make the "right" or "best" decisions for their infants. When mothers lack accurate information and self-confidence in their ability to successfully breastfeed, they have less agency in the decision-making processes. Indiscriminate recommendations for supplementation by providers (as described by several participants) are indicative of a paternalistic approach to care that capitalizes on the vulnerability of the mother. One pediatrician explained this challenge for mothers to be their own advocates:

when it comes right down to it, after delivery, I think it's just that they're tired, they're exhausted, they're scared, and they're going to pretty much do what gets told to them as best for the baby, "This is best for your baby." It's really hard to fight that. I don't think we should put that on parents' shoulders to fight for that because they're just too vulnerable at that place. (P27, pediatrician, 255:257)

The medical model of care values authoritative knowledge that is defined by specialized skills of various providers and is the basis for professionalism. IBCLCs were clear that they rely on medical providers to diagnose and treat many breastfeeding problems; however, their approaches to managing breastfeeding problems seem to have developed from a more humanistic model of care similar to the field of nursing. Although the different models of care intersect and can function simultaneously, the resulting hierarchy of power and control may inhibit collaborative processes and negatively impact the provision of care to families. The hierarchies

of power and control in these settings are also particularly important to consider in the provision of FCC because the position of the patient and family within the hierarchy matters. Inequalities in power develop because the providers are familiar with the setting while the family is not, the family is there seeking medical advice/expertise from those with authoritative knowledge, the providers may act as gatekeepers of this authoritative knowledge, and parents are expected to conform to the organizational norms and follow policies. Many IBCLCs in the present study described mothers as being "vulnerable," which may lead providers to control the amount or type of information shared with families. A family-centered approach to the professional management of breastfeeding problems requires an acknowledgement of the strengths of the family and a negotiation of roles such that the family feels a sense of empowerment and agency in their care.

IBCLCs described professional resistance as a barrier to providing evidence-based and family-centered breastfeeding support. Professional resistance to best practices in breastfeeding management is illustrative of the hierarchical systems of power and control that have been inculcated into the medical model of care. The following lengthy excerpt provides a glimpse into one hospital setting where professional resistance, attitudes, lack of knowledge, and lack of value for breastfeeding as professional cultural norm prevent the provision of FCC:

Respondent: So, we had this recent big blow up here with rounding in the room. Rounding in the room with the parent and the baby and not rounding up the babies to go to the nursery is a big deal to me. I hate that when they round the babies up and take them to the nursery where they sit waiting for people to come to make rounds. The new nursery in this building that they're going to move into doesn't have a nursery. That's based on the national module of where we're going with this, with the JCAHO Standards. Everybody in this pediatric community who rounds here rounds in the nursery except for me and [another pediatrician]. That became this big discussion.

She suggests that the professional resistance is related to a lack of comfort in being in a woman's personal space as a man.

We were trying to persuade people, "It's not so bad. You just take your stethoscope . . . and you go into rooms and the computers are all in the rooms. You can do it all in there." We just could not get people to do it. The leaders mostly in this group here are [name of pediatricians]. . . They're both guys and they both just don't feel comfortable in the mom's room. I think it's because they're guys. It's just that way. You have to kind of trip over people's suitcases with their underwear hanging out and there's their toothbrush at the sink. It's not a set up to easily round in a room and feel like you're not kind of wading through somebody's personal stuff to get to the baby. The new rooms are supposed to be better that way but we'll see.

In the construction, there was this period of time where they had to close the nursery and the hospital just all of a sudden told the pediatricians, "Well, you're going to have to round in the room because the nursery is closed." You haven't seen so much screaming. People were throwing tantrums about until finally . . . those guys persuaded the hospital to reopen the nursery so they could round because they just would not change. They would not change. [Laughter] That made me realize how fundamental this is. That seems like such a simple thing, doesn't it? Just go to the room and round. What is the problem with that?

Interviewer: What were the reasons that they...?

She also explains that the reasons given by these physicians for their resistance are simply excuses and suggest a basic unwillingness to change and also reflect a hierarchy of power.

Respondent: The lighting is bad, that's bullshit. It's not. There aren't enough ophthalmoscopes. Okay, so we got six more pairs. That's bullshit. The computer never works which is always true. That's whether you're in a nursery or not in the nursery. [Laughter] We want to see each other. It's a socializing thing. We get to see each other. That's not true. Nobody ever talks to each other in a nursery which is all like doing our thing and mad at each other, anyway. [Laughter] It's just that there are no excuses that I really found valid except that it's the way that it's always been done.

[Male pediatrician name] is powerful, though because his group . . . they have the most babies. He says, "We have so many babies. It's just more efficient if we'd line them up and do them like that." I go, "[Pediatrician name], there are some days you have one baby or no babies. I mean, come on, there are some days you have six babies but when you have six babies, it takes you just as much time if you just go room to room and get it all done. Just try it." "No, no." So, they finally just persuaded the hospital. We had a meeting where he almost spit in the administrator's face, I swear. [Laughter] They had some back room meeting and decided to open up the nursery again.

Here she attaches the resistance to the age of these physicians who are stuck in their ways. This is interesting because as new evidence-based research emerges, physicians have a responsibility to learn and practice this evidence.

That's why I say, people like us old farts, they're just going to have to die off. Then these new people will come in. So, in the new hospital, there is no nursery in that new L&D. They're going to have a Circ [circumcision] room like a procedure room that's small. But I'll bet you that group will have their babies brought there. They'll just sit there waiting for their babies to be brought. The nurses will just have to spend their time carting babies back and forth. [Laughter]

Interviewer: What are they doing? These appointments, they're just like checking the basic, whatever it is that they're checking on the babies. Do you think being in the same room with the mom while they're doing it leads to too many questions or they think it takes more time?

In this next comment, this participant describes avoidance as a strategy for physicians to remain steadfast in their ways. She explains that this may be in part because they do not have adequate knowledge or confidence to manage the breastfeeding issues that may arise.

Respondent: Both. They don't want to hear those questions because they're usually about feeding. They almost always tell you that he's just not eating enough. I'm having problems with latching or I'm not sure what to do here and they don't know what to say. What they need to say is — they don't have to do it themselves. They just have to get help for that mom through the staff but they don't want to hear that because it feels like an impossible thing.

Often in the rooms, there is lots of family. You have to ask them to step out if they're not immediate family so you can have some quiet and focus. That often doesn't feel comfortable. But nobody cares, people are glad to step out, really. [Laughter] They're there because they thought they are supposed to be there but really they don't know what to say. I don't know, I think it's just the way it's always been done and where their comfort is and their perception of their time needs. (P27, pediatrician, 525:543)

One of the core principles of FCC is "Collaboration among patients, families, and providers occurs in policy and program development and professional education, as well as in the delivery of care" (Johnson, 2000). Principles of FCC are included in the practice philosophies of pediatricians, nurses, and lactation consultants (American Academy of Pediatrics, 2012b; International Board of Lactation Consultant Examiners, 2008; Pillitteri, 2007). IBCLCs in this study described communication attempts with providers and families that are inclusive, but also identified a lack of reciprocal communication efforts by other providers in particular. This lack of communicative interaction reinforces the institutional hierarchy and

power differentials between different types of providers within the biomedical system. Although lactation consultants may practice elements of FCC and are family-centered in their philosophical approaches to breastfeeding management, until collaboration strategies with other providers reflect the value of individual roles, the provision of care cannot be considered family-centered.

FCBC requires a systems approach that incorporates family-centered principles at the level of the mother-baby dyad, family, community, health care system, and policy. The range of barriers identified by lactation consultants intersects all of these levels. The findings from this study provide additional support for the Surgeon General's Call to Action to address the barriers at every level of the system (U.S. Department of Health and Human Services, 2011b). In particular, at the health care level, a lack of interprofessional collaboration and a shared philosophy among providers that values breastfeeding were major barriers to providing optimal FCBC for these IBCLCs. Based on the literature and results from this study, the PI proposes a set of 10 Principles of Family-Centered Breastfeeding Care (FCBC) presented in Table 16 below.

An innovative, transformational approach is needed throughout the system of health care delivery in the support and management of breastfeeding to effectively apply FCC. Since little is known about the potential for FCC to be applied specifically to breastfeeding support, more research is warranted. This exploration of the role of lactation consultants as providers of FCC in the context of a health care team begins to address some of the gaps in the literature on FCC and breastfeeding management.

Table 16 – 10 Principles of Family-Centered Breastfeeding Care (FCBC)

Table 10 101	inciples of Family-Centered Breastreeding Care (FCBC)
Principle #1:	The mother-infant dyad is at the center of a team-based approach to
	breastfeeding support.
Principle #2:	Breastfeeding is perceived as the normal and optimal method of infant-feeding,
	which is reflected by the attitudes, knowledge, and skills of healthcare
	providers, and Baby-Friendly guidelines which includes the 10 Steps to
	Successful Breastfeeding and adherence to the WHO International Code of
	Marketing of Breast-milk Substitutes.
Principle #3:	The family is respected as the primary caregivers and advocates for their
	children.
Principle #4:	Culturally-competent care respects breastfeeding as more than just a feeding
	behavior and honors the many reasons behind a family's decision to breastfeed
	(or not).
Principle #5:	The family context is considered in the provision of breastfeeding support,
	which includes various sources of social support, cultural norms, family
	dynamics including other children, previous experiences, the economic
	situation, and personal goals, among others.
Principle #6:	The strengths of the family are acknowledged and utilized to empower the
	family to make the best decisions possible to support the breastfeeding dyad.
Principle #7:	Anticipatory guidance and the provision of care are flexible and dynamic to
	meet the evolving needs of the individual breastfeeding dyad and family.
Principle #8:	Unbiased and accurate, evidence-based information about breastfeeding is
	provided to the mother and other family members.
Principle #9:	Communication and collaboration between families, healthcare providers, and
	community support resources demonstrates respect for individual roles and is
	optimally structured to provide the best care possible.
Principle #10:	Continuous quality improvement ensures continuity of care in breastfeeding
	support and access to services for all families, across settings, and over time.

Section III: Strengths and Limitations

As with any research, the results and interpretations of this study are subject to the personal biases of the PI. The PI is a mother of two children and experienced some breastfeeding problems with both of them. She benefited from professional lactation support and became interested in this topic because of her personal experiences. She is also a Certified Lactation Counselor (CLC), which is far from the level of expertise and training of the IBCLC credential, but may have led to some biases due to some clinical knowledge about breastfeeding.

Bracketing techniques such as keeping a reflexive journal, working with an independent research assistant in coding, identifying and revisiting assumptions, and member checks were employed by the PI to increase the credibility and dependability of the results and interpretations. The past experiences of the PI, while potentially adding biases, also could have strengthened the interview process and analysis because she has some clinical breastfeeding knowledge and training as a CLC. This background likely informed the development of relevant and appropriate questions.

There also may be differences between those who agreed to participate in this study and those who did not respond to recruitment emails or phone calls. Purposive and snowball sampling methods were used to capture a broad range of experiences; however, the perceptions of some IBCLCs (African-American) and from particular settings (BFHI) were not wellrepresented in this study and should be included in future research. In addition, there are 67 counties in Florida and lactation support in communities varies greatly between urban, suburban, and rural areas. Although the PI was able to include participants from each major region in Florida, there could be additional issues that were unexplored due to geographical limitations. The PI kept careful notes about the process of theoretical saturation to ensure that this limitation would be minimized. Also, only IBCLCs were included in this study. Other breastfeeding support persons and providers, such as physicians, nurses, and CLCs, may have additional insights into the barriers to managing early breastfeeding problems. IBCLCs working only in a NICU setting were excluded because the needs of infants who are in the NICU are unique and specialized. The barriers faced by these IBCLCs are important and should be explored in future research.

There are also several strengths to this research. The diversity in employment settings, geographical regions, and credentials of the IBCLCs provided the researcher with a broad range

of experiences to interrogate through constant-comparative analysis. The application of grounded theory methodology generated emergent themes in a previously unexplored area of research and led to the development of a framework that could be used to explore barriers for other providers and in other settings, perhaps beyond lactation consulting and into other areas of health care. While there have been some studies that examine the impact of lactation support on breastfeeding outcomes (Bonuck, et al., 2005; Castrucci, et al., 2006; Rishel & Sweeney, 2005; Witt, et al., 2012), there are very few qualitative studies that focus on the perspective of lactation consultants about their experiences (Buckley, 2009; Carroll & Reiger, 2005; Eden, 2013; Noel-Weiss, et al., 2012; Szucs, et al., 2009; Torres, 2013). The PI is unaware of any research that specifically focuses on the range of barriers for lactation consultants in managing breastfeeding problems, their perceived roles for providers who work with the mother-baby dyad, and communication strategies used with other providers and families. The use of qualitative methodology in the present study allowed for in-depth conversations with participants and the generation of rich data that provides important insight into their experiences.

To the PI's knowledge, there is no published research that examines FCC in the context of breastfeeding specifically. This study investigated IBCLCs' perspectives on the application of FCC in the professional management of breastfeeding problems and identified barriers to providing FCC. These results have also led the researcher to set forth a set of principles for Family-Centered Breastfeeding Care (FCBC), which contributes to the literature about FCC, moves the science forward, and could influence policy change to improve breastfeeding support.

In addition, the participants in this study may have benefited from the opportunity to participate in this research. Qualitative research can benefit participants in that they have the opportunity to talk about issues that are important to them, allowing them to feel valued and

empowered (Hutchinson, Wilson, & Wilson, 1994). Many participants in this study made comments that support this potential outcome of qualitative research. The following comments offer a few examples into the IBCLCs' perspectives about participating in this research study:

Golly, I think you covered it all. [Laughter] I think you pulled out some things I didn't know were issues. [Laughter] I do know I'm in a pretty cushy spot based on so many of the other things that I hear. (P8, hospital, 717)

I don't know, this is pretty thorough; I'm impressed. It's like, "Wow, I got to think about this." What comes to mind for me is how - it was interesting, your dreaming question and how you deal so much with barriers that you can get closed in by them yourself sometimes. I mean I don't think about it, but then when you go to dream, it's like, "Oh, how can it be different?" So I was grateful for the opportunity to have to look at some of the things that you were asking that go in areas that I hadn't allowed myself to go, I think. I mean not that I've never been there, but it's refreshing to do that. (P26, WIC, 246)

Finally, this study has the potential to inform policy change. The results support other research studies that identify the need for policy and institutional changes to address quality improvement and the delivery of evidence-based, family-centered care to support breastfeeding families (Bartick, et al., 2009). This study adds to that research by offering the perspective of the providers with the most expert knowledge in providing best practices for breastfeeding support.

Section IV: Implications for Public Health

Moving the Science Forward

Improving the lifelong health of mothers and their children is an important public health goal. Strong evidence affirms that non-breastfed babies are at an increased risk for a range of health problems and illnesses, and that breastfeeding is beneficial to the health and wellbeing of mothers (Ip, et al., 2009). Most women in the U.S. desire to breastfeed their babies. Data from the 2005-2007 Infant Feeding Practices Study II indicates that more than 80% of pregnant women intended to breastfeed. Of those who intended to exclusively breastfeed (59.6%), more than 85% intended to exclusively breastfeed for at least three months (Perrine, Scanlon, Li,

Odom, & Grummer-Strawn, 2012). Although intention is high, about 60% of mothers who intended to exclusively breastfeed did not meet their desired duration due to a range of factors. Factors that were significantly associated with increased odds of not achieving prenatally intended breastfeeding duration included the following: lactation issues such as latching problems and painful nipples, nutritional concerns related to issues such as sufficient milk supply and adequate weight gain, maternal or infant medical issues such as illness or medication needs, and effort related to milk-pumping (Odom, et al., 2013). Many of these factors can be resolved or mitigated through professional breastfeeding support (Labarere, et al., 2005; Taveras, et al., 2003; Taveras, et al., 2004b; U.S. Department of Health and Human Services, 2011b; Witt, et al., 2012).

A recent study found that integration of a scheduled breastfeeding evaluation by an IBCLC into a pediatric practice improved maternal satisfaction and breastfeeding duration. From 2007 to 2009 breastfeeding duration rates increased by 10% at two months, 15% at four months, 11% at six months, and 9% at nine months (Witt, et al., 2012). Though evidence exists documenting the positive influence of professional breastfeeding support for mothers, little is known about the perspectives of IBCLCs regarding the factors that influence their success as professionals in supporting families and managing breastfeeding problems.

The ultimate goal of this dissertation research was to inform the development of strategies to reduce the incidence of early weaning, thus improving our nation's breastfeeding rates and ultimately improving the health of women, infants, and future generations. By exploring the perspectives of lactation consultants about early breastfeeding problems and the factors associated with hindering the management of these problems, this research has important implications for public health. As described in the Surgeon General's Call to Action to Support

Breastfeeding, our nation needs to build a public health infrastructure that addresses multiple levels of interconnected factors that influence breastfeeding (U.S. Department of Health and Human Services, 2011b). While tackling the barriers individually is important, no one solution exists to provide optimal support to breastfeeding families, rather, as this study has shown, a comprehensive, interdisciplinary systems approach to addressing the barriers to supporting breastfeeding is necessary.

Major developments in maternity care practices are transforming women's experiences with breastfeeding and improving breastfeeding outcomes. Many of these changes have come in the form of national policy statements and practice recommendations. Healthy People 2020 offers a set of breastfeeding objectives for our nation and the CDC Breastfeeding Report Card provides a biennial report to assess state and national progress on these objectives and others (Centers for Disease Control and Prevention (CDC), 2013; U.S. Department of Health and Human Services, 2011a). CDC funded state-level programs such as Communities Putting Prevention to Work and Community Transformation Grants assist in supporting breastfeeding initiatives (Grummer-Strawn et al., 2013). At the hospital level, the Joint Commission's Perinatal Care core measure set provides standardized performance measures to assess particular aspects of perinatal care which, as of 2010, includes exclusive breast milk feeding. The Joint Commission accredits most hospitals and these measures serve to create awareness about hospitals' progress, to connect evidence-based hospital practices with outcomes, and to stimulate quality improvement efforts (United States Breastfeeding Committee, 2010). At the professional level, the AAP provides educational opportunities for pediatricians to gain more skill and expertise in breastfeeding support and management and urge pediatricians to develop breastfeeding-friendly practices (American Academy of Pediatrics, 2013a, 2013b).

