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Planting Seeds: A Naturalistic Inquiry into the Perceptions and Experiences of WIC Peer Counselors as they Interacted with Mothers Making their Infant Feeding Decisions

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Planting Seeds: A Naturalistic Inquiry into the Perceptions and Experiences of WIC Peer Counselors as they Interacted with Mothers Making their Infant Feeding Decisions

by

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Dedication

This dissertation is dedicated to my family, without whom this process would have been impossible. Joseph, my dear husband and rock, you have steadfastly encouraged me, and I thank you. Paris and Lakeleigh, my exotically beautiful and brilliant daughters, thank you for pushing me when I was exhausted-one day you will travel the same path and I'll be rooting for you. To momma and daddy, Keith and Deborah Gressett, thank you for making this path and all my other degrees feasible. I could not have gone this far in my education without your sustained help, love, and cheerleading. Thank you all for walking with me every step and moment of the way. I love you all! I would be remiss to not say, "With God, all things are possible!"

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Planting Seeds: A Naturalistic Inquiry into the Perceptions and

Experiences of WIC Peer Counselors as they Interacted with Mothers

Making their Infant Feeding Decisions

Publication No.____

Lisa Rene Wagner MPH, BA, BSN, RNC

The University of Texas Medical Branch, 2020

Supervisor: Carolyn A. Phillips

Breastfeeding rates in the United States lag behind other developed and

developing nations resulting in poorer outcomes for both the mother and infant (Dieterich,

Felice, O'Sullivan, & Rasmussen, 2013). Breastfeeding confers health benefits for the

infant by providing immunities against otitis media, gastrointestinal illnesses, necrotizing

enterocolitis, childhood obesity and diabetes (AAP, 2012; Rasmussen, Latulippe, and

Yaktine, 2016). Breastfeeding benefits the mother by providing decreased risk of

developing breast and ovarian cancers, hypertension, obesity, and myocardial infarction

(Schwarz & Nothnagle, 2015). Despite these and other benefits, Special Supplemental

Nutrition Program for Women, Infants, and Children (WIC) participants are less likely to

breastfeed compared to non-WIC participants (Tenefelde, Finnegan, & Hill, 2011) and

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have not met any Healthy People 2020 breastfeeding goals (Rasmussen, Latulippe, & Yaktine, 2016). There is a paucity of research pertaining to what happens in WIC offices as (WIC) Peer Counselors (WPCs) interact with mothers making their infant feeding decisions and there is a gap in the literature examining the perceptions and experiences of WPCs as they deal with their WIC clients. This study utilized Naturalistic Inquiry (Lincoln & Guba, 1985; Erlandson et al., 1993) to explore and describe the perceptions and experiences of WPCs as they interact with mothers as they are making their infant feeding decisions. Participants were recruited via purposive and snowball sampling resulting in nine WPCs who dealt with WIC mothers making their infant feeding decisions. Data collection and analysis was informed by semi-structured face-to-face interviews. Trustworthiness was assured using Lincoln and Guba's criteria. Findings from the study highlighted the role of WIC peer counselors and how they get their breastfeeding messages across by using innovative strategies to help their WIC clients initiate and sustain breastfeeding. WIC's utilizations of WPCs to support and promote breastfeeding has enhanced their breastfeeding rates (WIC Data Tables, USDA, 2020).

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List of Abbreviations

BA Bachelor of Art

BSN Bachelor of Science in Nursing

GSBS Graduate School of Biomedical Science

MPH Master of Public Health

NI Naturalistic Inquiry

UTMB University of Texas Medical Branch

WIC The Special Supplemental Program for Women, Infants, and Children

WPC The Special Supplemental Program for Women, Infants, and Children

(WIC) Peer Counselor

Chapter 1: Introduction

INTRODUCTION

Chapter One introduces this Naturalistic Inquiry (NI) study which explored the perceptions and experiences of WIC Peer Counselors as they interacted with mothers who are making their infant feeding decisions. The Chapter begins with an overview of the role of WIC peer counselors and how they inform mothers about their infant feeding choices. The Chapter continues to describe the study problem, the study aim and research question, the methodology, and significance of the study. Lastly, Chapter One provides a brief synopsis of study findings.

STUDY PROBLEM

Breastfeeding rates in the US lag behind other developed and developing nations resulting in poorer health outcomes for both the mother and infant (Dieterich, Felice, O'Sullivan, & Rasmussen, 2013). Although WIC provides breastfeeding and nutritional advice and support for over half of the nation's infants and their mothers, WIC mothers are less likely to initiate and sustain breastfeeding compared to mothers who are WIC-eligible but choose to not participate in WIC (Tenefelde, Finnegan and Hill, 2011).