The Baby-Friendly Hospital Initiative (BFHI), which recognizes hospitals that comply with the evidence-based Ten Steps to Successful Breastfeeding, has also advanced maternity care practices and improved breastfeeding support (Baby Friendly Hospital Initiative, 2010). The Maternity Practices in Infant Nutrition and Care (mPINC) survey is administered biennially to all maternity units in the U.S., and provides a comprehensive picture of the significant gap between evidence-based best practices related to the Ten Steps and the routine care actually provided (Centers for Disease Control and Prevention, 2011a). IBCLCs in the present study also noted these gaps; many of them expressed dissatisfaction with the lack of evidence-based breastfeeding support practices and indicated a need for the hospitals in their communities to work toward the BFHI designation. Although literature exists to describe some of the barriers to implementing Baby-Friendly practices, the results from this study add the perspective of the lactation professionals about these barriers.

Interprofessional Collaboration and Coordination of Care

The results from this study indicate a greater need for interprofessional collaborative approaches to managing breastfeeding problems and better coordination and continuity of care. The mother-infant dyad may encounter a range of healthcare providers within the maternity care setting such as obstetricians, pediatricians, midwives, nurses, and lactation consultants. These healthcare professionals each provide discipline-specific roles within their own distinct professional paradigms. Interprofessional or interdisciplinary collaboration among these providers requires shared decision making, open communication, and shared authority, which is often challenging in the context of these distinct professional paradigms (Lindeke & Block, 1998). In order to understand the constraints to interprofessional collaborative breastfeeding support, the present study explored lactation consultants' perspectives about the ideal roles of

these various professionals and the impact of the actual performance of these roles on their ability to successfully manage breastfeeding problems and support families.

When asked to describe the role of the IBCLC in the management of breastfeeding problems, the following themes emerged: educator, breastfeeding expert, member of the healthcare team, emotional support, holistic approach, and empower mothers. Participants identified themselves as the experts in breastfeeding and lactation; however, they felt strongly that other providers such as pediatricians, obstetricians, and nurses should have some basic breastfeeding knowledge and skills to support mothers. They also believed that these providers should know when to refer to an IBCLC who can provide more technical support with less time restrictions. For example, a hospital-based IBCLC believed the role of the pediatrician is to "do the overview and if there are any issues refer to the specialists, which would be us." (16, hospital, 669) Though some experienced IBCLCs had built rapport with other providers who utilized them as experts for breastfeeding support, most IBCLCs felt that physicians do not refer to lactation consultants as they should.

IBCLCs emphasized the importance of a team-based approach to breastfeeding management; however, they described being constrained by a lack of acknowledgement of the IBCLC credential by other healthcare professionals which could explain the lack of referrals and communication between providers. One participant said, "I believe because of our depth of knowledge we are truly the infant-feeding experts. I truly with that there was much more promotion of breastfeeding and the IBCLC credential and with acknowledgement from all pediatricians." (P17, hospital/private practice, 409) The lack of recognition for the IBCLC credential by other providers likely reflects the relatively nascent and ongoing professionalization of lactation consulting as a discipline.

Research related to the professionalization of lactation consulting has only begun to appear in the literature (Barclay et al., 2012; Carroll & Reiger, 2005; Eden, 2013; Torres, 2013) Hall (2005) explains that

In the development of a profession, the professional group takes control of the occupation. Through exclusionary closure, the profession limits the number and type of entrants into its fold, thus enhancing the market value of the service. The profession then begins to monitor and regulate the labour of other occupations that provide related services to protect its market niche (citing Witz, 1992).

The boundaries between various healthcare professions are often blurred, requiring ongoing "boundary work" (P. Hall, 2005; Torres, 2013). Findings from this dissertation suggest that lactation consultants are constantly negotiating multiple and overlapping roles as they iteratively define their professional identity within various contexts and settings. The "boundary work" of lactation consultants is important because interdisciplinary collaborative processes rely on the performance of individual roles within a team-based structure and family-centered care model. When competencies overlap, roles become "blurred" or not clearly defined within each discipline, and collaboration may become challenging. Indeed breastfeeding support spans the responsibility of several types of providers (obstetricians, midwives, nurses, lactation consultants, pediatricians, and sometimes specialists); while lactation consultants have carved out the role of expert in breastfeeding management, the distinct roles of the various professionals in this same area may not be entirely clear. Furthermore, the range of lactation credentials (e.g., CLC, CLE) further obfuscates the expert (gold standard) role of the IBCLC in breastfeeding management and support. Several IBCLCs commented that "role confusion is huge," especially for physicians who may not understand the extensive training and experience of the IBCLC

credential. One IBCLC questioned, "if [physicians] don't know what that role [of the lactation consultant] is, then how can they utilize them? Frankly, they can't." (P15, hospital, 437:4343) The lack of role clarity among various providers working with the breastfeeding dyad is a major barrier to interprofessional collaboration for breastfeeding support.

IBCLCs in this study described challenges in clarifying their role identity within their diverse settings and also noted the ways that the roles of other health professionals can impact their ability to manage breastfeeding problems in these settings. Participants commonly described the lack of role clarity as an obstacle to a team-based approach: "It's really difficult because you're relying on other people to actually be part of the team. They don't see you as part of the team." (P21, private practice, 239) IBCLCs clearly believed themselves to be the expert providers trained to manage problems related to breastfeeding and human lactation. The Surgeon General's Call to Action to Support Breastfeeding (2011) and the CDC's Breastfeeding Report Card also acknowledge IBCLCs as the experts in the professional support of breastfeeding (Centers for Disease Control and Prevention (CDC), 2013; U.S. Department of Health and Human Services, 2011b). Yet, participants in this study expressed that they do not feel valued for their expertise or respected as a profession, which clearly has an effect on their ability to collaborate with other providers. Although the professionalization of lactation consulting (Eden, 2013) has become more legitimized within the healthcare system, navigating their occupational boundaries appears to be a continuous process. Additional recognition by other providers and insurance companies may continue to advance the credibility of the profession, at which point interprofessional collaboration could be attainable.

This dissertation research offers insight into the challenges faced by lactation consultants in working to integrate into professional and community-based healthcare settings. In a study

examining the differences between lactation consultants and doulas in their approaches to navigating the medical context of maternity care, Torres (2013) posits that the medicalization of breastfeeding along with shifting occupational boundaries within the maternity care system afford lactation consultants easier entry into the medical maternity system than doulas. Torres (2013) writes that

the increasing medical support for breastfeeding, the call for medical management of breastfeeding, and the lack of breastfeeding training among medical professionals – have combined to create an opening for lactation specialists in the occupational boundaries of maternity care. This creates an opportunity for lactation consultants to claim jurisdiction over breastfeeding knowledge and fill this occupational space (p. 927)

Torres reported that the lactation consultants in her study experienced respect from other healthcare professionals and believed that they had organizational support to enact their roles. Referrals from other providers, opportunities to engage in changes to policies and practices, and the ability to educate other healthcare professionals about breastfeeding suggest indicates the presence of coordination of care that includes and values the expertise of the lactation consultant (Torres, 2013). In contrast, many of the IBCLCs in the present study described the failure of other providers to refer to lactation consultants in a timely manner as a major barrier to providing support to families. Though Torres (2013) studied lactation consultants in hospital settings, private practice and WIC-based participants in this study commented that the delay in referral can exacerbate the breastfeeding problem:

If they're not going to do a good job in anticipatory guidance, in teaching them when they leave, then they need to refer them . . . because I hate getting those babies after mommy had this great milk supply and now, her milk supply is in the toilet because the baby wasn't transferring and we have a baby that didn't gain weight who's at risk for going back in the hospital. That's the bad scenario. (P3, private practice, 189)

In addition, although some participants gave examples of efforts to engage with policy decision-makers and offer education in-services, they did not succeed in many of these endeavors. Unlike the lactation consultants in Torres' study, these IBCLCs expressed frustration at the lack of collaboration with other providers and did not seem well-integrated into the maternity care setting.

IBCLCs' philosophical approaches to breastfeeding support are diverse and combine several models of care which perhaps partly explains why they are not so easily integrated into an interprofessional collaborative team. In recent dissertation research on the professionalization of lactation consulting, Eden (2013) proposed that the knowledge and approaches to care of IBCLC professionals draw from three different models typically associated with other professionals or lay support. These models include the biomedical or technocratic approach of physicians, the nursing or humanistic approach of nurses, and mother-to-mother counseling or holistic approach of LLL Leaders and peer counselors. The value and utilization of evidencebased knowledge enables IBCLCs to practice within the biomedical system, though their approach to problems reflects aspects of humanistic and mother-to-mother care in providing emotional support and developing collaborative care plans (Eden, 2013). IBCLCs in the present study described a multifaceted set of professional roles that are represented by these three different models of care and offer additional support to Eden's findings. For example, they defined themselves as the breastfeeding experts (biomedical), educators and members of the health care team (humanistic), and providers of emotional support, empowerment, and holistic approaches to care (holistic).

In identifying barriers to interprofessional collaboration in breastfeeding support, the diverse backgrounds and professional settings of IBCLCs must be considered within a specific

context. IBCLCs hold a range of different credentials and as such, they may have different scopes of practice, levels of autonomy, role expectations, strategies for success, and work with diverse populations of mothers. Though the PI initially presumed that scope of practice would be an important limiting factor for IBCLCs, the majority did not describe their scope in this way. Rather they felt comfortable with their scope of practice and role in breastfeeding management and other barriers were perceived as more problematic. Participants believed that a team-based approach to breastfeeding management necessitates the acknowledgement of the distinct roles of various providers and the ability to refer to each other. One participant explained,

I have to be able to recognize I can't grab a pair of scissors and [clip a tongue-tie]. I need to be able to know my law and I need to know that, but I don't think I need to know the clinical aspect of it. I just need to know it's not my job. (P19, private practice, 787)

Despite feeling comfortable within their scopes of practice, IBCLCs did find that collaboration was challenging and limited their ability to assist women in managing particular problems. The amount of inconsistent information described by participants is not only due to a lack of evidence-based knowledge, but is also a product of poor coordination between providers.

IBCLCs noted the frustration of mothers who receive inconsistent or misinformation and believed that the failure of providers to "be on the same page," impacts the success of these mothers in meeting their breastfeeding goals. Although IBCLCs in this study believe that other providers (e.g., pediatricians, obstetricians, nurses) do have a role to play in breastfeeding support, research has shown that those providers lack comfort in their knowledge and skills (Hellings & Howe, 2004; Krogstrand & Parr, 2005; Register, et al., 2000; Renfrew, et al., 2006; Schanler, et al., 1999; Spear, 2006) and that they are more comfortable within their own typical client population which limits their ability to care for the mother and infant as a dyad (Arthur, et al., 2003). These studies have shown that a lack of knowledge and comfort with managing breastfeeding problems leads to sub-optimal breastfeeding support.

Healthcare professionals' diverse approaches to care emerge from unique value systems that are embedded within each profession's distinct cultural milieu. When these values are divergent, professionals may disagree on the appropriate solutions (P. Hall, 2005; Lindeke & Block, 1998). However, despite different professional values, team-based, collaborative approaches to care have been promoted by many healthcare professions as the expected standard. In an article about professionalism in pediatrics, Fallat and Glover (2007) wrote,

The AAP acknowledges the crucial role that nonphysician health care professionals play in pediatric care and stresses the importance of working collaboratively with nurses, social workers, chaplains, nurse practitioners, physician assistants, and others.

Pediatricians should respect the contributions of other health care professionals but also acknowledge the appropriate limitations and roles of these professionals (p. e1129).

Participants in this study reported mixed levels of engagement with pediatricians and other providers; however, the findings from this study emphasize IBCLCs' desire to be perceived as a valued member of the healthcare team. They believe that collaboration will improve outcomes and lead to more effective and efficient delivery of services in breastfeeding support. Because the role of many IBCLCs is currently marginalized within the biomedical hierarchy, it is important for public health initiatives to develop new strategies to integrate lactation consultants into collaborative approaches to care.

The AAP has taken a strong position on encouraging pediatricians to have an active role in the provision of breastfeeding support, and reinforces their responsibility to work as a team with other providers "coordinate with community-based health care professionals and certified breastfeeding counselors to ensure uniform and comprehensive breastfeeding support" (American Academy of Pediatrics, 2012a, p. e836). In addition, the Surgeon General's Call to

Action to Support Breastfeeding suggests that, "Ideally, there would be a system to ensure that breastfeeding mothers and their infants would receive skilled support with lactation from informed and available health care teams. Hospitals, primary care clinicians, and community organizations share responsibility for creating such systems." The report also recommends that healthcare systems "Establish partnerships for integrated and continuous follow-up care after discharge from the hospital" to accomplish this goal (U.S. Department of Health and Human Services, 2011b, p. 45).

Public health education and practice initiatives designed to improve care coordination for breastfeeding support need to address the barriers identified by IBCLCs in this dissertation study. In particular, the recognition and valuing of the IBCLC credential should occur at the policy level, institutional/organizational level, and community level in order to establish the credibility and respect needed to work collaboratively within the healthcare setting. By developing interprofessional collaborative education strategies, perhaps the social norms, knowledge, and attitudes about breastfeeding will transform and create a trickle-down effect to influence improved coordination and communication and lead to better service delivery of breastfeeding support. The findings from this dissertation indicate the need for improved interprofessional education opportunities so that various healthcare professionals are able to build rapport, develop respect, understand provider roles, and learn communication skills that will translate into collaborative practice. The concept of incorporating lactation professionals into interprofessional education strategies is new and should be explored in future public health program development designs. Those working to improve the delivery of breastfeeding support services can look to models from the maternity care setting that have been developed to

implement interprofessional collaboration between physicians and midwives (Avery, Montgomery, & Brandl-Salutz, 2012; Blanchard & Kriebs, 2012; King, Laros, & Parer, 2012).

In the development of a framework for high-performing pediatric care coordination, Antonelli, McAllister, and Popp (2009) defined care coordination as,

a patient- and family-centered, assessment-driven, team-based activity designed to meet the needs of children and youth while enhancing the caregiving capabilities of families. Care coordination addresses interrelated medical, social, developmental, behavioral, educational, and financial needs to achieve optimal health and wellness outcomes (p. vii) In this way, the coordination of care becomes interdisciplinary and focused on the unique needs of the individual families. Interprofessional collaboration is necessary to move toward the integration of Family-Centered Breastfeeding Care, yet a framework for collaborative competencies remains unclear in the literature. One study designed to understand the competencies needed for interprofessional collaboration identified two core competencies: 1) understanding and appreciation the roles of other providers, and 2) effective communication. The authors explain that "Health providers stressed the need for an environment that embraces collaborative practice and allows for collaborative competencies to develop. This includes providing time, resources, and encouragement to engage in collaborative practice as well as setting clear expectations" (Suter et al., 2009, p. 47). IBCLCs in the current study similarly identified the need for better understanding of roles among various providers and improved communication within the network of professionals who work with breastfeeding families. In addition, issues related to administrative support, time and staffing resources, and an overall valuing of the expertise of the lactation consultant were perceived as important to optimizing the coordination of care.

The AAP acknowledges that continuous, timely access to care for pediatric patients is integral to successful a successful model of collaborative care (Fallat & Glover, 2007). Because the health of the mother is intricately intertwined with the health and needs of the infant in a breastfeeding relationship, the provision of continuous access to care for the infant (who is the pediatric patient) must include continuous and timely access to care for the mother. This type of coordination is unique because the needs of two individuals must be considered in the provision of collaborative and continuous breastfeeding support. Continuity of care is important because women who receive sub-optimal breastfeeding support in the hospital setting are at a greater risk for early weaning or not meeting their breastfeeding goals (DiGirolamo, et al., 2008). Furthermore, barriers to the coordination of care may be compounded in low-income settings. Particular attention to coordination with WIC and other low-income community services is needed to improve access to continual care for these families. Interdisciplinary continuing education opportunities might promote networking among healthcare professionals who work with breastfeeding dyads and lead to better continuous and timely care coordination. Professionals need opportunities to build rapport, foster interdisciplinary relationships, improve communication, learn about the availability of services in the community, and designate time to collectively identify barriers and needs within the individual setting/context. Some IBCLCs mentioned the need for standardized breastfeeding education to ensure that providers are not giving conflicting or non-evidence-based information to families. Future research should investigate the effectiveness of interprofessional education that includes lactation consultants, the benefits and challenges of collaborative practices in the professional management of breastfeeding problems, the impact of collaborative approaches on breastfeeding outcomes, patient satisfaction, and job satisfaction of the healthcare professionals involved.

Quality Improvement

As the findings from this dissertation study intimate, the optimal provision of professional breastfeeding support would be strengthened by interprofessional collaboration and coordinated care which necessitates considerable modifications to the existing healthcare structure. Despite the growing support for the adoption of the Ten Steps and BFHI designation, which have evidenced success at improving breastfeeding outcomes, there remains a significant gap between evidence-based best practices in breastfeeding support and actual practices in maternity care settings (Bartick, et al., 2009; Institute of Medicine (IOM), 2001). New initiatives in quality improvement could begin to address this gap. According to the U.S. Department of Health and Human Resources (HRSA),

Quality improvement (QI) consists of systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups. The Institute of Medicine's (IOM) which is a recognized leader and advisor on improving the Nation's health care, defines quality in health care as a direct correlation between the level of improved health services and the desired health outcomes of individuals and populations. (U.S. Department of Health and Human Services, April, 2011).

There are four primary principles that are evident in QI projects. These are: 1) QI projects work as systems and processes, 2) QI projects focus on patients' needs and expectations, 3) QI projects function as team processes, and 4) QI projects focus on the use of data to evaluate current systems, document and monitor improvements, and identify areas for improvement (U.S. Department of Health and Human Services, April, 2011).

The National Initiative for Children's Healthcare Quality (NICHQ) works to advance children's healthcare through quality improvement. The NICHQ has been engaged in three QI projects aimed at encouraging better breastfeeding support practices and increase the number of hospitals that obtain the Baby-Friendly designation. QI approaches are geared toward the spread and sustainability of evidence-based practices. Specifically, they are looking at how to bridge the gap from evidence-based research to operationalizing best practices into the field. For example, although healthcare professionals may know that skin-to-skin is important to breastfeeding success, they may not have the skills to implement skin-to-skin in a systematic way into their organization. QI provides hospital staff with the skill set to implement sustainable changes that are driven by the staff so that they have a sense of ownership.

The New York State Breastfeeding Quality Improvement in Hospitals (BQIH) Learning Collaborative was designed to execute quality improvement techniques in 12 hospitals by applying the Breakthrough Series methodology (developed by the Institute for Healthcare Improvement (IHI)), to improve maternity care standards (Fitzpatrick et al., 2013; National Initiative for Children's Healthcare Quality (NICHQ), 2013b). The goals for the project were, "(1) increase exclusive breastfeeding; (2) improve hospital breastfeeding policies, practices, and systems; (3) increase staff skills and knowledge of breastfeeding support through education; (4) empower, educate, and support new mothers to successfully breastfeed; and (5) change the culture and social norm relative to breastfeeding" (Magri & Hylton-McGuire, 2013, p. 178). Interestingly, these improvement goals align with barriers identified by IBCLCs in the present study. The completed project resulted in successful improvement across a range of maternity care breastfeeding practices (Magri & Hylton-McGuire, 2013; National Initiative for Children's Healthcare Quality (NICHQ), 2013b).

NICHQ's Texas Ten Step Star Achiever Breastfeeding Learning Collaborative (2012-2017) is also a quality improvement project designed "to help Texas hospitals create environments in which women's choices concerning breastfeeding can best be supported, with the goal of increasing exclusive breastfeeding in the immediate postpartum period and continuing through six months of age" (National Initiative for Children's Healthcare Quality (NICHQ), 2013c). In this project, there are 81 teams of hospitals in Texas that have been broken into 3 geographic areas; NICHQ and partners are working with one area at a time for 13-16 months each over the course of five years. The ultimate goal is for hospitals to become BFHI. The Texas state WIC program and the Texas Department of State Health Services are providing funding to support this quality improvement project to improve breastfeeding rates at these hospitals (E. Fitzgerald, personal communication, July 8, 2013).

Finally, the NICHQ has partnered with the CDC on the Best Fed Beginnings project, which began in 2012, and is working with 89 teams from 29 states across the country to participate in a quality improvement learning collaborative (also employing the Breakthrough Series methodology to "make system-level changes to maternity care practices in pursuit of Baby-Friendly designation" (National Initiative for Children's Healthcare Quality (NICHQ), 2013a). Announced on October 1, 2013, the Medical University of South Carolina was the first of the 89 hospitals to be designated a "Baby-Friendly" birthing facility and is one of only three BFHI hospitals in the state (Medical University of South Carolina, 2013).

The results of these QI projects are encouraging; however, more research about QI projects with IBCLCs is needed. IBCLCs have a unique perspective and may play a critical role in the success of these QI projects. Sub-optimal breastfeeding duration and exclusivity in the U.S. is an important public health issue that warrants innovative approaches to improve

maternity care practices and enable healthcare professionals to best meet the support needs of breastfeeding mothers. Quality improvement collaborative (QICs) have the potential to improve the process of care; however, research is needed to more clearly understand the elements that successfully drive quality improvement processes (Nadeem, Olin, Hill, Hoagwood, & Horwitz, 2013). QI projects should be designed, implemented, and evaluated in an effort to optimize the professional management and support of breastfeeding problems.

Implications for Policy

Under the Affordable Care Act (ACA) women's preventive health care must be covered by insurance plans. Under this provision, breastfeeding is considered preventive care and pregnant and nursing women are entitled to breastfeeding equipment and comprehensive lactation support and counseling by a trained provider (Patient Protection and Affordable Care Act, 2010). However, the language is vague and insurance plans differ in their interpretation of "a trained provider." Many insurance plans do not recognize the IBCLC credential as a trained provider and instead require the counseling to be provided by a physician. As this study and others have demonstrated, physicians often lack the knowledge and skills and the time needed to provide evidence-based support and management of breastfeeding problems. The National Breastfeeding Center recently released a "Breastfeeding Policy Scorecard" to evaluate how well healthcare insurance companies nationwide are fulfilling their obligations outlined by the ACA. Twenty-eight of the 79 insurance companies received a score of D or F, while only four receive an A grade. The scorecard assessed insurers on their coverage of breastfeeding support and equipment and those that scored high "covered breastfeeding support through coverage of classes and visits in the hospital, home and office by qualified lactation counselors either in-network or out-of-network; and those that covered the rental of 'hospital grade' pumps required when

medically necessary, and the purchase of electric pumps through multiple sources" (National Breastfeeding Center, 2013).

The extensive knowledge and training of IBCLCs and evidence of their effectiveness in improving breastfeeding initiation, duration, and exclusivity (Bonuck, et al., 2005; Castrucci, et al., 2006; Thurman & Allen, 2008) suggest that health insurance companies should work to cover their services for mothers. Although lactation support is time intensive, the benefits of breastfeeding reduce healthcare costs for our nation long-term (Bartick & Reinhold, 2010; United States Lactation Consultant Association, 2012). One of the primary challenges to hiring IBCLCs is the model of reimbursement. Many mothers must pay for the services of an IBCLC out of their own pockets which also contributes to health disparities such that low-income mothers continue to be most at risk for early weaning and consequently, at greater risk for lifelong health problems (United States Lactation Consultant Association, 2012). Fee-for-service models of reimbursement are problematic because they do not focus on the value of the care being provided, whereas pay-for-performance models have the potential to cut costs long-term and adequately compensate providers for their time. Pay-for-performance models are also more closely aligned with QI approaches to professional breastfeeding support such as BFHI and the profession's focus on best practices.

A recent study explored the frequency with which IBCLCs submit their lactation consults to insurance providers for reimbursement and the proportion of submissions that are recognized by insurers. The results indicate that submissions were low and infrequent and recognition by insurance providers was also low. Interestingly, the authors report that submissions and recognition varied by professional setting and job classification. They speculate that success may be related to other credentials which suggests that the IBCLC credential alone is not

recognized (Chetwynd, Meyer, Stuebe, Costello, & Labbok, 2013). More research is needed to better understand how to improve reimbursement for professional lactation support in a range of occupational settings and the perspectives of IBCLCs who provide this support. The topic of licensure in connection with reimbursement emerged with some IBCLCs in the present study, suggesting the need for this issue to be more fully explored.

Several participants in this study commented that in their dream world, every pediatric practice would have an IBCLC on staff to provide ongoing outpatient support to the mother-baby dyad. The AAP recently published guidelines on how pediatricians can create a breastfeeding friendly practice. Among these guidelines is the following recommendation: "Employ a lactation consultant in the office who potentially can help increase breastfeeding rates of the practice. Although a lactation consultant cannot bill at the same professional level as a physician, she often can bill commensurate with her background (i.e. nurse or dietician). If the baby is being seen for another reason, the visit can be associated with the physician professional fee where appropriate" (American Academy of Pediatrics, 2013a). There are some successful examples of the inclusion of an IBCLC as part of a pediatric practice and these should serve as models for other practices (Corriveau, Drake, Kellams, & Rovnyak, 2013; Witt, et al., 2012). Findings from one study that evaluated the benefits of integrating a lactation consultant into a pediatric practice are encouraging. The authors reported that the existing medical system structure did not need modification to effectively integrate a lactation consultant onto the team. They write, "Because the physician evaluates the patient, the visit is reimbursed as a general medical visit. We have found these reimbursements sufficiently cover LC salaries" (Witt, et al., 2012, p. 42). Innovative approaches to increase the ability for IBCLCs to work in pediatric settings would be valuable public health initiatives.

One of the aims of the ACA is to improve the quality of care through innovative health service delivery models such as the patient-centered medical home (PCMH) model. This model includes several important principles such as patient-centered care, coordinated/integrated care, quality and safety assurance, comprehensive care, and accessible services (Patient Protection and Affordable Care Act, 2010). The results from this study also suggest the need for professional structure of breastfeeding support to evolve to incorporate these principles. The implementation of PCMHs will be important to study and those working to improve breastfeeding outcomes should explore the possibilities for incorporating professional breastfeeding support into this model of care.

Section V: Future Directions

The results of this research study are expected to lead to further studies regarding barriers and facilitating factors to the professional management of early breastfeeding problems among various health care practitioners who are involved in providing breastfeeding support. The results from this study may lead to the development of a questionnaire that could be used to assess barriers to the professional management of breastfeeding problems on a much larger and perhaps national scale. The results of this study should inform the development of interventions targeted at providers to improve management of breastfeeding problems with the intention of reducing early weaning. The findings from this study could be triangulated by conducting research with physicians and nurses to add their perspectives on the professional management of breastfeeding problems, by conducting a content analysis of LactNet, and by observing breastfeeding management in various settings. A quantitative survey could be conducted to better understand the model that was developed from the results of this study and to explore

whether the factors are similar or different for other types of providers working to manage breastfeeding problems.

The model that emerged from this dissertation research represents the indirect and direct factors that impact the ability of the IBCLC to manage breastfeeding problems. IBCLCs primarily described these factors in the context of other healthcare professionals, mothers, and their families. These factors emerged from the data and represent various aspects within the healthcare system and among healthcare providers and families that influence the role enactment of the IBCLC. In addition to these factors, exploration of issues related to role and the meaning associated with social interactions from the perspective of the IBCLC were also found to influence the role enactment of the IBCLC. Future research should more deeply explore these interpersonal factors (aspects of role and social interactions) and background characteristics of IBCLCs to develop a more complete picture of the ways in which IBCLCs enact their role and the strategies they use to navigate challenges they encounter. Table 17 presents categories for further interrogation and possible integration into the "IBCLCs' Perceived Influences to Managing Breastfeeding Problems" model that emerged from this study.

Table 17 – Interpersonal Factors of IBCLCs to Explore in Future Research

Personal Background	Role	Social Interactions
Credentials	Role Clarity	Connectedness
Knowledge	Role Conflict	Feeling Respected
Training and Skills	Role Strain	Social Support
Experience	Perceived Behavioral Control	Social Norms
Attitudes	Self-Efficacy	
Practice Philosophy		

Studying lactation consultants and the families they work with simultaneously could provide additional perspective into the co-construction of meaning in the experience of giving and receiving lactation support. This study did not include mothers' experiences of receiving

lactation support, but their perspective is equally important and should be considered in future research to explore the symbolic interactions between the family and the lactation consultant and the co-construction of meaning. Lactation consultants described the psychosocial component of lactation support and thus, the interdependent co-construction of meaning between the provider and the mother may blur the professional boundaries traditionally defined by biomedical, technocratic elements of care. According to symbolic interactionism, the context and interaction with others contribute to meaning-making and thus, other settings for lactation support are relevant. IBCLCs in the NICU setting were not included in this study; however, due to the intensity of experience in this environment, the co-construction of meaning between various NICU providers and families are likely defined by different professional boundaries and offer another perspective to consider. Families' and lactation consultants' interpretation of the barriers to optimal lactation support in the NICU setting would be dissimilar to other lactation consultants because meaning is constructed and reinterpreted within settings and among individuals in a particular social context. Differences by geography (urban/rural) should also receive additional attention in future studies.

To the PI's knowledge, this is the first study to explore FCC in the context of breastfeeding support and management of problems. Additional research in this area is needed. Future studies should evaluate the operationalization of the proposed set of 10 principles of FCBC and their impact on improving the professional management of breastfeeding problems from the perspectives of the various providers involved and the families. FCBC has the potential to transform professional breastfeeding support in ways that reduce early weaning and assist families to meet their intended breastfeeding goals. Future changes in policy and practices

should consider the integration of FCBC principles and studies should then examine the possible quality improvement outcomes.

Pediatrics and obstetrics, while becoming more female-dominated, have been defined by the historically male-dominated field of medicine (Ehrenreich & English, 1973). This perception of history persists and was evident through the observation that most participants referred to pediatricians by using a male pronoun. In contrast, nursing and lactation consulting have been historically female-dominated professions. The nursing model of care embraces a more humanistic approach and the profession of lactation consulting grew out of mother-to-mother support. The hierarchies of respect described by participants in this study may be deeply entrenched in the gender ratio imbalances and power structures that inhabit the interconnected spheres of these various professions. Future research should examine the position of lactation consultants within these hierarchies and the relationships with gender and power.

The findings from this dissertation suggest that efforts to improve the structure in which breastfeeding problems are managed would benefit from clearer delineation of various providers' roles. IBCLCs desire to have their credential valued and to be perceived as important members of the health care team. Family-centered care necessitates interprofessional collaboration and in the context of breastfeeding support, family-centered, team-based approaches to care could strengthen BFHI efforts, lead to increased job satisfaction and patient satisfaction, and improve breastfeeding outcomes overall. Effective strategies for operationalizing these approaches into the professional management of breastfeeding problems are needed.

Future public health studies could also work to develop an interdisciplinary model of successful breastfeeding support that can be used to assist all healthcare providers who work with breastfeeding dyads to understand their role and build competencies in interprofessional

collaboration. Defining occupational boundaries is challenging for the profession of lactation consulting, partly because of the range of experiences, credentials, backgrounds, and settings of IBCLCs. These variations likely create disparate levels of knowledge which could undermine the credential or make it appear less legitimate to healthcare professionals. The different pathways to becoming and IBCLC are a strength of the profession; however, exploration into more standardized education for IBCLCs and other providers could reveal possibilities for advancing the profession and its credibility in the eyes of others.

The profession of lactation consulting would benefit from diversity. Low-income and African American mothers have lower breastfeeding duration and exclusivity rates and yet are generally underserved by professional lactation consultants (U.S. Department of Health and Human Services, 2011b). The PI was not successful in reaching the four possible African American IBCLCs in the state of Florida; therefore, their important perspectives were not included in this study. Initiatives to improve the diversity of the profession and research into the needs of African American IBCLCs in particular are warranted.

Finally, the findings from this study with IBCLCs from across the state of Florida offer a new perspective from which to understand the barriers to providing optimal breastfeeding support to families. The model that was developed to illustrate the relationships between these barriers and how they influence the ability of the IBCLC to effectively manage breastfeeding problems could be used to inform initiatives designed to address the Surgeon General's Call to Action to Support Breastfeeding and other programs at the national, state, and local levels. IBCLCs play an important role in public health by helping women to meet their breastfeeding goals and improve the lifelong health of women and children, and ultimately future generations.

REFERENCES

- Abbott Laboratories. (2010). Abbott Voluntarily Recalls Certain Similac® Brand Powder Infant Formulas That Did Not Meet Its Quality Standards. Retrieved October 30, 2010, from http://recall.similac.com/recall/
- Abrahams, S. W., & Labbok, M. H. (2009). Exploring the impact of the Baby-Friendly Hospital Initiative on trends in exclusive breastfeeding. *International Breastfeeding Journal*, *4*, 11. doi: 10.1186/1746-4358-4-11
- Academy of Lactation Policy and Practice. (2011). Scope of Practice for the Certified Lactation Counselor (CLC). Retrieved February 4, 2012, from http://www.healthychildren.cc/Scope%20of%20Practice.pdf
- Ahluwalia, I. B., Morrow, B., & Hsia, J. (2005). Why do women stop breastfeeding? Findings from the Pregnancy Risk Assessment and Monitoring System. *Pediatrics*, *116*(6), 1408-1412. doi: 10.1542/peds.2005-0013
- Aldiabat, K. M., & Le Navenec, C. (2011). Philosophical Roots of Classical Grounded Theory: Its Foundations in Symbolic Interactionism *The Qualitative Report*, *16*(4), 1063-1080.
- Allers, K. S. (2012, August 3, 2012). Lactation consultants need to diversify yesterday.

 Retrieved September 1, 2013, from

 http://womensenews.org/story/sisterspace/120802/lactation-consultants-need-diversify-yesterday

- American Academy of Nurse Practitioners. (2010). Frequently Asked Questions: Why Choose a Nurse Practitioner as your Healthcare Provider. Retrieved February 20, 2012, from http://www.npfinder.com/faq.pdf
- American Academy of Pediatrics. (2003). Scope of practice issues in the delivery of pediatric health care. *Pediatrics*, 111(2), 426-435.
- American Academy of Pediatrics. (2010). Hospital stay for healthy term newborns. *Pediatrics*, 125(2), 405-409. doi: 10.1542/peds.2009-3119
- American Academy of Pediatrics. (2012a). Breastfeeding and the use of human milk. *Pediatrics*, 129(3), e827-841. doi: 10.1542/peds.2011-3552
- American Academy of Pediatrics. (2012b). Patient- and Family-Centered Care and the Pediatrician's Role. *Pediatrics*, 129(2), 394-404. doi: 10.1542/peds.2011-3084
- American Academy of Pediatrics. (2013a). How to have a breastfeeding friendly practice.

 Retrieved September 1, 2013, from

 http://www2.aap.org/breastfeeding/files/pdf/AAP%20HaveFriendlyPractice.pdf
- American Academy of Pediatrics. (2013b). Ten steps to support parents' choice to breastfeed their baby. Retrieved September 1, 2013, from http://www2.aap.org/breastfeeding/files/pdf/tenstepsposter.pdf

- American College of Nurse Midwives. (1992, 2004). Definition of Midwifery and Scope of
 Practice of Certified Nurse-Midwives and Certified Midwives. Retrieved February 20.
 2012, from
 http://www.midwife.org/ACNM/files/ACNMLibraryData/UPLOADFILENAME/000000
 000266/Definition%20of%20Midwifery%20and%20Scope%20of%20Practice%20of%20
 CNMs%20and%20CMs%20Dec%202011.pdf
- Amir, L. H., Dennerstein, L., Garland, S. M., Fisher, J., & Farish, S. J. (1996). Psychological aspects of nipple pain in lactating women. *Journal of Psychosomatic Obstetrics and Gynaecology*, 17(1), 53-58.
- Amir, L. H., & Donath, S. (2007). A systematic review of maternal obesity and breastfeeding intention, initiation and duration. *BMC Pregnancy Childbirth*, 7, 9. doi: 1471-2393-7-9 [pii] 10.1186/1471-2393-7-9 [doi]
- Antonelli, R. C., McAllister, J. W., & Popp, J. (2009). Making care coordination a critical component of the pediatric health system: a multidisciplinary framework: The Commonwealth Fund.
- Apple, R. D. (1987). *Mothers & Medicine: A Social History of Infant Feeding 1890-1950*.

 Madison: The University of Wisconsin Press.
- Arora, S., McJunkin, C., Wehrer, J., & Kuhn, P. (2000). Major factors influencing breastfeeding rates: Mother's perception of father's attitude and milk supply. *Pediatrics*, *106*(5), E67.
- Arthur, C. R., Saenz, R., & Replogle, W. H. (2003). Breastfeeding education, treatment, and referrals by female physicians. *Journal of Human Lactation*, 19(3), 303-309.