The primary goal of WIC is to safeguard the health of nutritionally at-risk, low-income women, infants, and children through nutritional counseling, as well as breastfeeding promotion and utilization of WIC food packages that are designed to incentivize mothers to breastfeed (Bronner, Barber, Vogelhut, & Resnik, 2001). Bronner, Barber, Vogelhut, & Resnik explain that the WIC peer counselor role was developed as a way to support WIC mothers who choose to breastfeed and increase the breastfeeding rates among WIC participants. Their research findings revealed that the WPC role is perceived by members of the WIC organization to be effective in promoting

breastfeeding rates; nevertheless, WIC lacks breastfeeding policies and procedures in recruiting, training, and counseling WPCs about breastfeeding promotion. The researchers conclude that ineffective communication between healthcare providers and WPCs about breastfeeding promotion among WIC mothers may serve as a barrier to improving breastfeeding rates among WIC dyads. Increasing breastfeeding rates among WIC mothers and their infants is crucial because this dyad is at higher risk of poorer health and developmental outcomes (Bronner, Barber, & Miele, 2001).

Breastfeeding is considered optimal infant nutrition. Because breastmilk is superior to breastmilk substitutes by conferring neuroprotective antibodies and decreasing the incidence of illnesses such as otitis media, gastrointestinal infections, necrotizing enterocolitis (NEC), sudden infant death syndrome (SIDS), and upper respiratory infections (AAP, 2012; Rasmussen, Latulippe, and Yaktine, 2016). The long-term benefits of breastfeeding for the infant include lower rates of childhood obesity and type two diabetes. Moreover, breastfed infants have lower systolic blood pressure and are less likely to have childhood leukemia and atopic dermatitis (Rasmussen, Latulippe, and Yaktine, 2016).

Breastfeeding also benefits mothers. Maternal benefits include a decreased risk of developing breast and ovarian cancers, hypertension, obesity, and myocardial infarction (Schwarz & Nothnagle, 2015). Schwarz & Nothnagle report that for every year a woman breastfeeds, her risk of developing breast cancer decreases by 4% and women with a positive BRCA1 mutation who breastfed at least one year have a 37% decrease in their risk of developing breast cancer. Additionally, breastfeeding confers a long-term metabolic effect for the mother including a smaller waistline with less visceral adiposity which lowers the woman's risk of diabetes mellitus and hyperlipidemia. Schwarz & Nothnagle suggest that if 90% of US women breastfed one year about

14,000 heart attacks would be prevented, and 54,000 women would not need hypertension medications.

Despite WIC's robust revamping of its nutritional program to reflect breastfeeding as a priority, WIC participants continue to view WIC as a supporter of formula rather than breastfeeding (Holmes, Chin, Kaczorowski, and Howard, 2009; Rasmussen, Latulippe, and Yaktine, 2016). This belief is supported by the fact that WIC is the largest consumer of formula in the United States. The WIC peer counselor is the primary contact person to help the WIC mother who is breastfeeding her infant; therefore, WPCs play a crucial role in promoting breastfeeding and guiding mothers in their food package choices offered by WIC. To date, no research has been about WPCs' perceptions and experiences as they interact with WIC mothers and whether they influence the WIC participants to breastfeed exclusively.

RESEARCH QUESTION AND AIM OF THE STUDY

The study aimed to explore the perceptions and experiences of WPCs as they interacted with mothers making their infant feeding decisions. Specifically, the study aimed to understand factors that impact how the WPC interacts with mothers making infant feeding decisions and factors the WPC perceives affect the mothers' infant feeding decisions. The study used Naturalistic Inquiry (Erlandson et al., 1993; Lincoln & Guba, 1985) to answer the question: What are the perceptions and experiences of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Peer Counselors (WPCs) as they interact with WIC mothers making their infant feeding decisions?

NATURALISTIC INQUIRY

Naturalistic Inquiry (NI), informed by Lincoln and Guba (1985) and elaborated by Erlandson et al. (1993), was utilized for the study. Naturalistic Inquiry is ideal for qualitative

studies that seek to answer complex questions about unique social contexts and patterns of behavior particularly when little is known about the phenomenon of interest. NI assumes and acknowledges that people perceive reality differently; people have varying and unique perceptions and experiences with a given phenomenon and their experiences are a product of multiple factors including the context in which the experience occurred. Moreover, perceptions of the phenomenon are multi-layered and interrelated (Erlandson et al.).