- Avery, M. D., Montgomery, O., & Brandl-Salutz, E. (2012). Essential components of successful collaborative maternity care models: the ACOG-ACNM project. *Obstetrics and Gynecology Clinics of North America*, *39*(3), 423-434. doi: 10.1016/j.ogc.2012.05.010
- Baby Friendly Hospital Initiative. (2010). About the BFHI. Retrieved October 21, 2010, from http://www.babyfriendlyusa.org/eng/01.html
- Baby Milk Action. (2010). Nestle boycott. Retrieved October 1, 2010, from http://info.babymilkaction.org/nestlefree
- Bai, Y. K., Middlestadt, S. E., Joanne Peng, C. Y., & Fly, A. D. (2009). Psychosocial factors underlying the mother's decision to continue exclusive breastfeeding for 6 months: an elicitation study. *Journal of Human Nutrition and Dietetics*, 22(2), 134-140. doi: 10.1111/j.1365-277X.2009.00950.x
- Bai, Y. K., Wunderlich, S. M., & Fly, A. D. (2010). Predicting Intentions to Continue Exclusive

 Breastfeeding for 6 Months: a Comparison Among Racial/Ethnic Groups. *Maternal and Child Health Journal*. doi: 10.1007/s10995-010-0703-7
- Barclay, L., Longman, J., Schmied, V., Sheehan, A., Rolfe, M., Burns, E., & Fenwick, J. (2012).

 The professionalising of breast feeding--where are we a decade on? *Midwifery*, 28(3),

 281-290. doi: 10.1016/j.midw.2011.12.011
- Barnett, E., Sienkiewicz, M., & Roholt, S. (1995). Beliefs about breastfeeding: a statewide survey of health professionals. *Birth*, 22(1), 15-20.

- Bartick, M., & Reinhold, A. (2010). The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. *Pediatrics*, 125(5), e1048-1056. doi: peds.2009-1616 [pii] 10.1542/peds.2009-1616 [doi]
- Bartick, M., Stuebe, A., Shealy, K. R., Walker, M., & Grummer-Strawn, L. M. (2009). Closing the quality gap: promoting evidence-based breastfeeding care in the hospital. *Pediatrics*, 124(4), e793-802. doi: 10.1542/peds.2009-0430
- Bednall, J. (2006). Epoche and bracketing within the phenomenological paradigm. *Issues in Educational Research*, 16.
- Bentley, M. E., Dee, D. L., & Jensen, J. L. (2003). Breastfeeding among low income, African-American women: power, beliefs and decision making. *The Journal of Nutrition*, 133(1), 305S-309S.
- Benzies, K. M., & Allen, M. N. (2001). Symbolic interactionism as a theoretical perspective for multiple method research. *Journal of Advanced Nursing*, 33(4), 541-547.
- Bergman, V., Larsson, S., Lomberg, H., Marild, S., & Moller, A. (1994). Involvement of maternity and health care staff in breast-feeding. *Scandinavian Journal of Caring Sciences*, 8(2), 75-80.
- Bernard, H. R. (1994). Research Methods in Anthropology. Thousand Oaks, CA: Sage.
- Biro, M. A., Sutherland, G. A., Yelland, J. S., Hardy, P., & Brown, S. J. (2011). In-Hospital Formula Supplementation of Breastfed Babies: A Population-Based Survey. *Birth*, *38*(4), 302-310. doi: 10.1111/j.1523-536X.2011.00485.x

- Blanchard, M. H., & Kriebs, J. M. (2012). A successful model of collaborative practice in a university-based maternity care setting. *Obstetrics and Gynecology Clinics of North America*, 39(3), 367-372. doi: 10.1016/j.ogc.2012.05.005
- Blum, L. M. (1999). At the Breast: Ideologies of Breastfeeding and Motherhood in the Contemporary United States. Boston: Beacon Press.
- Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Bonuck, K. A., Trombley, M., Freeman, K., & McKee, D. (2005). Randomized, controlled trial of a prenatal and postnatal lactation consultant intervention on duration and intensity of breastfeeding up to 12 months. *Pediatrics*, *116*(6), 1413-1426. doi: 10.1542/peds.2005-0435
- Brookes, K., Davidson, P. M., Daly, J., & Halcomb, E. J. (2007). Role theory: a framework to investigate the community nurse role in contemporary health care systems.

 Contemporary Nurse, 25(1-2), 146-155. doi: 10.5555/conu.2007.25.1-2.146
- Brosco, J. P. (1999). The early history of the infant mortality rate in America: "A reflection upon the past and a prophecy of the future". *Pediatrics*, 103(2), 478-485.
- Brown, A. K., Damus, K., Kim, M. H., King, K., Harper, R., Campbell, D., . . . Harin, A. (1999).

 Factors relating to readmission of term and near-term neonates in the first two weeks of life. Early Discharge Survey Group of the Health Professional Advisory Board of the Greater New York Chapter of the March of Dimes. *Journal of Perinatal Medicine*, 27(4), 263-275. doi: 10.1515/jpm.1999.037

- Buckley, K. M. (2009). A double-edged sword: lactation consultants' perceptions of the impact of breast pumps on the practice of breastfeeding. *Journal of Perinatal Education*, 18(2), 13-22. doi: 10.1624/105812409x426297
- Bunik, M., Gao, D., & Moore, L. (2006). An investigation of the field trip model as a method for teaching breastfeeding to pediatric residents. *Journal of Human Lactation*, 22(2), 195-202.
- Bunik, M., Krebs, N. F., Beaty, B., McClatchey, M., & Olds, D. L. (2009). Breastfeeding and WIC enrollment in the Nurse Family Partnership Program. *Breastfeeding Medicine*, *4*(3), 145-149. doi: 10.1089/bfm.2008.0140
- Bunik, M., Shobe, P., O'Connor, M. E., Beaty, B., Langendoerfer, S., Crane, L., & Kempe, A. (2010). Are 2 weeks of daily breastfeeding support insufficient to overcome the influences of formula? *Academic Pediatrics*, 10(1), 21-28. doi: 10.1016/j.acap.2009.09.014
- Burbank, P. M., & Martins, D. C. (2010). Symbolic interactionism and critical perspective: divergent or synergistic? *Nursing Philosophy*, *11*(1), 25-41. doi: 10.1111/j.1466-769X.2009.00421.x
- Capitulo, K. L., & Silverberg, M. C. (2001). Creating patient-focused, family-centered, maternal-child and pediatric healthcare. *MCN American Journal of Maternal/Child Nursing*, 26(6), 298-305; quiz 306.
- Carroll, K., & Reiger, K. (2005). Fluid experts: Lactation consultants as postmodern professional specialists. *Health Sociology Review*, *14*(2), 101-110.

- Castrucci, B. C., Hoover, K. L., Lim, S., & Maus, K. C. (2006). A comparison of breastfeeding rates in an urban birth cohort among women delivering infants at hospitals that employ and do not employ lactation consultants. *Journal of Public Health Management and Practice*, 12(6), 578-585.
- Cattaneo, A., & Buzzetti, R. (2001). Effect on rates of breast feeding of training for the baby friendly hospital initiative. *BMJ*, 323(7325), 1358-1362.
- Caulfield, L. E., Gross, S. M., Bentley, M. E., Bronner, Y., Kessler, L., Jensen, J., . . . Paige, D.
 M. (1998). WIC-based interventions to promote breastfeeding among African-American
 Women in Baltimore: effects on breastfeeding initiation and continuation. *Journal of Human Lactation*, 14(1), 15-22.
- Celi, A. C., Rich-Edwards, J. W., Richardson, M. K., Kleinman, K. P., & Gillman, M. W. (2005). Immigration, race/ethnicity, and social and economic factors as predictors of breastfeeding initiation. *Archives of Pediatrics and Adolescent Medicine*, 159(3), 255-260. doi: 159/3/255 [pii] 10.1001/archpedi.159.3.255 [doi]
- Centers for Disease Control and Prevention. (2009). Infant Feeding Practices Study II. Retrieved April 1, 2012, from http://www.cdc.gov/ifps/results/ch3/table3-35.htm
- Centers for Disease Control and Prevention. (2010). Breastfeeding Among U.S. Children Born 1999—2007, CDC National Immunization Survey. Retrieved October 3, 2010, from http://www.cdc.gov/breastfeeding/data/NIS_data/index.htm

- Centers for Disease Control and Prevention. (2011a). Maternity Practices in Infant Nutrition and

 Care in Florida -- 2009 mPINC Survey. Retrieved from

 http://www.cdc.gov/breastfeeding/pdf/mPINC/states/mPINC_2009_Florida.pdf
- Centers for Disease Control and Prevention. (2011b). mPINC Results. Retrieved January 14, 2012, from http://www.cdc.gov/breastfeeding/data/mpinc/results.htm
- Centers for Disease Control and Prevention (CDC). (2013). Breastfeeding Report Card United States, 2013. Retrieved September 22, 2013, from http://www.cdc.gov/breastfeeding/pdf/2013BreastfeedingReportCard.pdf
- Charmaz, K. (2006). Constructing Grounded Theory: A practical guide through qualitative analysis. Los Angeles: Sage.
- Charpak, N., Ruiz, J. G., Zupan, J., Cattaneo, A., Figueroa, Z., Tessier, R., . . . Worku, B. (2005).

 Kangaroo Mother Care: 25 years after. *Acta Paediatrica*, 94(5), 514-522. doi:

 N076005604427V17 [pii] 10.1080/08035250510027381 [doi]
- Chen, D. C., Nommsen-Rivers, L., Dewey, K. G., & Lonnerdal, B. (1998). Stress during labor and delivery and early lactation performance. *American Journal of Clinical Nutrition*, 68(2), 335-344.
- Chen, H. Y., & Boore, J. R. (2009). Using a synthesised technique for grounded theory in nursing research. *Journal of Clinical Nursing*, 18(16), 2251-2260. doi: 10.1111/j.1365-2702.2008.02684.x

- Chetwynd, E., Meyer, A. M., Stuebe, A., Costello, R., & Labbok, M. (2013). Recognition of International Board Certified Lactation Consultants by Health Insurance Providers in the United States: Results of a National Survey of Lactation Consultants. *Journal of Human Lactation*. doi: 10.1177/0890334413499974
- Chezem, J., Friesen, C., & Boettcher, J. (2003). Breastfeeding knowledge, breastfeeding confidence, and infant feeding plans: effects on actual feeding practices. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 32(1), 40-47.
- Clarke, A. E., & Star, S. L. (2003). Science, technology, and medicine studies. In L. T. Reynolds & N. J. Herman-Kinney (Eds.), *Handbook of Symbolic Interactionism* (pp. 539-574). New York: AltaMira Press.
- Clegg, S. (2008). *Standardization of lactation staffing in an integrated hospital system*. Paper presented at the International Lactation Consultant Association Las Vegas, Nevada.
- Clemons, S. N., & Amir, L. H. (2010). Breastfeeding women's experience of expressing: a descriptive study. *Journal of Human Lactation*, 26(3), 258-265. doi: 10.1177/0890334410371209
- Corlett, J., & Twycross, A. (2006). Negotiation of parental roles within family-centred care: a review of the research. *Journal of Clinical Nursing*, 15(10), 1308-1316. doi: 10.1111/j.1365-2702.2006.01407.x
- Corriveau, S. K., Drake, E. E., Kellams, A. L., & Rovnyak, V. G. (2013). Evaluation of an office protocol to increase exclusivity of breastfeeding. *Pediatrics*, *131*(5), 942-950. doi: 10.1542/peds.2012-1310

- Cramton, R., Zain-Ul-Abideen, M., & Whalen, B. (2009). Optimizing successful breastfeeding in the newborn. *Current Opinion in Pediatrics*, 21(3), 386-396. doi: 10.1097/MOP.0b013e32832b325a
- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design: Choosing among five approaches* (Second ed.). Thousand Oaks: Sage Publications.
- de Vonderweid, U., & Leonessa, M. (2009). Family centered neonatal care. *Early Human Development*, 85(10 Suppl), S37-38. doi: 10.1016/j.earlhumdev.2009.08.009
- Debus, M. (1988). Methodological Review: a handbook for excellence in focus group research.

 Washington, D.C.: Academy for Educational Development.
- Declercq, E., Labbok, M. H., Sakala, C., & O'Hara, M. (2009). Hospital practices and women's likelihood of fulfilling their intention to exclusively breastfeed. *American Journal of Public Health*, 99(5), 929-935. doi: 10.2105/ajph.2008.135236
- Dennis, C. L., & McQueen, K. (2009). The relationship between infant-feeding outcomes and postpartum depression: a qualitative systematic review. *Pediatrics*, *123*(4), e736-751. doi: 10.1542/peds.2008-1629
- Dettwyler, K. A. (1995). Beauty and the Breast: The Cultural Context of Breastfeeding in the United States. In P. Stuart-Macadam & K. A. Dettwyler (Eds.), *Breastfeeding:*Biocultural Perspectives. New York: Aldine de Gruyter.

- Dewey, K. G., Nommsen-Rivers, L. A., Heinig, M. J., & Cohen, R. J. (2003). Risk factors for suboptimal infant breastfeeding behavior, delayed onset of lactation, and excess neonatal weight loss. *Pediatrics*, 112(3 Pt 1), 607-619.
- DiGirolamo, A. M., Grummer-Strawn, L. M., & Fein, S. B. (2003). Do perceived attitudes of physicians and hospital staff affect breastfeeding decisions? *Birth*, *30*(2), 94-100.
- DiGirolamo, A. M., Grummer-Strawn, L. M., & Fein, S. B. (2008). Effect of maternity-care practices on breastfeeding. *Pediatrics*, *122 Suppl 2*, S43-49. doi: 10.1542/peds.2008-1315e
- DiGirolamo, A. M., Thompson, N., Martorell, R., Fein, S., & Grummer-Strawn, L. (2005).

 Intention or experience? Predictors of continued breastfeeding. *Health Education & Behavior*, 32(2), 208-226. doi: 10.1177/1090198104271971
- Dillaway, H. E., & Douma, M. E. (2004). Are pediatric offices "supportive" of breastfeeding?

 Discrepancies between mothers' and healthcare professionals' reports. *Clinical Pediatrics*,

 43(5), 417-430.
- Disantis, K. I., Collins, B. N., Fisher, J. O., & Davey, A. (2011). Do infants fed directly from the breast have improved appetite regulation and slower growth during early childhood compared with infants fed from a bottle? *International Journal of Behavioral Nutrition and Physical Activity*, 8, 89. doi: 10.1186/1479-5868-8-89

- Dollberg, S., Botzer, E., Grunis, E., & Mimouni, F. B. (2006). Immediate nipple pain relief after frenotomy in breast-fed infants with ankyloglossia: a randomized, prospective study.

 **Journal of Pediatric Surgery, 41(9), 1598-1600. doi: S0022-3468(06)00381-2 [pii]

 10.1016/j.jpedsurg.2006.05.024 [doi]
- Dykes, F. (2002). Western medicine and marketing: construction of an inadequate milk syndrome in lactating women. *Health Care for Women International*, 23(5), 492-502. doi: 10.1080/073993302760190092
- Dyson, S., & Brown, B. (2006). *Social Theory and Applied Health Research*. London: Open University Press.
- Earle, S. (2002). Factors affecting the initiation of breastfeeding: implications for breastfeeding promotion. *Health Promotion International*, *17*(3), 205-214.
- Eden, A. R. (2011, October 31, 2011). *Lactation Consulting: The Expanding Role of IBCLCs in Breastfeeding Support*. Paper presented at the 139th Annual Meeting and Exposition of the American Public Health Association, Washington, DC.
- Eden, A. R. (2012). New professions and old practices: Lactation consulting and the medicalization of breastfeeding. In B. L. Hausman, P. H. Smith & M. Labbok (Eds.), Beyond Health, Beyond Choice: Breastfeeding Constraints and Realities. Piscataway, NJ: Rutgers University Press.
- Eden, A. R. (2013). The Professionalization and Practice of Lactation Consulting: Medicalized Knowledge, Humanistic Care (Dissertation): University of South Florida.

- Ehrenreich, B., & English, D. (1973). Witches, Midwives, and Nurses: A History of Women Healers. New York: The Feminist Press.
- Ekstrom, A., Widstrom, A. M., & Nissen, E. (2003). Duration of breastfeeding in Swedish primiparous and multiparous women. *Journal of Human Lactation*, 19(2), 172-178.
- Ertem, I. O., Votto, N., & Leventhal, J. M. (2001). The timing and predictors of the early termination of breastfeeding. *Pediatrics*, 107(3), 543-548.
- Escobar, G. J., Gonzales, V. M., Armstrong, M. A., Folck, B. F., Xiong, B., & Newman, T. B. (2002). Rehospitalization for neonatal dehydration: a nested case-control study. *Archives of Pediatrics and Adolescent Medicine*, *156*(2), 155-161.
- Fairbank, L., O'Meara, S., Renfrew, M. J., Woolridge, M., Sowden, A. J., & Lister-Sharp, D. (2000). A systematic review to evaluate the effectiveness of interventions to promote the initiation of breastfeeding. *Health Technology Assessment*, 4(25), 1-171.
- Fairbrother, N., & Stanger-Ross, I. (2010). Reproductive-aged women's knowledge and attitudes regarding infant-feeding practices: an experimental evaluation. *Journal of Human Lactation*, 26(2), 157-167. doi: 10.1177/0890334409352853
- Fallat, M. E., & Glover, J. (2007). Professionalism in pediatrics. *Pediatrics*, *120*(4), e1123-1133. doi: 10.1542/peds.2007-2230
- Feldman-Winter, L., Barone, L., Milcarek, B., Hunter, K., Meek, J., Morton, J., . . . Lawrence, R. A. (2010). Residency curriculum improves breastfeeding care. *Pediatrics*, *126*(2), 289-297. doi: 10.1542/peds.2009-3250

- Feldman-Winter, L., Schanler, R. J., O'Connor, K. G., & Lawrence, R. A. (2008). Pediatricians and the promotion and support of breastfeeding. *Archives of Pediatrics and Adolescent Medicine*, 162(12), 1142-1149.
- Fischer, C. T. (2009). Bracketing in qualitative research: conceptual and practical matters.

 *Psychotherapy Research, 19(4-5), 583-590. doi: 10.1080/10503300902798375
- Fitzpatrick, E., Dennison, B. A., Welge, S. B., Hisgen, S., Boyce, P. S., & Waniewski, P. A. (2013). Development of the breastfeeding quality improvement in hospitals learning collaborative in new york state. *Breastfeeding Medicine*, 8(3), 263-272. doi: 10.1089/bfm.2012.0107
- Forrester, I. T., Wheelock, G., & Warren, A. P. (1997). Assessment of students' attitudes toward breastfeeding. *Journal of Human Lactation*, *13*(1), 33-37.
- Freed, G. L., Clark, S. J., Curtis, P., & Sorenson, J. R. (1995). Breast-feeding education and practice in family medicine. *Journal of Family Practice*, 40(3), 263-269.
- Freed, G. L., Clark, S. J., Harris, B. G., & Lowdermilk, D. L. (1996). Methods and outcomes of breastfeeding instruction for nursing students. *Journal of Human Lactation*, 12(2), 105-110.
- Freed, G. L., Clark, S. J., Lohr, J. A., & Sorenson, J. R. (1995). Pediatrician involvement in breast-feeding promotion: a national study of residents and practitioners. *Pediatrics*, 96(3 Pt 1), 490-494.