SIGNIFICANCE OF STUDY

Little is known or understood about how WPC interact with mothers making infant feeding sessions, what happens during their interactions, and what factors WPCs believe affect mothers' infant feeding decisions. Study findings may address the gap in understanding of factors the WPC perceives influence mothers making their infant feeding decisions. Understanding what goes on between the WIC peer counselor and the new mothers may inform future interventions to improve breastfeeding initiation and duration rates among WIC participants. The long-term potential benefits to society may include increased breastfeeding rates among WIC participants.

OVERVIEW OF STUDY FINDINGS

Study findings revealed that the responses of WPCs who deal with WIC mothers are multifaceted and the WPCs themselves are an important element in the interactions. WPCs must triage and support the dyad from the first encounter and with each visit; they must develop, identify, and create strategies to encourage mothers to breastfeed and to monitor for breastfeeding success and duration. WPCs must manage their own expectations for the mothers who may rebuff their advice, and they must educate and support the mother about breastfeeding problems and help them find appropriate ways to mitigate such problems. WPCs continuously monitor themselves

and the mother while educating and supporting the dyad, regardless of the mother's infant feeding decisions.

SUMMARY OF INTRODUCTION

Chapter One has introduced the study by providing an overview of the problem. The Chapter also includes the study's aims and the research question; the methodology including data collection and analysis, and the significance of the study, and a brief summary of study findings.

PLAN FOR REMAINING CHAPTERS

Chapter Two provides a review of the literature. Chapter Three describes the implementation of Naturalistic Inquiry Methodology (Erlandson et al., 1993; Lincoln & Guba, 1985) in this study that explored the perceptions and experiences of WPCs as they interacted with mothers making their infant feeding decisions. Chapter Four presents the study findings and Chapter Five provides a discussion of the study findings, its significance, implications, and conclusions.

Chapter 2: Review of Literature

INTRODUCTION

Chapter Two reviews current literature surrounding the role of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Peer Counselors (WPCs). The role of the WPC is to encourage WIC clients to exclusively breastfeed their infants, preferably until the infant is through six months of age. Chapter Two examines the literature around the issues of breastfeeding exclusivity, beginning with the Healthy People 2020 and 2030 breastfeeding goals, the benefits of breastfeeding for both the mother and infant, and socio-cultural factors that influence breastfeeding in the United States (US). The Chapter continues with a discussion of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program and its history, an examination of the racial/ethnic composition of WIC clients, the costs of the WIC program, the WIC food packages, WIC's role in breastfeeding, the culture of WIC clients and its impact on breastfeeding rates, barriers and motivators for breastfeeding among WIC clients, and the role of the WIC peer counselor (WPC). The Chapter ends with a discussion of the gaps in the extant literature.

HEALTHY PEOPLE 2020 AND 2030 BREASTFEEDING GOALS

Healthy People (HP) 2020 breastfeeding goals are founded on evidence-based science to improve the health of infants. The HP 2020 established that 25.5% of infants would be exclusively breastfeeding through six months of life; and 46.2% to be exclusively breastfeed through three months of life (United States Breastfeeding Committee (USBC), Healthy People 2020 breastfeeding goals). The new proposed HP 2030 breastfeeding goal published in October 2020, has one robust breastfeeding objective which is that 42.4% of US infants would be exclusively

breastfed through six months (United States Department of Agriculture (USDA) Healthy People 2030 breastfeeding goal).

BREASTFEEDING EXCLUSIVITY

Breastfeeding exclusivity is defined as the infant receiving only breastmilk, including expressed breastmilk, or donor human milk (DHM) (United States Breastfeeding Committee (USBC), 2013; World Health Organization (WHO), 2018). To meet this criteria, the infant may not receive water, other liquids, or solids; however, oral rehydration solution, vitamin or mineral drops, or medicines may be offered (WHO). Breastfeeding exclusivity rates in the US lag behind developed and developing countries despite recommendations that all infants, with few exceptions, be exclusively breastfed for the first six months of life by the American Academy of Pediatrics (AAP), World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), and the Surgeon General (AAP, 2012; WHO, 2018).

BREASTFEEDING BENEFITS

The qualities of breastmilk are unparalleled compared to breastmilk substitutes; breastmilk provides the infant neuroprotective antibodies while also decreasing the incidence of illnesses such as otitis media, gastrointestinal illnesses, necrotizing enterocolitis (NEC), sudden infant death syndrome (SIDS), and upper respiratory infections (AAP, 2012; Rasmussen, Latulippe, and Yaktine, 2016). The long-term benefits of breastfeeding for the infant also include lower rates of childhood obesity and type-two diabetes. Breastfed infants have lower systolic blood pressure and are less likely to have childhood leukemia and atopic dermatitis (Rasmussen, Latulippe, and Yaktine, 2016).

Breastfeeding also benefits the mother. Maternal benefits include decreased risks for developing breast and ovarian cancers, hypertension, obesity, and myocardial infarction (Schwarz

& Nothnagle, 2015). Additionally, Schwarz and Nothnagle (2015) report that among women with a positive BRCA1 mutation who breastfed at least one year have a 37% decreased risk of developing breast cancer. For every year a woman breastfeeds, her risk of developing breast cancer decreases by 4%. A long-term metabolic effect of breastfeeding for the woman includes a smaller waistline with less visceral adiposity, which lowers her risk of diabetes mellitus and hyperlipidemia. Additionally, Schwarz & Nothnagle state that if 90% of US women breastfed one year postpartum, about 14,000 heart attacks would be prevented, and 54,000 women would not need hypertension medications. Despite these and other benefits of breastfeeding for the mother and her infant, only 19% of mothers meet the Healthy People breastfeeding goals to breastfeed exclusively for six months and continue to breastfeed until the infant is at least 12 months of age (Schwarz & Nothnagle).

Globally, only 41% of infants are exclusively breastfed at six months, with high income countries having much lower rates of breastfeeding. For example, only 16% of US infants are breastfeeding exclusively through six months of life (Negin, Coffman, Vizintin, & Raynes-Greenow, 2016). If infants were exclusively breastfed according to national recommendations, at least \$3 billion annually would be saved in treating just three illnesses: otitis media, gastrointestinal illnesses, and necrotizing enterocolitis (NEC) (Weimar, 2001). An online calculator designed to estimate the impact of breastfeeding on health outcomes in the US demonstrates that a simple 5% increase in breastfeeding rates could have a significant impact on the disease burden of otitis media and gastrointestinal illnesses in infants under one year, with a savings of \$44 million in direct medical costs (Stuebe, Jegier, Schwarz, Green, Reinhold, Colaizy, Bogen, Schaefer, Jegier, Green, & Bartick (2017). Moreover, an additional \$13 billion would be saved if 90 percent of US mothers exclusively breastfed for the first six months because of the savings in direct costs of formula,

physician and lab fees for treating otitis media, gastroenteritis, and NEC; and indirect costs such as lost wages for parents missing work due to their children's illness, and the estimated cost of premature death (AAP, 2012; Weimar, 2001). Annually, the lives of about 823,000 children under age five years and an additional 20,000 lives of women with breast and ovarian cancer could be saved simply by increasing breastfeeding rates across the globe (Victora, Bahl, Barros, Franca, Horton, Krasevec, Murch, Sankar, Walker, & Rollins, 2016).

Socio-Cultural Factors Influencing Breastfeeding

Breastfeeding is a complex, socially learned behavior influenced by the mother's cultural and personal environment. Although the woman is guided by her own sense of confidence in her ability to breastfeed her infant, she is influenced by her age, race, employment, level of education, referent others including her partner, economic, political, and psychological factors (de Jager, Skouteris, Broadbent, Amir, & Mellor, 2012; Dick et al., 2002; Flower, Willoughby, Cadigan, Perrin, & Randolph, 2007; Mathews, Leerkes, Lovelady, & Labban, 2014; Smith-Gagen, Hollen, Walker, Cook, & Yang, 2014; Srinivas, Benson, Worley, & Schulte, 2015; Swanson & Power, 2005). A woman's sociocultural beliefs about the positive and negative benefits of breastfeeding predicts her infant feeding choices (Swanson & Power). Other factors such as a woman's acculturation to her new environment also influences her infant feeding choices; the infant's father can bolster infant feeding methods including breastfeeding, especially if he is co-residing with the mother (Sparks, 2011).

The Iowa Infant Feeding Attitude Scale (IIFAS) (de la Mora, Russell, Dungy, Losch, & Dusdieker, 1998) measures maternal attitudes toward infant feeding methods. The IIFAS reliability using Cronbach's alpha ranges from .85-.86 (de la Mora et al.). The IIFAS uses information about the woman's socio-cultural, economic, and environmental characteristics,

socio-demographics characteristics of the mother's family, structural and social support, the woman's perceptions of the health benefits or barriers of breastfeeding, her perceived knowledge, attitudes, and skills related to breastfeeding, predicts whether she will initiate breastfeeding. The higher the woman's score on the IIFAS, the more likely she is to breastfeed. Reports of IIFAS studies conclude that marital status, maternal age, income, and higher socioeconomic status are positively correlated with feeding attitudes. Women who are older, married, have higher income, and higher socioeconomic status have more favorable attitudes toward breastfeeding (de la Mora et al.).