- Freed, G. L., Clark, S. J., Sorenson, J., Lohr, J. A., Cefalo, R., & Curtis, P. (1995). National assessment of physicians' breast-feeding knowledge, attitudes, training, and experience. *JAMA*, 273(6), 472-476.
- Frost, J., Anstey, E. H., & Eden, A. R. (2011). Local Low-Income African American Women

 Breastfeeding against the Odds: A Positive Deviance Approach.
- Gagnon, A. J., Leduc, G., Waghorn, K., Yang, H., & Platt, R. W. (2005). In-hospital formula supplementation of healthy breastfeeding newborns. *Journal of Human Lactation*, 21(4), 397-405. doi: 10.1177/0890334405280835
- Gartner, L. M., Morton, J., Lawrence, R. A., Naylor, A. J., O'Hare, D., Schanler, R. J., & Eidelman, A. I. (2005). Breastfeeding and the use of human milk. *Pediatrics*, 115(2), 496-506. doi: 115/2/496 [pii] 10.1542/peds.2004-2491 [doi]
- Gatti, L. (2008). Maternal perceptions of insufficient milk supply in breastfeeding. *Journal of Nursing Scholarship*, 40(4), 355-363. doi: 10.1111/j.1547-5069.2008.00234.x
- Geddes, D. T., Langton, D. B., Gollow, I., Jacobs, L. A., Hartmann, P. E., & Simmer, K. (2008).

 Frenulotomy for breastfeeding infants with ankyloglossia: effect on milk removal and sucking mechanism as imaged by ultrasound. *Pediatrics*, 122(1), e188-194. doi: peds.2007-2553 [pii] 10.1542/peds.2007-2553 [doi]
- Geraghty, S. R., & Rasmussen, K. M. (2010). Redefining "breastfeeding" initiation and duration in the age of breastmilk pumping. *Breastfeeding Medicine*, *5*(3), 135-137. doi: 10.1089/bfm.2009.0094

- Geraghty, S. R., Riddle, S. W., & Shaikh, U. (2008). The breastfeeding mother and the pediatrician. *Journal of Human Lactation*, 24(3), 335-339.
- Gonzalez, K. A., Meinzen-Derr, J., Burke, B. L., Hibler, A. J., Kavinsky, B., Hess, S., . . . Morrow, A. L. (2003). Evaluation of a lactation support service in a children's hospital neonatal intensive care unit. *Journal of Human Lactation*, *19*(3), 286-292.
- Gramling, L., Hickman, K., & Bennett, S. (2004). What makes a good family-centered partnership between women and their practitioners? A qualitative study. *Birth*, *31*(1), 43-48.
- Grossman, L. K., Harter, C., Sachs, L., & Kay, A. (1990). The effect of postpartum lactation counseling on the duration of breast-feeding in low-income women. *American Journal of Diseases of Children*, *144*(4), 471-474.
- Grummer-Strawn, L. (2012). The Critical Role of Hospitals in Supporting Breastfeeding:

 Systemic Changes and Long-Term Benefits. Retrieved February 10, 2012, from
 http://www.nichq.org/our_projects/BFB%20Jan%20Info%20Webinar.pdf
- Grummer-Strawn, L., Reinold, C., & Krebs, N. F. (2010). Use of World Health Organization and CDC growth charts for children aged 0-59 months in the United States. *MMWR**Recommendations and Reports, 59(RR-9), 1-15.
- Grummer-Strawn, L., Shealy, K. R., Perrine, C. G., MacGowan, C., Grossniklaus, D. A., Scanlon, K. S., & Murphy, P. E. (2013). Maternity care practices that support breastfeeding: CDC efforts to encourage quality improvement. *Journal of Women's Health*, 22(2), 107-112. doi: 10.1089/jwh.2012.4158

- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82.
- Guise, J. M., Palda, V., Westhoff, C., Chan, B. K., Helfand, M., & Lieu, T. A. (2003). The effectiveness of primary care-based interventions to promote breastfeeding: systematic evidence review and meta-analysis for the US Preventive Services Task Force. *Annals of Family Medicine*, 1(2), 70-78.
- Gutowski, J. L., Walker, M., & Chetwynd, E. (2010). Containing health care costs help in plain sight. International Board Certified Lactation Consultants: Allied health care providers contribute to the solution. Morrisville, NC: United States Lactation Consultant Association.
- Guttman, N., & Zimmerman, D. R. (2000). Low-income mothers' views on breastfeeding. *Social Science and Medicine*, 50(10), 1457-1473.
- Hall, P. (2005). Interprofessional teamwork: professional cultures as barriers. *Journal of Interprofessional Care*, 19 Suppl 1, 188-196. doi: K471558162661643 [pii] 10.1080/13561820500081745 [doi]
- Hall, R. T., Simon, S., & Smith, M. T. (2000). Readmission of breastfed infants in the first 2 weeks of life. *Journal of Perinatology*, 20(7), 432-437.
- Hamilton, B. E., Martin, J. A, Ventura, S.J. (2009). Births: Preliminary Data for 2007. National
 Vital Statistics Reports. 57(12); Hyattsville, MD: National Center for Health Statistics.
 Retrieved February 5, 2010, from
 http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_12.pdf

- Hannula, L., Kaunonen, M., & Tarkka, M. T. (2008). A systematic review of professional support interventions for breastfeeding. *Journal of Clinical Nursing*, *17*(9), 1132-1143. doi: 10.1111/j.1365-2702.2007.02239.x
- Hauck, Y. L., Graham-Smith, C., McInerney, J., & Kay, S. (2011). Western Australian women's perceptions of conflicting advice around breast feeding. *Midwifery*, 27(5), e156-162. doi: 10.1016/j.midw.2010.02.003
- Haughton, J., Gregorio, D., & Perez-Escamilla, R. (2010). Factors associated with breastfeeding duration among Connecticut Special Supplemental Nutrition Program for Women,
 Infants, and Children (WIC) participants. *Journal of Human Lactation*, 26(3), 266-273.
 doi: 10.1177/0890334410365067
- Haughwout, J. C., Eglash, A. R., Plane, M. B., Mundt, M. P., & Fleming, M. F. (2000).

 Improving residents' breastfeeding assessment skills: a problem-based workshop. *Family Practice*, 17(6), 541-546.
- Hausman, B. L. (2003). *Mother's Milk: Breastfeeding Controversies in American Culture*. New York: Routledge.
- Hazelbaker, A. K. (2010). *Tongue-Tie: Morphogenesis, Impact, Assessment and Treatment*.

 Columbus: Aidan and Eva Press.
- Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: a comparison of Glaser and Strauss. *Int J Nurs Stud*, 41(2), 141-150.

- Hellings, P., & Howe, C. (2000). Assessment of breastfeeding knowledge of nurse practitioners and nurse-midwives. *Journal of Midwifery & Women's Health*, 45(3), 264-270.
- Hellings, P., & Howe, C. (2004). Breastfeeding knowledge and practice of pediatric nurse practitioners. *Journal of Pediatric Health Care*, 18(1), 8-14.
- Heymann, S. J., Earle, A., & Hayes, J. (2007). The Work, Family, and Equity Index: How does the United States measure up? *Policy brief for Council on Contemporary Families*: The Institute for Health and Social Policy.
- Hillenbrand, K. M., & Larsen, P. G. (2002). Effect of an educational intervention about breastfeeding on the knowledge, confidence, and behaviors of pediatric resident physicians. *Pediatrics*, 110(5), e59.
- Hoffmeister, B. (2013, August 29, 2013). Racial inequities in breastfeeding: My commitment to be a mentor. Retrieved September 1, 2013, from http://lactationmatters.org/2013/08/29/racial-inequities-in-breastfeeding-my-commitment-to-be-a-mentor/
- Hogan, M., Westcott, C., & Griffiths, M. (2005). Randomized, controlled trial of division of tongue-tie in infants with feeding problems. *Journal of Paediatrics and Child Health*, 41(5-6), 246-250. doi: JPC604 [pii] 10.1111/j.1440-1754.2005.00604.x [doi]
- Holmes, A. V., Chin, N. P., Kaczorowski, J., & Howard, C. R. (2009). A barrier to exclusive breastfeeding for WIC enrollees: limited use of exclusive breastfeeding food package for mothers. *Breastfeeding Medicine*, *4*(1), 25-30. doi: 10.1089/bfm.2008.0110

- Hospital stay for healthy term newborns. (2010). *Pediatrics*, *125*(2), 405-409. doi: 10.1542/peds.2009-3119
- Howard, C. R., Schaffer, S. J., & Lawrence, R. A. (1997). Attitudes, practices, and recommendations by obstetricians about infant feeding. *Birth*, *24*(4), 240-246.
- Humenick, S. S., Hill, P. D., & Spiegelberg, P. L. (1998). Breastfeeding and health professional encouragement. *Journal of Human Lactation*, *14*(4), 305-310.
- Hutchinson, S. A., Wilson, M. E., & Wilson, H. S. (1994). Benefits of participating in research interviews. *Image the Journal of Nursing Scholarship*, 26(2), 161-164.
- IBLCE in the Americas. (2012). Steps to Becoming an IBCLC. Retrieved January 20, 2012, from http://americas.iblce.org/steps-to-becoming-an-ibclc
- IBLCE International. (2012). Professional Standards. Retrieved January 20, 2012, from http://www.iblce.org/professional-standards
- Institute of Medicine (IOM). (2001). Crossing the Quality Chasm: A New Health Care System for the 21st Century. Washington, D.C.: Committee on Health Care in America.
- Institute of Medicine (IOM). (2011). Early childhood obesity prevention policies. . Washington, DC: The National Academies Press.
- International Board of Lactation Consultant Examiners. (2008). Scope of Practice for

 International Board Certified Lactation Consultants. Retrieved February 20, 2012, from

 http://iblce.org/upload/downloads/ScopeOfPractice.pdf

- International Board of Lactation Consultant Examiners. (2011). Facts and Figures. Retrieved March 12, 2012, from http://americas.iblce.org/facts-and-figures
- International Board of Lactation Consultant Examiners. (2012). IBLCE International. Retrieved January 17, 2012, from http://www.iblce.org/home
- International Board of Lactation Consultant Examiners (IBLCE). (2011). Need to recertify?

 Retrieved February 20, 2012, from http://americas.iblce.org/need-to-recertify
- International Board of Lactation Consultant Examiners (IBLCE). (2012). Clinical competencies for the practice of International Board Certified Lactation Consultants (IBCLCs).

 Retrieved September 1, 2013, from http://iblce.org/wp-content/uploads/2013/08/clinical-competencies.pdf
- International Lactation Consultant Association. (2005, 2006). Standards of Practice for International Board Certified Lactation Consultants (IBCLCs). Retrieved February 20, 2012, from http://iblce.org/upload/downloads/StandardsOfPractice.pdf
- International Lactation Consultant Association. (2011). Position paper on the role and impact of the IBCLC. Retrieved November 4, 2011, from http://www.ilca.org/files/resources/ilca_publications/Role%20%20Impact%20of%20the %20IBCLC-webFINAL_08-15-11.pdf
- Ip, S., Chung, M., Raman, G., Trikalinos, T. A., & Lau, J. (2009). A summary of the Agency for Healthcare Research and Quality's evidence report on breastfeeding in developed countries. *Breastfeeding Medicine*, 4 Suppl 1, S17-30. doi: 10.1089/bfm.2009.0050 [doi]

- Jensen, E. (2011). Participation in the Supplemental Nutrition Program for Women, Infants and Children (WIC) and Breastfeeding: National, Regional, and State Level Analyses.

 Maternal and Child Health Journal. doi: 10.1007/s10995-011-0796-7
- Jensen, E., & Labbok, M. (2011). Unintended consequences of the WIC formula rebate program on infant feeding outcomes: will the new food packages be enough? *Breastfeeding Medicine*, 6(3), 145-149. doi: 10.1089/bfm.2010.0022
- Jeon, Y. H. (2004). The application of grounded theory and symbolic interactionism.

 Scandinavian Journal of Caring Sciences, 18(3), 249-256. doi: 10.1111/j.1471-6712.2004.00287.x
- Jevitt, C., Hernandez, I., & Groer, M. (2007). Lactation complicated by overweight and obesity: supporting the mother and newborn. *Journal of Midwifery & Women's Health*, 52(6), 606-613. doi: S1526-9523(07)00163-8 [pii] 10.1016/j.jmwh.2007.04.006 [doi]
- Jimenez, V., Klein, M. C., Hivon, M., & Mason, C. (2010). A mirage of change: family-centered maternity care in practice. *Birth*, *37*(2), 160-167. doi: 10.1111/j.1523-536X.2010.00396.x
- Johnson, B. H. (2000). Family-Centered Care: Four Decades of Progress. *Families, Systems & Health*, 18(2), 137-156.
- Jones, K. W. (1983). Sentiment and science: the late nineteenth century pediatrician as mother's advisor. *Journal of Social History*, *17*(1), 79-96.

- Kantrowitz-Gordon, I. (2013). Expanded care for women and families after preterm birth. *Journal of Midwifery & Women's Health*, 58(2), 158-166. doi: 10.1111/j.1542-2011.2012.00242.x
- Keddy, B., Sims, S. L., & Stern, P. N. (1996). Grounded theory as feminist research methodology. *Journal of Advanced Nursing*, 23(3), 448-453.
- Kelleher, C. M. (2006). The physical challenges of early breastfeeding. *Social Science and Medicine*, 63(10), 2727-2738. doi: 10.1016/j.socscimed.2006.06.027
- Kellymom. (2012). Professional Credentials and Descriptions. Retrieved January 20, 2012, from http://www.kellymom.com/lcdirectory/abbreviations.html
- Khoo, A. K., Dabbas, N., Sudhakaran, N., Ade-Ajayi, N., & Patel, S. (2009). Nipple pain at presentation predicts success of tongue-tie division for breastfeeding problems. *European Journal of Pediatric Surgery*, 19(6), 370-373. doi: 10.1055/s-0029-1234041 [doi]
- Khoury, A. J., Moazzem, S. W., Jarjoura, C. M., Carothers, C., & Hinton, A. (2005). Breast-feeding initiation in low-income women: Role of attitudes, support, and perceived control. *Women's Health Issues*, *15*(2), 64-72.
- King, T. L., Laros, R. K., Jr., & Parer, J. T. (2012). Interprofessional collaborative practice in obstetrics and midwifery. *Obstetrics and Gynecology Clinics of North America*, 39(3), 411-422. doi: 10.1016/j.ogc.2012.05.009

- Klunklin, A., & Greenwood, J. (2006). Symbolic interactionism in grounded theory studies: women surviving with HIV/AIDS in rural northern Thailand. *Journal of the Association of Nurses in AIDS Care*, 17(5), 32-41. doi: 10.1016/j.jana.2006.07.005
- Knoderer, H. M. (2009). Inclusion of parents in pediatric subspecialty team rounds: attitudes of the family and medical team. *Academic Medicine*, 84(11), 1576-1581. doi: 10.1097/ACM.0b013e3181bb2bed
- Kogan, M. D., Singh, G. K., Dee, D. L., Belanoff, C., & Grummer-Strawn, L. M. (2008).
 Multivariate analysis of state variation in breastfeeding rates in the United States.
 American Journal of Public Health, 98(10), 1872-1880. doi: AJPH.2007.127118 [pii]
 10.2105/AJPH.2007.127118 [doi]
- Kramer, M. S., Chalmers, B., Hodnett, E. D., Sevkovskaya, Z., Dzikovich, I., Shapiro, S., . . . Helsing, E. (2001). Promotion of Breastfeeding Intervention Trial (PROBIT): a randomized trial in the Republic of Belarus. *JAMA*, 285(4), 413-420.
- Krogstrand, K. S., & Parr, K. (2005). Physicians ask for more problem-solving information to promote and support breastfeeding. *Journal of the American Dietetic Association*, 105(12), 1943-1947.
- Kuan, L. W., Britto, M., Decolongon, J., Schoettker, P. J., Atherton, H. D., & Kotagal, U. R. (1999). Health system factors contributing to breastfeeding success. *Pediatrics*, 104(3), e28.

- Kuhlthau, K. A., Bloom, S., Van Cleave, J., Knapp, A. A., Romm, D., Klatka, K., . . . Perrin, J.
 M. (2011). Evidence for family-centered care for children with special health care needs:
 a systematic review. *Academic Pediatrics*, 11(2), 136-143. doi:
 10.1016/j.acap.2010.12.014
- Kuo, D. Z., Bird, T. M., & Tilford, J. M. (2011). Associations of family-centered care with health care outcomes for children with special health care needs. *Maternal and Child Health Journal*, 15(6), 794-805. doi: 10.1007/s10995-010-0648-x
- Kuo, D. Z., Houtrow, A. J., Arango, P., Kuhlthau, K. A., Simmons, J. M., & Neff, J. M. (2012).
 Family-centered care: current applications and future directions in pediatric health care.
 Maternal and Child Health Journal, 16(2), 297-305. doi: 10.1007/s10995-011-0751-7
- Kuo, D. Z., Sisterhen, L. L., Sigrest, T. E., Biazo, J. M., Aitken, M. E., & Smith, C. E. (2012).
 Family experiences and pediatric health services use associated with family-centered rounds. *Pediatrics*, 130(2), 299-305. doi: 10.1542/peds.2011-2623
- Kurinij, N., & Shiono, P. H. (1991). Early formula supplementation of breast-feeding. *Pediatrics*, 88(4), 745-750.
- Kushner, K. E., & Morrow, R. (2003). Grounded theory, feminist theory, critical theory: toward theoretical triangulation. *ANS Advances in Nursing Science*, 26(1), 30-43.
- La Leche League International (LLLI). (2011). A brief history of La Leche League International.