In states with robust breastfeeding laws protecting breastfeeding, women are more likely to initiate and sustain breastfeeding (Hawkins, Stern, & Gillman, 2013). The majority of working mothers cease breastfeeding around three months, when most women return to work (Sparks, 2011). The political environment surrounding breastfeeding and employment factors into whether the mother will continue to breastfeed beyond three months. In states where workplace breastfeeding was protected by mandated pumping breaks, Hispanic and White infants were 30% more likely to breastfed for at least six months (Smith-Gagen et al, 2014). Moreover, Hispanic and White infants were 20% more likely to breastfed for at least six months where breastfeeding laws were enforced (Smith-Gagen et al.,). Compared to White and Hispanic infants, Black infants are 50% less likely to be breastfeed for at least six months despite breastfeeding laws designed to protect the breastfeeding dyad (Smith-Gagen et al.,).

HISTORICAL CONTEXT OF SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC)

WIC is a federally funded program administered by the Food and Nutrition Services (FNS) of the US Department of Agriculture (USDA). Created as a two-year pilot program in 1972 to

safeguard the nutritional health of low-income women, infants, and children, WIC was enacted into legislation and became a permanent nutrition program in 1975 (Schulz, Shanks, & Houghtaling, 2015; Rasmussen, Latiluppe, and Yaktine, 2015). A federal grant makes WIC available nationally, as well as in the District of Columbia, Puerto Rico, Guam, American Samoa, American Virgin Islands, Northern Mariana Islands, and in 34 tribal organizations (Rasmussen, Latuilippe, and Yaktine, 2015). The Child Nutrition and WIC Reauthorization Act of 1989 mandated the WIC budget to have breastfeeding support including breastpumps, breastfeeding education and materials, and personalized counseling (Tenefelde, Finnegan and Hill, 2011).

In 2009, WIC changed its food packages in response to the Institute of Medicine's (IOM) recommendation that WIC align its nutritional offerings to reinforce nutrition education, breastfeeding, and prevention of chronic disease because of the increase in obesity rates and nutritional-related diseases (National Research Council, 2005). The changes in the food packages reflected the newer dietary guidelines to include more fruits and vegetables, whole grains, and lower saturated fat, and to appeal to culturally diverse populations (Schulz, Shanks, and Houghtaling, 2015). The WIC food packages will be discussed below.

WIC has an enormous impact on the nutrition of the US women, infants, and children, servicing half of the nation's infants; in 2010, nearly 9.2 million women and infants participated in WIC (Baumgartel and Spatz, 2013). Participation in WIC is associated with positive benefits for women, infants, and children, including improved birth outcomes, fewer premature births, increased likelihood that a woman will receive prenatal care, increased immunization rates, and improved preconception nutritional status (USDA, 2013).

The goal of nutrition education for WIC participants is that they will attain positive changes in their knowledge, attitudes, and behaviors about food consumption (USDA WIC Participant and

Program Characteristics 2016 Final Report, 2016). WIC is required by the Food and Nutrition Services (FNS) to offer participants a minimum of two educational sessions each certification period though face-to-face, online, or group classes. WIC is invested in long-term breastfeeding among their participants to attempt to meet the Healthy People 2020 breastfeeding goals (Rasmussen, Latiluppe, & Yaktine, 2015).

To be eligible for WIC, the applicant must meet three criteria: (1) be one of five groups including: (a) pregnant women or up to six weeks postpartum, (b) breastfeeding women up to one year postpartum, (c) non-breastfeeding women up to six months postpartum, (d) infants, or (e) children up to five years old; (2) applicants must demonstrate their nutritional risk according to federal criteria such as biochemical or anthropometric measurements, nutrition-related medical condition, dietary deficiencies, unhealthy behaviors such as drug and/or alcohol abuse, or conditions that can lead to nutritional risk such as homelessness; and (3) be income eligible as defined as household income at or below 185 percent of the federal poverty level, or eligible by participating in other federal programs such as Medicaid (Effects of the Special Supplemental Nutrition Program for Women, Infants, and Children, USDA, 2012). WIC participants must be at nutritional risk for either end of the weight spectrum, obesity or underweight.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides nutritional services to eligible participants by offering nutritious food supplementation; nutrition; education; breast pumps; screening and referral to health and social services to pregnant, breastfeeding, and non-breastfeeding postpartum women, as well as infants and children up to five years old (Effects of the Special Supplemental Nutrition Program for Women, Infants, and Children).

RACIAL AND ETHNIC COMPOSITION OF THE WIC POPULATION

Rasmussen, Latiluppe, and Yaktine (2015), report that WIC participants represent a wide variety of racial and ethnic population owing in part to increased immigration. The USDA reports the distribution of the race of WIC participants as follows: Hispanic/Latino-42%; Non-Hispanic-White-29%; Non-Hispanic-Black-20%; American Indian or Alaskan Native-1%; Non-Hispanic Asian-or Pacific Islander-4%; and Non-Hispanic Multiple Races-4% (Summary: Special Supplemental Nutrition Program for WIC Participant and Program Characteristics 2018, USDA, 2020).

COSTS OF THE WIC PROGRAM

As of April 2018, WIC had about 7.8 million certified participants, with the number of participants decreasing since 2010 (Summary: Special Supplemental Nutrition Program for WIC Participant and Program Characteristics 2018). The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) food program costs as well as expenditures for nutrition services includes breastfeeding promotion and education. Total WIC costs for 2019 were about \$5.2 million with WIC spending about \$41 per participant monthly (USDA Summary, 2020). Since 2012, WIC has increased its spending on infant formula by \$124 million; the value of the formula rebates to WIC is about \$1.8 billion annually. (Rasmussen, Latiluppe, &Yaktine, 2015).

WIC FOOD PACKAGES

A primary intervention the WIC peer counselor (WPC) uses to promote the nutrition of women, infants, and children is to encourage breastfeeding among WIC participants. The WPC also offers a WIC food package that will motivate and support the woman's decision to breastfeed. Research supports the contention that the composition of the WIC food packages increases the likelihood of breastfeeding exclusivity (Stuebe, Jegier, Schwarz, Green, Reinhold, Colaizy, Bogen, Schaefer, Jegier, Green, & Bartick, 2017). Research by Langellier, Chaparro, Wang,

Koleilat, & Whaley (2014) suggests that the WIC food packages in combination with WPCs support can improve breastfeeding outcomes and sustain exclusive breastfeeding. In 2009, WIC remained committed to improving breastfeeding behaviors among participants and implemented new food packages to reflect their priority on breastfeeding promotion. WIC offers their mothers three food package options: the Exclusively Breastfeeding package which lasts for one year for the mother and infant, the Partial Breastfeeding package which lasts for one year for the mother and infant, and the Full Formula package which lasts for six months for the mother and one year for the infant (WIC Food Packages for Moms & Infants, 2018). Each food package is uniquely designed to meet the woman's needs for herself and her infant. The three WIC food packages are devised to augment the mother and infant's nutrition.

Exclusive Breastfeeding Package

The Exclusive Breastfeeding package offers the most food for the mother and infant compared to the other packages. This food package is provided for one year for the exclusively breastfeeding dyad to incentivize the mother to keep breastfeeding. The Exclusive Breastfeeding package also has been shown to motivate and encourage mothers to initiate and maintain breastfeeding exclusivity (Wilde, Wolf, Fernandes, Collins, 2012). Wilde et.al, explain that WPCs are routinely encouraged to provide no formula to increase breastfeeding exclusivity; however, their research also explains that breastfeeding promotion practices differ across WIC agencies. The mother is also eligible to receive breastfeeding support for a year (WIC Food Packages for Moms & Infants, 2018). The Exclusive Breastfeeding package provides a year's worth of food to the mother and infant, including meat for the infant. The longevity of the Exclusive Breastfeeding food package may motivate WIC participants to initiate and maintain breastfeeding exclusivity.

Partial Breastfeeding Package

The partial breastfeeding package provides less food for the mother and the infant for one year. The infant will receive food and formula, but no meat, in smaller quantities for a year. The mother will only receive food for six months after delivery (WIC Food Packages for Moms & Infants, 2018).

Full Formula Package

The Full Formula package offers less food for the mother and baby. The infant will receive formula, cereal, and baby food, but no meat, for a year. The mother will only receive food for six months after delivery (WIC Food Packages for Moms & Infants, 2018).

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participants obtain their nutritious foods though authorized WIC vendors that accept WIC checks, vouchers, and/or electronic funds (Schulz, Shanks, & Houghtaling, 2015). Since the implementation of the new food packages however, a limited positive effect in breastfeeding has been observed which suggests WIC should examine other breastfeeding promotion opportunities (Rasmussen, Latiluppe, & Yaktine, 2015). Nevertheless, new and expecting mothers continue to be less likely to initiate and sustain breastfeeding compared to non-participating but WIC-eligible mothers. Moreover, about 54% of the formula sold in the US goes to WIC participants (Jensen & Labbok, 2011; USDA, 2014).