 Retrieved January 17, 2012, from http://www.llli.org/lllihistory.html

- Laantera, S., Polkki, T., & Pietila, A. M. (2011). A descriptive qualitative review of the barriers relating to breast-feeding counselling. *International Journal of Nursing Practice*, 17(1), 72-84. doi: 10.1111/j.1440-172X.2010.01909.x
- Labarere, J., Gelbert-Baudino, N., Ayral, A. S., Duc, C., Berchotteau, M., Bouchon, N., . . . Pons, J. C. (2005). Efficacy of breastfeeding support provided by trained clinicians during an early, routine, preventive visit: a prospective, randomized, open trial of 226 mother-infant pairs. *Pediatrics*, 115(2), e139-146.
- Labbok, M. (2008). Exploration of guilt among mothers who do not breastfeed: the physician's role. *Journal of Human Lactation*, 24(1), 80-84.
- Labiner-Wolfe, J., Fein, S. B., Shealy, K. R., & Wang, C. (2008). Prevalence of breast milk expression and associated factors. *Pediatrics*, *122 Suppl 2*, S63-68. doi: 10.1542/peds.2008-1315h
- LACTNET. (2012). Retrieved January 2012, from http://community.lsoft.com/archives/lactnet.html
- Langellier, B. A., Pia Chaparro, M., & Whaley, S. E. (2011). Social and Institutional Factors that Affect Breastfeeding Duration Among WIC Participants in Los Angeles County, California. *Maternal and Child Health Journal*. doi: 10.1007/s10995-011-0937-z
- Lawrence, R. A., & Howard, C. R. (2001). The role of lactation specialists. A guide for physicians. *Pediatric Clinics of North America*, 48(2), 517-523, xvii.

- Lewallen, L. P., Dick, M. J., Flowers, J., Powell, W., Zickefoose, K. T., Wall, Y. G., & Price, Z.
 M. (2006). Breastfeeding support and early cessation. *Journal of Obstetric, Gynecologic,*& Neonatal Nursing, 35(2), 166-172. doi: JOGN31 [pii] 10.1111/j.1552-6909.2006.00031.x [doi]
- Li, R., Darling, N., Maurice, E., Barker, L., & Grummer-Strawn, L. M. (2005). Breastfeeding rates in the United States by characteristics of the child, mother, or family: the 2002

 National Immunization Survey. *Pediatrics*, 115(1), e31-37. doi: peds.2004-0481 [pii]

 10.1542/peds.2004-0481 [doi]
- Li, R., Fein, S. B., Chen, J., & Grummer-Strawn, L. M. (2008). Why mothers stop breastfeeding: mothers' self-reported reasons for stopping during the first year. *Pediatrics*, *122 Suppl 2*, S69-76. doi: 122/Supplement_2/S69 [pii] 10.1542/peds.2008-1315i [doi]
- Li, R., Fein, S. B., & Grummer-Strawn, L. M. (2010). Do infants fed from bottles lack self-regulation of milk intake compared with directly breastfed infants? *Pediatrics*, 125(6), e1386-1393. doi: 10.1542/peds.2009-2549
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.
- Lindeke, L. L., & Block, D. E. (1998). Maintaining professional integrity in the midst of interdisciplinary collaboration. *Nursing Outlook*, 46(5), 213-218.
- Lindeke, L. L., Krajicek, M., & Patterson, D. L. (2001). PNP roles and interventions with children with special needs and their families. *Journal of Pediatric Health Care*, *15*(3), 138-143. doi: 10.1067/mph.2001.111278

- Losch, M., Dungy, C. I., Russell, D., & Dusdieker, L. B. (1995). Impact of attitudes on maternal decisions regarding infant feeding. *Journal of Pediatrics*, 126(4), 507-514.
- Lu, M. C., Lange, L., Slusser, W., Hamilton, J., & Halfon, N. (2001). Provider encouragement of breast-feeding: evidence from a national survey. *Obstetrics & Gynecology*, 97(2), 290-295.
- MacKean, G. L., Thurston, W. E., & Scott, C. M. (2005). Bridging the divide between families and health professionals' perspectives on family-centred care. *Health Expectations*, 8(1), 74-85. doi: 10.1111/j.1369-7625.2005.00319.x
- Magri, E. P., & Hylton-McGuire, K. (2013). Transforming a care delivery model to increase breastfeeding. *MCN American Journal of Maternal/Child Nursing*, *38*(3), 177-182; quiz 183-174. doi: 10.1097/NMC.0b013e3182836af7
- Mandal, B., Roe, B. E., & Fein, S. B. (2010). The differential effects of full-time and part-time work status on breastfeeding. *Health Policy*, *97*(1), 79-86. doi: 10.1016/j.healthpol.2010.03.006
- Mannel, R., & Mannel, R. S. (2006). Staffing for hospital lactation programs: recommendations from a tertiary care teaching hospital. *Journal of Human Lactation*, 22(4), 409-417. doi: 10.1177/0890334406294166
- Mason, M. (2010). Sample Size and Saturation in PhD Studies Using Qualitative Interviews. Forum: Qualitative Social Research, 11(3), Art. 8. doi: http://nbn-resolving.de/urn:nbn:de:0114-fqs100387.

- Maternal and Child Health Bureau. (2005). Definition of Family-Centered Care. Retrieved

 March 1, 2012, from

 http://www.familyvoices.org/admin/work_family_centered/files/FCCare.pdf
- Matthew-Maich, N., Ploeg, J., Dobbins, M., & Jack, S. (2013). Supporting the Uptake of Nursing Guidelines: what you really need to know to move nursing guidelines into practice.

 Worldviews Evidence-Based Nursing, 10(2), 104-115. doi: 10.1111/j.1741-6787.2012.00259.x
- McInnes, R. J., & Chambers, J. A. (2008). Supporting breastfeeding mothers: qualitative synthesis. *Journal of Advanced Nursing*, 62(4), 407-427. doi: 10.1111/j.1365-2648.2008.04618.x
- McLeod, D., Pullon, S., & Cookson, T. (2002). Factors influencing continuation of breastfeeding in a cohort of women. *Journal of Human Lactation*, 18(4), 335-343.
- Medical University of South Carolina. (2013). MUSC designated 'baby friendly.' Retrieved

 October 13, 2013, from

 http://academicdepartments.musc.edu/pr/pressrelease/2013/baby_friendly.htm
- Meehan, K., Harrison, G. G., Afifi, A. A., Nickel, N., Jenks, E., & Ramirez, A. (2008). The association between an electric pump loan program and the timing of requests for formula by working mothers in WIC. *Journal of Human Lactation*, 24(2), 150-158. doi: 10.1177/0890334408316081
- Meiers, S. J., & Tomlinson, P. S. (2003). Family-nurse co-construction of meaning: a central phenomenon of family caring. *Scandinavian Journal of Caring Sciences*, *17*(2), 193-201.

- Mellin, P. S., Poplawski, D. T., Gole, A., & Mass, S. B. (2011). Impact of a formal breastfeeding education program. *MCN American Journal of Maternal/Child Nursing*, *36*(2), 82-88; quiz 89-90. doi: 10.1097/NMC.0b013e318205589e
- Merewood, A., Brooks, D., Bauchner, H., MacAuley, L., & Mehta, S. D. (2006). Maternal birthplace and breastfeeding initiation among term and preterm infants: a statewide assessment for Massachusetts. *Pediatrics*, 118(4), e1048-1054. doi: 118/4/e1048 [pii] 10.1542/peds.2005-2637 [doi]
- Merewood, A., Mehta, S. D., Chamberlain, L. B., Philipp, B. L., & Bauchner, H. (2005).

 Breastfeeding rates in US Baby-Friendly hospitals: results of a national survey.

 Pediatrics, 116(3), 628-634. doi: 10.1542/peds.2004-1636
- Merewood, A., Philipp, B. L., Chawla, N., & Cimo, S. (2003). The baby-friendly hospital initiative increases breastfeeding rates in a US neonatal intensive care unit. *Journal of Human Lactation*, 19(2), 166-171.
- Mikesell, L., & Bromley, E. (2012). Patient centered, nurse averse? Nurses' care experiences in a 21st-century hospital. *Qualitative Health Research*, 22(12), 1659-1671. doi: 10.1177/1049732312458180
- Miller, C. (1995). In-Depth Interviewing by Telephone: Some Practical Considerations.

 Evaluation and Research in Education. *Evaluation and Research in Education*, 9(1), 29-38.

- Miller, L. C., Cook, J. T., Brooks, C. W., Heine, A. G., & Curtis, T. K. (2007). Breastfeeding education: empowering future health care providers. *Nursing for Women's Health*, *11*(4), 374-380. doi: 10.1111/j.1751-486X.2007.00193.x
- Moran, V. H., Bramwell, R., Dykes, F., & Dinwoodie, K. (2000). An evaluation of skills acquisition on the WHO/UNICEF Breastfeeding Management Course using the prevalidated Breastfeeding Support Skills Tool (BeSST). *Midwifery*, *16*(3), 197-203. doi: 10.1054/midw.2000.0214
- Morland-Schultz, K., & Hill, P. D. (2005). Prevention of and therapies for nipple pain: a systematic review. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 34*(4), 428-437. doi: 34/4/428 [pii] 10.1177/0884217505276056 [doi]
- Mozingo, J. N., Davis, M. W., Droppleman, P. G., & Merideth, A. (2000). "It wasn't working." Women's experiences with short-term breastfeeding. *MCN American Journal of Maternal/Child Nursing*, 25(3), 120-126.
- Mullen, K., Conrad, L., Hoadley, G., & Iannone, D. (2007). Family-centered maternity care: one hospital's quest for excellence. *Nursing for Women's Health*, *11*(3), 282-290. doi: 10.1111/j.1751-486X.2007.00166.x
- Murray, E. K., Ricketts, S., & Dellaport, J. (2007). Hospital practices that increase breastfeeding duration: results from a population-based study. *Birth*, *34*(3), 202-211. doi: 10.1111/j.1523-536X.2007.00172.x

- Nadeem, E., Olin, S. S., Hill, L. C., Hoagwood, K. E., & Horwitz, S. M. (2013). Understanding the components of quality improvement collaboratives: a systematic literature review.

 **Milbank Quarterly*, 91(2), 354-394. doi: 10.1111/milq.12016
- National Breastfeeding Center. (2013). Breastfeeding policy scorecard. Retrieved October 1, 2013, from http://www.nbfcenter.com/NBfC_Breastfeeding-Policy-Scorecard-09.2013.pdf
- National Center for Environmental Health, & Centers for Disease Control and Prevention.

 (2009). Perchlorate in Baby Formula Fact Sheet. Retrieved October 1, 2010, from http://www.cdc.gov/nceh/features/perchlorate_factsheet.htm
- National Initiative for Children's Healthcare Quality (NICHQ). (2013a). Best Fed Beginnings.

 Retrieved October 5, 2013, from

 http://breastfeeding.nichq.org/Projects/Best%20Fed%20Beginnings/Overview.aspx
- National Initiative for Children's Healthcare Quality (NICHQ). (2013b). New York State

 Breastfeeding Quality Improvement in Hospitals. Retrieved October 5, 2013, from

 http://breastfeeding.nichq.org/Projects/New%20York%20State%20Breastfeeding%20Qu
 ality%20Improvement%20in%20Hospitals/Overview.aspx
- National Initiative for Children's Healthcare Quality (NICHQ). (2013c). Texas Breastfeeding

 Learning Collaborative. Retrieved October 5, 2013, from

 http://breastfeeding.nichq.org/Projects/Texas%20Ten%20Step%20Star%20Achiever%20

 Breastfeeding%20Learning%20Collaborative/Overview.aspx

- National WIC Association. (2013). WIC funding and operation. Retrieved September 30, 2013, from https://www.nwica.org/topics/wic-funding-operation
- Neifert, M. (2001). Prevention of breastfeeding tragedies. *Pediatric Clinics of North America*, 48(2), 273-297.
- Neifert, M., DeMarzo, S., Seacat, J., Young, D., Leff, M., & Orleans, M. (1990). The influence of breast surgery, breast appearance, and pregnancy-induced breast changes on lactation sufficiency as measured by infant weight gain. *Birth*, *17*(1), 31-38.
- Neifert, M., Gray, J., Gary, N., & Camp, B. (1988). Factors influencing breast-feeding among adolescents. *Journal of Adolescent Health Care*, 9(6), 470-473.
- Nelson, A. M. (2007). Maternal-newborn nurses' experiences of inconsistent professional breastfeeding support. *Journal of Advanced Nursing*, 60(1), 29-38. doi: 10.1111/j.1365-2648.2007.04373.x
- Neuman, W. L. (2003). *Social Research Methods: qualitative and quantitative approaches* (5th ed.). Boston: Pearson Education, Inc.
- Newacheck, P. W., Kim, S. E., Blumberg, S. J., & Rising, J. P. (2008). Who is at risk for special health care needs: findings from the National Survey of Children's Health. *Pediatrics*, 122(2), 347-359. doi: 122/2/347 [pii] 10.1542/peds.2007-1406 [doi]

- Nickel, N. C., Taylor, E. C., Labbok, M. H., Weiner, B. J., & Williamson, N. E. (2013).

 Applying organisation theory to understand barriers and facilitators to the implementation of baby-friendly: A multisite qualitative study. *Midwifery*, 29(8), 956-964. doi: 10.1016/j.midw.2012.12.001
- Noel-Weiss, J., Cragg, B., & Woodend, A. K. (2012). Exploring how IBCLCs manage ethical dilemmas: a qualitative study. *BMC Medical Ethics*, *13*, 18. doi: 10.1186/1472-6939-13-18
- Nommsen-Rivers, L. A., Chantry, C. J., Cohen, R. J., & Dewey, K. G. (2010). Comfort with the idea of formula feeding helps explain ethnic disparity in breastfeeding intentions among expectant first-time mothers. *Breastfeeding Medicine*, *5*(1), 25-33. doi: 10.1089/bfm.2009.0052
- Notestine, G. E. (1990). The importance of the identification of ankyloglossia (short lingual frenulum) as a cause of breastfeeding problems. *Journal of Human Lactation*, 6(3), 113-115.
- Nyqvist, K. H., Haggkvist, A. P., Hansen, M. N., Kylberg, E., Frandsen, A. L., Maastrup, R., . . . Haiek, L. N. (2012). Expansion of the ten steps to successful breastfeeding into neonatal intensive care: expert group recommendations for three guiding principles. *Journal of Human Lactation*, 28(3), 289-296. doi: 10.1177/0890334412441862
- Odom, E. C., Li, R., Scanlon, K. S., Perrine, C. G., & Grummer-Strawn, L. (2013). Reasons for earlier than desired cessation of breastfeeding. *Pediatrics*, *131*(3), e726-732. doi: 10.1542/peds.2012-1295

- Office on Women's Health. (2010). The Business Case For Breastfeeding: Steps For Creating A

 Breastfeeding Friendly Worksite. Retrieved October 1, 2010, from

 http://www.womenshealth.gov/breastfeeding/government-programs/business-case-for-breastfeeding/
- Ogbuanu, C., Glover, S., Probst, J., Hussey, J., & Liu, J. (2011). Balancing work and family: effect of employment characteristics on breastfeeding. *Journal of Human Lactation*, 27(3), 225-238; quiz 293-225. doi: 10.1177/0890334410394860
- Olson, B. H., Horodynski, M. A., Brophy-Herb, H., & Iwanski, K. C. (2010). Health professionals' perspectives on the infant feeding practices of low income mothers.

 *Maternal and Child Health Journal, 14(1), 75-85. doi: 10.1007/s10995-008-0425-2
- Onwuegbuzie, A. J., & Leech, N. L. (2007). A call for qualitative power analysis. *Quality & Quantity*, 41, 105-121.
- Osband, Y. B., Altman, R. L., Patrick, P. A., & Edwards, K. S. (2011). Breastfeeding education and support services offered to pediatric residents in the US. *Academic Pediatrics*, 11(1), 75-79. doi: 10.1016/j.acap.2010.11.002
- Palda, V. A., Guise, J. M., & Wathen, C. N. (2004). Interventions to promote breast-feeding: applying the evidence in clinical practice. *Canadian Medical Association Journal*, 170(6), 976-978.
- Patient Protection and Affordable Care Act. (2010). Public Law 111-148. Retrieved March 1, 2012, from http://thomas.loc.gov/cgi-bin/bdquery/z?d111:HR03590:@@@L&summ2=m&summary

- Paul, I. M., Beiler, J. S., Schaefer, E. W., Hollenbeak, C. S., Alleman, N., Sturgis, S. A., . . .
 Weisman, C. S. (2012). A Randomized Trial of Single Home Nursing Visits vs Office-Based Care After Nursery/Maternity Discharge: The Nurses for Infants Through
 Teaching and Assessment After the Nursery (NITTANY) Study. Archives of Pediatrics and Adolescent Medicine, 166(3), 263-270. doi: 10.1001/archpediatrics.2011.198
- Paul, I. M., Lehman, E. B., Hollenbeak, C. S., & Maisels, M. J. (2006). Preventable newborn readmissions since passage of the Newborns' and Mothers' Health Protection Act. *Pediatrics*, 118(6), 2349-2358. doi: 10.1542/peds.2006-2043
- Perrine, C. G., Scanlon, K. S., Li, R., Odom, E., & Grummer-Strawn, L. M. (2012). Baby-Friendly hospital practices and meeting exclusive breastfeeding intention. *Pediatrics*, 130(1), 54-60. doi: 10.1542/peds.2011-3633
- Pettoello-Mantovani, M., Campanozzi, A., Maiuri, L., & Giardino, I. (2009). Family-oriented and family-centered care in pediatrics. *Italian Journal of Pediatrics*, *35*(1), 12. doi: 10.1186/1824-7288-35-12
- Philipp, B. L., Merewood, A., Miller, L. W., Chawla, N., Murphy-Smith, M. M., Gomes, J. S., . . . Cook, J. T. (2001). Baby-friendly hospital initiative improves breastfeeding initiation rates in a US hospital setting. *Pediatrics*, *108*(3), 677-681.
- Philipp, B. L., Merewood, A., & O'Brien, S. (2001). Physicians and breastfeeding promotion in the United States: a call for action. *Pediatrics*, 107(3), 584-587.
- Phillips, C. R. (2003). *Family-Centered Maternity Care*. Sudbury, MA: Jones and Bartlett Publishers.

- Pillitteri, A. (2007). Maternal and Child Health Nursing: Care of the Childbearing and Childrearing Family. Retrieved from http://downloads.lww.com/wolterskluwer_vitalstream_com/sample-content/9780781777766_Pillitteri/samples/Chapter01.pdf
- Plummer, M., & Young, L. E. (2010). Grounded theory and feminist inquiry: revitalizing links to the past. *Western Journal of Nursing Research*, 32(3), 305-321. doi: 10.1177/0193945909351298
- Pugh, L. C., Milligan, R. A., Frick, K. D., Spatz, D., & Bronner, Y. (2002). Breastfeeding duration, costs, and benefits of a support program for low-income breastfeeding women. *Birth*, 29(2), 95-100.
- Rajan, L. (1993). The contribution of professional support, information and consistent correct advice to successful breast feeding. *Midwifery*, *9*(4), 197-209.
- Rasmussen, K. M. (2007). Association of maternal obesity before conception with poor lactation performance. *Annual Review of Nutrition*, 27, 103-121. doi: 10.1146/annurev.nutr.27.061406.093738 [doi]
- Rasmussen, K. M., & Geraghty, S. R. (2011). The quiet revolution: breastfeeding transformed with the use of breast pumps. *American Journal of Public Health*, 101(8), 1356-1359. doi: 10.2105/ajph.2011.300136
- Rasmussen, K. M., Hilson, J. A., & Kjolhede, C. L. (2001). Obesity may impair lactogenesis II. *Journal of Nutrition*, 131(11), 3009S-3011S.