ROLE OF THE SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC) IN BREASTFEEDING

In keeping with the Healthy People 2020 breastfeeding goals, the support, protection, and promotion of breastfeeding is a priority for WIC. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is the only US healthcare provider that actively includes support for breastfeeding exclusivity (Labbok & Taylor, 2008). WIC protects breastfeeding by

promoting breastfeeding and not providing formula during the first postnatal month in accordance to a mother's infant feeding decision. Additionally, WIC promotes breastfeeding by offering WIC participants the Exclusive Breastfeeding package which does not include formula, and by providing education on the health benefits for the breastfeeding dyad. WIC supports breastfeeding through the activities of the WIC Peer Counselor including personalized breastfeeding counseling, offering breastpumps, and referral to a WIC certified lactation consultant for breastfeeding problems that exceed the WPCs level of expertise (Rasmussen, Latulippe, & Yaktine, 2016).

WIC was mandated in 1989 to implement breastfeeding promotion standards across state and local levels; in 1992, the USDA was required to establish and fund a national breastfeeding promotion program (Rasmussen, Latulippe, & Yaktine, 2016). WIC is also required to spend \$21 on every pregnant and breastfeeding woman in breastfeeding support initiatives in addition to collecting and reporting breastfeeding initiation and duration data (Rasmussen, Latulippe, & Yaktine, 2016). In 1998, WIC was authorized to purchase breastpumps for their eligible participants (Rasmussen, Latulippe, & Yaktine, 2016).

BREASTFEEDING CULTURE OF WIC PARTICIPANTS AND IMPACT ON BREASTFEEDING RATES

Historically, breastfeeding prevalence has been increasing, with rates varying from about 2.7 to 4% according to race and ethnicity (USDA Summary, 2016). Based on the most recent USDA (2020) WIC breastfeeding data report, breastfeeding rates for fiscal year 2019 reached 32.8% (FY 2019 WIC Breastfeeding Data Local Agency Report, 2020). Based on the USDA (2018) WIC breastfeeding initiation data, about 72% of all 6-to-13-month-old infants initiated breastfeeding. Nationally, the lowest breastfeeding rates at six months are among non-Hispanic black and highest among Spanish-speaking Hispanic women (McKinney et al., 2016). Breastfeeding rates among WIC participants reflect this trend such that African-American women

are least likely to initiate (49.27%) and maintain (5.88%) breastfeeding in comparison to other racial and ethnic groups, and Asian (80.37%) and Hispanic (65.57%) women are more likely to initiate and sustain (Asian=17.104% and Hispanic=10.10%) breastfeeding (Sparks, 2011). Research by Ryan and Zhou (2006) revealed that WIC participants with infants under six-months was the leading contributor of not breastfeeding and that non-WIC mothers were at least 1.5 times more likely to be exclusively breastfeeding at six months than mothers who participated in WIC. The rationale for this variance in breastfeeding rates is poorly understood (Rasmussen, Latiluppe, and Yaktine, 2014).

Some factors partially explain the racial/ethnic disparities in breastfeeding rates among WIC US mothers. Black mothers are more likely to be younger, unmarried, lower-income, and less educated and less likely to breastfeeding compared to White mothers. Nevertheless, although Hispanic mothers share the same socio-demographic characteristics as their Black counterparts, they are more likely to breastfeed than White mothers owing to their cultural beliefs and traditions (McKinney et al., 2016; Sparks, 2011).

THE CHANGING WIC PARADOX

Despite WICs robust revamping of their nutritional program based upon the IOMs recommendations to reflect breastfeeding as a priority, WIC participants view WIC as a supporter of formula rather than breastfeeding (Holmes, Chin, Kaczorowski, and Howard, 2009; Rasmussen, Latulippe, and Yaktine, 2016). WIC is the largest consumer of formula in the nation, serving over half of the nation's infants with free formula. About 70% of formula purchased in the US is by WIC (Rasmussen, Latulippe, and Yaktine, 2016). Over half of infants under six months are given a minimum of 800 ounces of formula monthly while infants 6 to 12 months are given up to 800 ounces monthly (USDA Food Package Report Summary, 2018). However, the amount of formula

distributed to WIC participants has declined over the past decade while breastfeeding rates have increased.

WIC participants' breastfeeding rates remain at least 20% lower despite breastfeeding initiatives like breastfeeding classes and monies allocated for their WPCs to help mothers (Baumgartel and Spatz, 2013). Compared to non-WIC women, WIC participants are 23% less likely to initiate breastfeeding and are 50% less likely to exclusively breastfeed (Tenefelde, Finnegan and Hill, 2011). Moreover, WIC participants have not met any Healthy People 2020 breastfeeding goals despite the robust breastfeeding promotion (Rasmussen, Latulippe, and Yaktine, 2016). The breastfeeding trend among WIC participants is improving; the most recent fiscal year WIC any breastfeeding data (2020) indicates an increase in breastfeeding rates every year from 2010 and that Texas ranks second highest (53.53%) after the Virgin Islands (58.21%). Nationally, the exclusive breastfeeding rate increased from 10.3% in 2010 to 12.3% in 2019. The USDA WIC breastfeeding data report (2020) credits the efforts of WPCs who provide robust breastfeeding education and support to their clients. According to this report (USDA, 2020), the highest exclusively breastfeeding rate (35.1%) among WIC participants in 2019 was in the Pueblo of Zuni, New Mexico. Texas' exclusively breastfeeding rate was 7%, comparatively. While the breastfeeding rates are increasing, the fully-formula fed rates among WIC participants are simultaneously decreasing. Since 2010, the US fully-formula fed rate has dropped from 73.3% to 67.2%. For 2019, Texas WIC agencies reported 46% of their infants were fully formula-fed.