- Rasmussen, K. M., & Kjolhede, C. L. (2004). Prepregnant overweight and obesity diminish the prolactin response to suckling in the first week postpartum. *Pediatrics*, *113*(5), e465-471.
- Ray, R., Gornick, J. C., & Schmitt, J. (2008). Parental Leave Policies in 21 Countries: Assessing

 Generosity and Gender Equality. Retrieved from

 http://www.cepr.net/documents/publications/parental_2008_09.pdf
- Register, N., Eren, M., Lowdermilk, D., Hammond, R., & Tully, M. R. (2000). Knowledge and attitudes of pediatric office nursing staff about breastfeeding. *Journal of Human Lactation*, 16(3), 210-215.
- Renfrew, M. J., Craig, D., Dyson, L., McCormick, F., Rice, S., King, S. E., . . . Williams, A. F. (2009). Breastfeeding promotion for infants in neonatal units: a systematic review and economic analysis. *Health Technology Assessment*, *13*(40), 1-146, iii-iv. doi: 10.3310/hta13400
- Renfrew, M. J., McFadden, A., Dykes, F., Wallace, L. M., Abbott, S., Burt, S., & Anderson, J. K. (2006). Addressing the learning deficit in breastfeeding: strategies for change.

 *Maternal and Child Nutrition, 2(4), 239-244. doi: 10.1111/j.1740-8709.2006.00068.x
- Riessman, C. K. (1983). Women and Medicalization: A New Perspective. *Social Policy*, *14*(Summer), 3-18.
- Riordan, J., & Auerbach, K. G. (1998). *Breastfeeding and Human Lactation* (2nd ed.). Boston: Jones and Bartlett.

- Riordan, J., Bibb, D., Miller, M., & Rawlins, T. (2001). Predicting breastfeeding duration using the LATCH breastfeeding assessment tool. *Journal of Human Lactation*, *17*(1), 20-23.
- Rishel, P. E., & Sweeney, P. (2005). Comparison of breastfeeding rates among women delivering infants in military treatment facilities with and without lactation consultants.

 **Military Medicine*, 170(5), 435-438.
- Rosen, P., Stenger, E., Bochkoris, M., Hannon, M. J., & Kwoh, C. K. (2009). Family-centered multidisciplinary rounds enhance the team approach in pediatrics. *Pediatrics*, *123*(4), e603-608. doi: 10.1542/peds.2008-2238
- Rosenberg, K. D., Stull, J. D., Adler, M. R., Kasehagen, L. J., & Crivelli-Kovach, A. (2008). Impact of hospital policies on breastfeeding outcomes. *Breastfeeding Medicine*, *3*(2), 110-116. doi: 10.1089/bfm.2007.0039
- Roudebush, J. R., Kaufman, J., Johnson, B. H., Abraham, M. R., & Clayton, S. P. (2006).

 Patient- and family-centered perinatal care: partnerships with childbearing women and families. *Journal of Perinatal & Neonatal Nursing*, 20(3), 201-209.
- Ryan, A. S., Zhou, W., & Arensberg, M. B. (2006). The effect of employment status on breastfeeding in the United States. *Women's Health Issues*, 16(5), 243-251. doi: 10.1016/j.whi.2006.08.001
- Ryan, A. S., Zhou, W., & Gaston, M. H. (2004). Regional and sociodemographic variation of breastfeeding in the United States, 2002. *Clinical Pediatrics*, 43(9), 815-824.

- Sattari, M., Levine, D., Neal, D., & Serwint, J. R. (2013). Personal breastfeeding behavior of physician mothers is associated with their clinical breastfeeding advocacy. *Breastfeeding Medicine*, 8(1), 31-37. doi: 10.1089/bfm.2011.0148
- Schanler, R. J., O'Connor, K. G., & Lawrence, R. A. (1999). Pediatricians' practices and attitudes regarding breastfeeding promotion. *Pediatrics*, 103(3), E35.
- Schmied, V., Beake, S., Sheehan, A., McCourt, C., & Dykes, F. (2011). Women's perceptions and experiences of breastfeeding support: a metasynthesis. *Birth*, *38*(1), 49-60. doi: 10.1111/j.1523-536X.2010.00446.x
- Schwartz, K., D'Arcy, H. J., Gillespie, B., Bobo, J., Longeway, M., & Foxman, B. (2002).

 Factors associated with weaning in the first 3 months postpartum. *Journal of Family Practice*, *51*(5), 439-444. doi: jfp_0502_00439 [pii]
- Scott, J. A., Binns, C. W., Oddy, W. H., & Graham, K. I. (2006). Predictors of breastfeeding duration: evidence from a cohort study. *Pediatrics*, *117*(4), e646-655. doi: 10.1542/peds.2005-1991
- Segel, S., Hashima, J., Gregory, W. T., Edelman, A., Li, H., & Guise, J. M. (2010). A new approach to postpartum rounds: patient-centered collaborative care improves efficiency. *Journal of Graduate Medical Education*, 2(1), 67-72. doi: 10.4300/jgme-d-09-00060.1
- Semenic, S., Loiselle, C., & Gottlieb, L. (2008). Predictors of the duration of exclusive breastfeeding among first-time mothers. *Research in Nursing & Health*, *31*(5), 428-441. doi: 10.1002/nur.20275

- Shealy, K. R., Scanlon, K. S., Labiner-Wolfe, J., Fein, S. B., & Grummer-Strawn, L. M. (2008).

 Characteristics of breastfeeding practices among US mothers. *Pediatrics*, *122 Suppl 2*,

 S50-55. doi: 10.1542/peds.2008-1315f
- Sheehan, A., Schmied, V., & Barclay, L. (2010). Complex decisions: theorizing women's infant feeding decisions in the first 6 weeks after birth. *Journal of Advanced Nursing*, 66(2), 371-380. doi: 10.1111/j.1365-2648.2009.05194.x
- Sheehan, D., Bridle, B., Hillier, T., Feightner, K., Hayward, S., Lee, K. S., . . . James, M. (1999).

 Breastfeeding outcomes of women following uncomplicated birth in HamiltonWentworth. *Canadian Journal of Public Health*, 90(6), 408-411.
- Sherwood, G. D., Brown, M., Fay, V., & Wardell, D. (1997). Defining Nurse Practitioner Scope of Practice: Expanding Primary Care Services. *The Internet Journal of Advanced Nursing Practice*, *1*(2).
- Sikorski, J., Renfrew, M. J., Pindoria, S., & Wade, A. (2003). Support for breastfeeding mothers: a systematic review. *Paediatric and Perinatal Epidemiology*, *17*(4), 407-417.
- Singh, G. K., Kogan, M. D., & Dee, D. L. (2007). Nativity/immigrant status, race/ethnicity, and socioeconomic determinants of breastfeeding initiation and duration in the United States, 2003. *Pediatrics*, 119 Suppl 1, S38-46. doi: 119/Supplement_1/S38 [pii] 10.1542/peds.2006-2089G [doi]
- Sleutel, M., Schultz, S., & Wyble, K. (2007). Nurses' views of factors that help and hinder their intrapartum care. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 36*(3), 203-211. doi: JOGN146 [pii] 10.1111/j.1552-6909.2007.00146.x [doi]

- Smalley, L. P., Kenney, M. K., Denboba, D., & Strickland, B. (2013). Family Perceptions of Shared Decision-Making with Health Care Providers: Results of the National Survey of Children with Special Health Care Needs, 2009-2010. *Maternal and Child Health Journal*. doi: 10.1007/s10995-013-1365-z
- Smith, L. J. (2010). *Impact of Birthing Practices on Breastfeeding*. Sudbury: Jones and Bartlett Publishers.
- Spatz, D. L. (2004). Ten steps for promoting and protecting breastfeeding for vulnerable infants. *Journal of Perinatal & Neonatal Nursing*, 18(4), 385-396.
- Spear, H. J. (2006). Baccalaureate nursing students' breastfeeding knowledge: a descriptive survey. *Nurse Education Today*, 26(4), 332-337. doi: 10.1016/j.nedt.2005.10.014
- Srinivasan, A., Dobrich, C., Mitnick, H., & Feldman, P. (2006). Ankyloglossia in breastfeeding infants: the effect of frenotomy on maternal nipple pain and latch. *Breastfeeding Medicine*, *1*(4), 216-224. doi: 10.1089/bfm.2006.1.216 [doi]
- Starks, H., & Trinidad, S. B. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*, 17(10), 1372-1380.
- Strauss, A., & Corbin, J. (1990). *Basics of Qualitative Research: grounded theory procedures* and techniques. Newbury Park, CA: Sage.

- Stryker, S., & Vryan, K. D. (2003). The symbolic interactionist frame. In J. Delameter (Ed.), *Handbook of Social Psychology* (pp. 3-28). New york: Kluwer Academic/Plenum Publishers.
- Sturges, J., & Hanrahan, K. (2004). Comparing Telephone and Face-to-Face Qualitative Interviewing: a Research Note. Qualitative Research. *Qualitative Research*, 4(1), 107-118.
- Suter, E., Arndt, J., Arthur, N., Parboosingh, J., Taylor, E., & Deutschlander, S. (2009). Role understanding and effective communication as core competencies for collaborative practice. *Journal of Interprofessional Care*, 23(1), 41-51. doi: 10.1080/13561820802338579
- Swanson, V., Power, K., Kaur, B., Carter, H., & Shepherd, K. (2006). The impact of knowledge and social influences on adolescents' breast-feeding beliefs and intentions. *Public Health Nutrition*, *9*(3), 297-305.
- Szucs, K. A., Miracle, D. J., & Rosenman, M. B. (2009). Breastfeeding knowledge, attitudes, and practices among providers in a medical home. *Breastfeeding Medicine*, 4(1), 31-42.
- Szucs, K. A., & Rosenman, M. B. (2013). Family-centered, evidence-based phototherapy delivery. *Pediatrics*, 131(6), e1982-1985. doi: 10.1542/peds.2012-3479
- Tarrant, R. C., Younger, K. M., Sheridan-Pereira, M., & Kearney, J. M. (2011). Factors associated with duration of breastfeeding in ireland: potential areas for improvement. *Journal of Human Lactation*, 27(3), 262-271. doi: 10.1177/0890334411413097

- Tashakkori, A., & Teddlie, C. (1998). *Mixed Methodology: combining qualitative and quantitative approaches* (Vol. 46). Thousand Oaks, CA: Sage.
- Taveras, E. M., Capra, A. M., Braveman, P. A., Jensvold, N. G., Escobar, G. J., & Lieu, T. A. (2003). Clinician support and psychosocial risk factors associated with breastfeeding discontinuation. *Pediatrics*, 112(1 Pt 1), 108-115.
- Taveras, E. M., Li, R., Grummer-Strawn, L., Richardson, M., Marshall, R., Rego, V. H., . . . Lieu, T. A. (2004a). Mothers' and clinicians' perspectives on breastfeeding counseling during routine preventive visits. *Pediatrics*, *113*(5), e405-411.
- Taveras, E. M., Li, R., Grummer-Strawn, L., Richardson, M., Marshall, R., Rego, V. H., . . . Lieu, T. A. (2004b). Opinions and practices of clinicians associated with continuation of exclusive breastfeeding. *Pediatrics*, *113*(4), e283-290.
- Taylor, J. S., Risica, P. M., Geller, L., Kirtania, U., & Cabral, H. J. (2006). Duration of breastfeeding among first-time mothers in the United States: results of a national survey. *Acta Paediatrica*, 95(8), 980-984. doi: T2796V713K171P00 [pii] 10.1080/08035250600750064 [doi]
- Tender, J. A., Janakiram, J., Arce, E., Mason, R., Jordan, T., Marsh, J., . . . Moon, R. Y. (2009).

 Reasons for in-hospital formula supplementation of breastfed infants from low-income families. *Journal of Human Lactation*, 25(1), 11-17. doi: 10.1177/0890334408325821
- Thorley, V. (2000). Complementary and competing roles of volunteers and professionals in the breastfeeding field. *International Journal of Self Help and Self Care*, 1(2), 171-179.

- Thulier, D. (2009). Breastfeeding in America: a history of influencing factors. *Journal of Human Lactation*, 25(1), 85-94. doi: 10.1177/0890334408324452
- Thulier, D., & Mercer, J. (2009). Variables associated with breastfeeding duration. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 38(3), 259-268. doi: 10.1111/j.1552-6909.2009.01021.x
- Thurman, S. E., & Allen, P. J. (2008). Integrating lactation consultants into primary health care services: are lactation consultants affecting breastfeeding success? *Pediatric Nursing*, 34(5), 419-425.
- Torres, J. M. (2013). Breast milk and labour support: lactation consultants' and doulas' strategies for navigating the medical context of maternity care. *Sociology of Health and Illness*, 35(6), 924-938. doi: 10.1111/1467-9566.12010
- Tyler, M., & Hellings, P. (2005). Feeding method and rehospitalization in newborns less than 1 month of age. *Journal of Obstetric, Gynecologic, & Neonatal Nursing, 34*(1), 70-79. doi: 10.1177/0884217504272813
- U.S. Department of Health and Human Services. (2000). HHS Blueprint for Action on Breastfeeding. Washington, D.C.: U.S. Department of Health and Human Services, Office on Women's Health.
- U.S. Department of Health and Human Services. (2011a). Healthy People 2020: Maternal,
 Infant, and Child Health. Retrieved January 24, 2011, from
 http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicid=26

- U.S. Department of Health and Human Services. (2011b). The Surgeon General's call to action to support breastfeeding. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General.
- U.S. Department of Health and Human Services. (April, 2011). Quality Improvement. Retrieved October 5, 2013, from
 http://www.hrsa.gov/quality/toolbox/508pdfs/qualityimprovement.pdf
- U.S. Department of Labor, Employment Standards Administration, & Division, (November 2007). Fact Sheet #28: The Family and Medical Leave Act of 1993. Retrieved June 3, 2008, from http://www.dol.gov/esa/regs/compliance/whd/whdfs28.pdf
- Ulin, P. R., Robinson, E. T., & Tolley, E. E. (2005). *Qualitative Methods in Public Health: A field guide for applied research*. San Francisco: Jossey-Bass.
- UNICEF, WHO, UNESCO, UNFPA, UNDP, UNAIDS, . . . The World Bank. (2010). Facts for Life 4th Edition. Retrieved October 1, 2010, from www.factsforlifeglobal.org
- United States Breastfeeding Committee. (2010). Implementing the Joint Commission Perinatal

 Care core measure on exclusive breast milk feeding. Washington, DC: United States

 Breastfeeding Committee.
- United States Department of Labor. (2010). Break time for nursing mothers. Retrieved December 11, 2011, from http://www.dol.gov/whd/nursingmothers/

- United States Lactation Consultant Association. (2012). Containing health care costs: help in plain sight 2nd. Retrieved October 1, 2013, from http://www.hmhbga.org/Reimbursement_White_Paper.pdf
- Van Esterik, P. (1989). *Beyond the Breast-Bottle Controversy*. New Brunswick: Rutgers University Press.
- Vittoz, J. P., Labarere, J., Castell, M., Durand, M., & Pons, J. C. (2004). Effect of a training program for maternity ward professionals on duration of breastfeeding. *Birth*, *31*(4), 302-307. doi: 10.1111/j.0730-7659.2004.00323.x
- Voos, K. C., Ross, G., Ward, M. J., Yohay, A. L., Osorio, S. N., & Perlman, J. M. (2011).
 Effects of implementing family-centered rounds (FCRs) in a neonatal intensive care unit
 (NICU). Journal of Maternal-Fetal and Neonatal Medicine, 24(11), 1403-1406. doi:
 10.3109/14767058.2011.596960
- Walker, M. (2011). *Breastfeeding Management for the Clinician: Using the Evidence* (Second Edition ed.). Sudbury: Jones and Bartlett Publishers.
- Wasserman, J. A., Clair, J. M., & Wilson, K. L. (2009). Problematics of grounded theory: innovations for developing an increasingly rigourous qualitative method. *Qualitative Research*, 9(3), 355-381.
- Watson Genna, C. (2008). *Supporting Sucking Skills in Breastfeeding Infants*. Sudbury, MA: Jones and Bartlett Publishers.

- Westmoreland, M. H., & Zwelling, E. (2000). Developing a family-centered, hospital-based perinatal education program. *Journal of Perinatal Education*, 9(4), 28-39. doi: 10.1624/105812400x87888
- White, J. M., & Klein, D. M. (2008). The Symbolic Interaction Framework *Family Theories* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Witt, A. M., Smith, S., Mason, M. J., & Flocke, S. A. (2012). Integrating routine lactation consultant support into a pediatric practice. *Breastfeeding Medicine*, 7, 38-42. doi: 10.1089/bfm.2011.0003
- Wojcicki, J. M. (2011). Maternal prepregnancy body mass index and initiation and duration of breastfeeding: a review of the literature. *Journal of Women's Health (Larchmt)*, 20(3), 341-347. doi: 10.1089/jwh.2010.2248
- Wolf, J. H. (2003). Low breastfeeding rates and public health in the United States. *American Journal of Public Health*, *93*(12), 2000-2010.
- World Health Organization. (2010). Framework for action on interprofessional education & collaborative practice. Retrieved March 25, 2012, from http://whqlibdoc.who.int/hq/2010/WHO_HRH_HPN_10.3_eng.pdf
- World Health Organization, & UNICEF. (1981). International Code of Marketing of Breast-milk

 Substitutes. Retrieved October 1, 2010, from

 http://www.who.int/nutrition/publications/code_english.pdf

- Yun, S., Liu, Q., Mertzlufft, K., Kruse, C., White, M., Fuller, P., & Zhu, B. P. (2010). Evaluation of the Missouri WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) breast-feeding peer counselling programme. *Public Health Nutrition*, *13*(2), 229-237. doi: 10.1017/s1368980009990668
- Ziol-Guest, K. M., & Hernandez, D. C. (2010). First- and second-trimester WIC participation is associated with lower rates of breastfeeding and early introduction of cow's milk during infancy. *Journal of the American Dietetic Association*, 110(5), 702-709. doi: 10.1016/j.jada.2010.02.013
- Zwelling, E., & Phillips, C. R. (2001). Family-centered maternity care in the new millennium: is it real or is it imagined? *Journal of Perinatal & Neonatal Nursing*, 15(3), 1-12.

APPENDIX A: SEMI-STRUCTURED INTERVIEW GUIDE

The purpose of this exploratory study is to understand the nature of International Board Certified Lactation Consultants' (IBCLCs) perceived barriers to the professional management of early breastfeeding problems.

Professional Background

- What brought you to lactation consulting?
 - o When and why did you become an IBCLC?
 - o How did you decide to become an IBCLC?
- What other credentials do you have and which do you consider to be your primary credential?
- Please describe your work setting
- What other types of providers do you work with regularly?
 - o In what capacity do you work with these other providers?
 - o Probe: Are the other nurses you work with IBCLC?
- Who are your typical clients/patients? (ethnicity, race, income level, insurance status, age, education level, language, etc.)

Research Question

Interview Guide Questions

- 1. What do IBCLCs perceive to be the barriers to providing professional support and management of early breastfeeding problems?
- In your job, what have you found to be factors that influence your success in providing support and management of early breastfeeding problems?
- Cover barrier and facilitators: "Let's focus now on some of the factors that facilitate/hinder your success"
 - With specific providers
 - Institutional
 - O With family and other social support systems?
 - What do you think are the barriers to managing early breastfeeding problems? Lots of probing depending on what comes up.

- 2. How do the perceived barriers to managing early breastfeeding problems vary by the type of breastfeeding problem?
- How do the barriers differ depending on the specific problem? (Probe for detail)
- Probe: Can you give some specific examples?
- What types of early breastfeeding issues do you most frequently see? (In the first few weeks) Explain/describe.
 - Which of these are the most common early breastfeeding problems that you see?
 Please list some.
 - What are some unusual/uncommon problems you have dealt with?
 - Are any of these problems that you have described more difficult to manage than others and why?
 - o Probe: Which problems are specifically medical?
 - o Probe: Which problems are more severe? Which require higher levels of medical intervention?
- Probe for family-related issues
- Possibly probe about any differences in managing early breastfeeding problems along racial/ethnic lines, insurance status, WIC participation?
- Possibly probe for discharge with pumps
- Probe: Can you describe the discharge process? Probe on breastfeeding discharge plan.
- 3. What are the roles of various health care professionals in providing breastfeeding support and management of early breastfeeding problems, as perceived by the IBCLC?
- What do you see as the role of the IBCLC in managing these early breastfeeding problems?
 - o Let's dream a bit. What would it be like in the ideal job for you? Let's pretend you could reinvent the rules- what would you make this job look like?
 - O How is your idea of the ideal role of an IBCLC different from the actual role that IBCLCs play in managing early breastfeeding problems?
- [If has other credentials (MD, RN, CNM, PhD, MPH etc.)]
 - How does the IBCLC credential work with your other credentials with regard to managing these problems?
 - How do these credentials (and the work that you do for each) overlap? Conflict?
 (Probe for Standards of Practice/Ethics, etc.)
 - O po you identify with any one credential more than the others? Which credential do you identify with most? Why?
 - Probe: If introducing yourself to a patient, or another professional, how do you introduce yourself? Does it change based on who this person is? How?
- What roles do other practitioners play with regard to breastfeeding problems? (Probe for specific practitioner type and roles- possibly depending on the problem as well-who are these providers- list them and describe breastfeeding role for each).

- Differences in FCC between different providers: Probe for how they interpret
 problems versus how other providers interpret the same problem. Probe for
 examples.
- How do the family and the family's social support system impact the professional management (by the providers) of early breastfeeding problems?
 - Probes: What are some of the problems that are related to the family context that you are able to manage?
 - What are some of the problems in the family context that you are not able to manage?
 - How does this impact your ability to provide adequate support?

Probes:

- Continuity of Care: Can you tell me a little bit about the transition from hospital to home for women in terms of breastfeeding challenges?
- Are women identifying their breastfeeding problems and seeking help?

Payment and Insurance Issues: Are you able to bill for your services? How does this work? If not, how do you get paid? (Different probes by credential) How does this impact your role as compared to other IBCLCs who work in different settings? Or compared to other providers.

- 4. How do these roles impact the ability of the IBCLC to provide support and management of early breastfeeding problems?
- How do the different roles of these various providers impact your ability (as an IBCLC) to provide support and management of early breastfeeding problems?
- What kind of relationships do you have with other healthcare providers who address early breastfeeding problems? Tell me more about these relationships.
 - o How closely do you work with these practitioners?
 - o How regularly do you work with these practitioners?
 - o How well do you think you work with these practitioners and why?
 - What types of strategies have you used to facilitate working collaboratively with these providers?
 - o Which of these strategies have worked?
 - Do you have certain healthcare providers that you work with all the time and why? Probe for referrals and who they trust and why

- 5. What are the communication strategies and other processes through which IBCLCs work with a) other health care professionals and b) families to provide support and management of early breastfeeding problems?
- Has your ability to provide effective support and management of early breastfeeding problems changed over time and if so, how and why? By credential or certification?
- How do you communicate with other providers?
 - o Probe: How is this received?
- How could breastfeeding support for dyads presenting with early breastfeeding problems be better coordinated within your practice setting?
 - o Among your staff?
 - With other breastfeeding support professionals?
 - O With families?
- What are some recommendations for improving the management of these problems for the various practitioners involved?
- Probe: If you had to give specific recommendations, what would you say? Example: If your hospital would take your advice . . .

Other possible questions:

Just to wrap this up, I'd like to ask a few more questions.

- What do you most like about managing early breastfeeding problems? What do you least like?
- What are the hardest parts about your job (constraints)?
- What are the barriers that make your job most difficult?
- How do women access IBCLCs? Through referrals? Lists? Web sites? Word of mouth?
- Do women have access to you just by being a patient at the hospital? How about when they are discharged?
- Do you see all women who give birth, just those who intend to breastfeed, or just those with problems? Can you describe how you determine which mothers to see?
- Are there other issues that you think are important that we didn't cover in this interview?

Demographic questions	Participant #
Sex: (circle) Male or Female	Age:
County/State	Race/Ethnicity:
Breastfeeding Education:	
Occupation:	
Number of Years in profession _	
Practice Setting(s):	
Do you work in a BFHI-designate	ed hospital? (circle) YES NO
Other credentials	(Primary credential)
LLL experience	Role
Do you have children? (circle) Y	ES NO
Previous Breastfeeding experience	e for you or your partner:

Children	Breastfed?	Type of breastfeeding	Length of breastfeeding
	Y/N	(supplemental or exclusive) (prior to 6 mos)	in weeks, months, or
		Feel free to add comments/detail if needed	years
1 st born			
2 nd born			
3 rd born			
4 th born			
5 th born			
6 th born			
Additional?			

If you breastfed your child/children, did you encounter any breastfeeding problems? Pleadescribe:	ise
Did you ever seek professional support to help with these problems? Please describe you experiences:	r

APPENDIX B: RECRUITMENT MATERIALS

Recruitment by phone- leaving a message: Hi
My name is Erica Anstey and I am a doctoral candidate in public health at the University of South Florida. I am doing my dissertation research on the perspectives of practicing lactation consultants about the professional management of early breastfeeding problems. I have identified you as an IBCLC, and I am interested in interviewing you to get your perspective. If you would be willing to participate in my project; please contact me at [phone number] or by email at [email address] and I can tell you more about my research.
I look forward to hearing from you. Again, my name is Erica Anstey and my number is [phone number]. Thank you so much!
(Eligibility criteria will be discussed and the IRB number will be provided when I am able to reach the participant since the voicemail may cut me off if I speak too long. My contact information needs to be clear and slow so the potential participant can call me back or email me)
Recruitment by phone: Hello. May I please speak with,
Hi, My name is Erica Anstey and I am a doctoral candidate in public health at the University of
South Florida. I am doing my dissertation research on the perspectives of practicing lactation consultants about the professional management of early breastfeeding problems. As I'm sure you know, breastfeeding problems often lead to early weaning. I think it is important to identify perspectives of lactation professionals such as yourself about the factors that may hinder your ability to really assist in managing these early problems.

• If "no": "thank you so much for your time. I hope you have a nice day."

perspective. Would you be willing to participate in my research study?

I have identified you as an IBCLC, and I am interested in interviewing you to get your

- If "yes": "wonderful- thank you so much. I am specifically looking for IBCLCs currently practicing in Florida who are age 18 or older, speak English, and practice primarily in a non-NICU setting. Do you meet these eligibility criteria?"
- If "no": "thank you so much for your interest. At this time I am only looking for IBCLCs who meet these criteria. I hope that future research will allow me to get your perspective someday. Have a nice day."

• If "yes": "Great! I'd like to schedule an interview at a date and time most convenient to you. Before we do that, do you have any questions about my project that I could answer for you?" Discuss questions. "I would also like to give you my contact information and the IRB number for this study" (give contact info and IRB Pro# 8742).

Recruitment	letter	hv	email:
IXCCI UIUIICIIC	ICLLCI	\mathbf{v}	cilian.

Dear _	
--------	--

My name is Erica Anstey and I am a doctoral candidate in public health at the University of South Florida. My dissertation research aims to better understand the perspectives of practicing lactation consultants (IBCLCs) about the professional management of early breastfeeding problems. As you know, breastfeeding problems often lead to early weaning and thus, it is important to identify the perspectives of lactation professionals about the factors that may hinder your ability to really assist in managing these early problems.

The voices of lactation consultants are currently underrepresented in the literature. I have identified you as an IBCLC, and I am interested in interviewing you to get your perspective. I am specifically looking for IBCLCs currently practicing in Florida who are age 18 or older, speak English, and practice primarily in a non-NICU setting. Please let me know if you would be willing to participate in my project; if so, please contact me by email [email address] or phone [phone number], and I can tell you more about my research study (IRB Pro# 8742). We can then schedule an interview at a date and time most convenient to you.

I look forward to hearing from you.

Erica Anstey, MA Doctoral Candidate, College of Public Health University of South Florida [Phone and email address]

Recruitment by newsletter

Dear Lactation Consultants,

Would you be willing to share your perspective about the barriers to managing early breastfeeding problems? Your voices are needed!

As you know, breastfeeding problems often lead to early weaning and thus, it is important to identify the perspectives of lactation professionals about the factors that may hinder your ability to really assist in managing these early problems.

If you are 18 or older, speak English, and are currently practicing as an IBCLC in Florida, I am interested in interviewing you to get your perspective. If you would be willing to participate in an interview, please contact me (Erica Anstey) at [phone number] or by email at [email address].

This is a great opportunity to participate in important research (IRB Pro#8742) being conducted at the University of South Florida to advance the knowledge base in your field! I look forward to hearing from you.

Erica Anstey, MA Doctoral Candidate, College of Public Health University of South Florida

Lactation Currents

July 2012

Your Voices are Needed!



Dear Lactation Consultants,

Would you be willing to share your perspective about the barriers to managing early breastfeeding problems? Your voices are needed!

As you know, breastfeeding problems often lead to early weaning and thus, it is important to identify the perspectives of lactation professionals about the factors that may hinder your ability to really assist in managing these early problems.

If you are 18 or older, speak English, and are currently practicing as an IBCLC in Florida, I am interested in interviewing you to get your perspective. If you would be willing to participate in an interview, please contact me: (Erica Anstey_ at 813-335-6611 or eanstey@health.usf.edu.

This is a great opportunity to participate in an important research (IRB Pro#8742) being conducted at the University of South Florida to advance the knowledge base in your field! I look forward to hearing from you.

Erica Anstey, MA

Doctoral Candidate, College of Public Health University of South Florida

(page 3)

APPENDIX C: USF IRB-APPROVED INFORMED CONSENT FORM

Study ID:Pro00008742 Date Approved: 7/1/2012 Expiration Date: 7/1/2013



Informed Consent to Participate in Research Information to Consider Before Taking Part in this Research Study

IRB Study # Pro 8742

You are being asked to take part in a research study. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher or study staff to discuss this consent form with you, please ask him/her to explain any words or information you do not clearly understand. We encourage you to talk with your family and friends before you decide to take part in this research study. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

We are asking you to take part in a research study called: <u>Factors Related to the Professional Management of Early Breastfeeding Problems</u>

The person who is in charge of this research study is Erica Anstey. This person is called the Principal Investigator. However, other research staff may be involved and can act on behalf of the person in charge. She is being guided in this research by Dr. Ellen Daley and Dr. Marti Coulter.

The research will be conducted at a convenient location such as an office, home, library, community center, on the phone, or via Skype.

Purpose of the study

The purpose of this study is to:

- understand the nature of International Board Certified Lactation Consultants' (IBCLCs)
 perceived barriers to the professional management of early breastfeeding problems, and
- · fulfill the PI's dissertation requirements of the doctoral program in Public Health.

Study Procedures

If you take part in this study, you will be asked to:

- Participate in one digitally voice-recorded in-depth interview for approximately 60 minutes.
 While the recording is optional, it will allow the PI to best capture your perspective.
- The interview will take place in-person in an agreed upon location of your choosing, over Skype, or on the telephone.
- The interview will take place at a time that is convenient for you.

TICE		
USF	mp.cp. p.	
	IRB Consent Rev. Date:	Page 1 of 4
		Page 1 01 4

Only the research team will have access to the interview files and your information will be kept
confidential. All study related materials will be maintained on a password-protected secure
computer or stored in a locked cabinet where only the PI and research assistant will have
access. All paper files will be shredded after retaining them for the required minimum time
period of five years after the close of the study.

Total Number of Participants

A maximum of 50 individuals will take part in this study.

Alternatives

You do not have to participate in this research study.

Risks or Discomfort

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

Benefits

We are unsure if you will receive any benefits by taking part in this research study.

Compensation

You will receive no payment or other compensation for taking part in this study.

Cost

There will be no additional costs to you as a result of being in this study.

Privacy and Confidentiality

We will keep your study records private and confidential. Certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

- The research team, including the Principal Investigator, study coordinator, and all other research staff.
- An outside agency will be used to transcribe the audio recordings; however, each file will be
 labeled with an identification number that is disassociated from your name. One master list
 that connects your name to your identification number will be kept by the PI on a passwordprotected computer and will not be accessible by anybody else. This list will only be used in the
 event that the PI needs to contact you to verify your statements in an effort to maintain
 credibility.
- Certain government and university people who need to know more about the study. For
 example, individuals who provide oversight on this study may need to look at your records.
 This is done to make sure that we are doing the study in the right way. They also need to make
 sure that we are protecting your rights and your safety.

UNIVERSITY OF SOUTH FLORIDA IRB Consent Rev. Date:

Page 2 of 4

IRB Number: Pro 8742 IC Adult Minimal Risk - SB Rev:9-3-2010

- Any agency of the federal, state, or local government that regulates this research. This includes the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).
- The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, staff in the USF Office of Research and Innovation, USF Division of Research Integrity and Compliance, and other USF offices who oversee this research

We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are.

Voluntary Participation / Withdrawal

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Your decision to participate or not to participate will not affect your job status.

New information about the study

During the course of this study, we may find more information that could be important to you. This includes information that, once learned, might cause you to change your mind about being in the study. We will notify you as soon as possible if such information becomes available.

You can get the answers to your questions, concerns, or complaints

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638. You may also contact the PI, Erica Anstey at 813-335-6611 (private personal mobile number) or eanstey@health.usf.edu.

USF UNIVERSITY OF SOUTH FLORIDA

IRB Number: Pro 8742 IC Adult Minimal Risk - SB Rev:9-3-2010 IRB Consent Rev. Date:

Page 3 of 4

Consent to Take Part in this Research Study

It is up to you to decide whether you want to take part in this study. If you want to take part, please

sign the form, if the following statements are true.			
I freely give my consent to take part in this study. It agreeing to take part in research. I have received a copy			
Signature of Person Taking Part in Study	Date		
Printed Name of Person Taking Part in Study			
Statement of Person Obtaini	ng Informed Consent		
I have carefully explained to the person taking part in the participation. I hereby certify that when this person sign she understands: • What the study is about; • What procedures will be used; • What the potential benefits might be; and • What the known risks might be.	s this form, to the best of my knowledge, he/		
I can confirm that this research subject speaks the langu- is receiving an informed consent form in the appropriate enough to understand this document or, if not, this perso is read to him or her. This subject does not have a medic compromise comprehension and therefore makes it hard can, therefore, give legally effective informed consent. To or analgesic that may cloud their judgment or make it has therefore, can be considered competent to give informed	language. Additionally, this subject reads well on is able to hear and understand when the form al/psychological problem that would to understand what is being explained and this subject is not under any type of anesthesia and to understand what is being explained and,		
Signature of Person Obtaining Informed Consent / Rese	arch Authorization Date		
Printed Name of Person Obtaining Informed Consent / H	Research Authorization		
IRB Number: Pro 8742 IC Adult Minimal Risk - SB Rev:9-3-2010 UNIVERSITY OF SOUTH FLORIT			

384

APPENDIX D: IRB APPROVAL LETTER



DIVISION OF RESEARCH INTEGRITY AND COMPLIANCE

Institutional Review Boards, FWA No. 00001669 12901 Bruce B. Downs Blvd... MDC035 • Tampa, FL 336124799 (813) 974-5638 • FAX (813) 974-5618

July 2, 2012

Erica Anstey Community and Family Health USF College of Public Health 13201 Bruce B. Downs Blvd. MDC 56 Tampa, FL 33612

RE: Expedited Approval for Initial Review

IRB#: Pro00008742

Title: Factors Related to the Professional Management of Early Breastfeeding Problems: Perspectives of Lactation Consultants

Dear Ms. Anstey:

On 7/1/2012 the Institutional Review Board (IRB) reviewed and **APPROVED** the above referenced protocol. Please note that your approval for this study will expire on 7/1/2013.

Approved Items:

Protocol Document:

Factors Related to the Professional Management of Early Breastfeeding Problems: Perspectives of Lactation Consultants

Consent/Assent Document:

Informed Consent .pdf

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review categories:

- (6) Collection of data from voice, video, digital, or image recordings made for research purposes.
- (7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Please note, the informed consent/assent documents are valid during the period indicated by the official, IRB-Approval stamp located on the form. Valid consent must be documented on a copy of the most recently IRB-approved consent form.

Your study also qualifies for a waiver of the requirements for the documentation of informed consent for those participating via Skype or telephone. This is in accordance with federal regulations at 45CFR46.117 (c) which states that an IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either: (1) that the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern; or (2) that the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

John Schinka, Ph.D., Chairperson USF Institutional Review Board

(Chinka, Ph.).