BREASTFEEDING BARRIERS IN THE WIC POPULATION

WIC participants are typically minorities, lower socioeconomic status, have lower income, are younger, are less likely to be married, and less educated than non-WIC women (Rasmussen, Latulippe, and Yaktine, 2016). Barriers to breastfeeding barriers among WIC participants often

differ from their non-WIC counterparts. WIC participants must be economically disadvantaged to receive benefits from WIC (USDA, 2012); low-income, less educated women are least likely to initiate and sustain breastfeeding compared to higher-income women and are more likely to supplement with formula and cease breastfeeding earlier (Srinivas, Benson, Worley, & Schulte, 2015). Low-income women are more likely to lack positive support systems that encourage them to breastfeed (Fischer, T.P., and Olson, B. H., 2014; Tenefelde, Finnegan and Hill, 2011).

Moreover, low-income women are more likely to report breastfeeding problems such as low-milk supply, sore nipples, or engorgement and are nearly twice as likely to stop breastfeeding (Fischer and Olson, 2014; Labbok and Taylor, 2008; Tenefelde, Finnegan and Hill, 2011). Previous research has revealed that the lack of breastfeeding among WIC participants is associated with those women "who select themselves into the WIC program are among the least likely to breastfeed" (Langellier, Chaparro, Wang, Koleilat, & Whaley, 2014, p.112).

The Special Supplemental Program for Women, Infants, and Children (WIC) clients are more likely to be obese. Maternal obesity contributes to breastfeeding problems as well. The burden of breast adiposity creates latch difficulties where the infant is unable to suckle at the breast. Obese mothers are less likely to ever breastfeed, are twice as likely to cease breastfeeding compared to non-obese mothers, have lower intention to breastfeed, and lower initiation and duration of breastfeeding (Rasmussen, Latulippe, & Yaktine, 2016).

Another barrier among WIC breastfeeding women is whether the mother returns to work after delivery. Returning to work is one of the most cited barriers to breastfeeding and to initiation of formula supplementation (Fischer, T.P., and Olson, B. H., 2014). Low-income women who work outside the home face challenges that likely will impact their ability to breastfeed exclusively (Tenefelde, Finnegan and Hill, 2011). Employers often do not allow mothers breaks to pump while

at work and may not facilitate the woman's ability to pump because of lack of electrical access, nearby sinks to wash her hands, and refrigeration to store her milk. WIC participants who intend to return to work or school are less likely to maintain breastfeeding exclusivity compared to women who planned to stay home postnatally (Tenefelde, Finnegan and Hill, 2011).

MOTIVATORS FOR BREASTFEEDING IN THE WIC POPULATION

WIC clients who intend to breastfeed and are committed to breastfeed are more likely to be older, have breastfeeding experience, higher education, and family who encourage breastfeeding including the baby's father, and access to breastfeeding support (Fischer, T.P., and Olson, B. H., 2014; Humphreys, Thompson, and Miner, 2005). Meier, Olson, Benton, Eghtedary and Song (2007) explain that women who have antenatal contacts with WIC support felt they were more prepared for breastfeeding compared to women who did not seek WIC support until the postpartum period and many were already having breastfeeding problems by the time they came to WIC. WIC participants who receive first trimester prenatal care are more likely to exclusively breastfeed (Tenefelde, Finnegan and Hill, 2011) and WIC women who attend prenatal and postnatal education classes have higher exclusive breastfeeding rates at six weeks, although not at twelve weeks (Gregory, Gross, Nguyen, Butz, & Johnson, 2016). WIC clients who receive support through home visits and other contact with providers have higher breastfeeding rates at six weeks postpartum. (Pugh, Serwint, Frick, Nancy, Sharps, Spatz, & Milligan, 2010).

Breastfeeding education about the health benefits of breastfeeding for the mother and infant can motivate WIC clients to declare their intention to breastfeed which makes her more likely to breastfeed (Tenefelde, Finnegan and Hill, 2011). Low-income women who have support from their own mothers and peer counselors as role models are more likely to exclusively breastfeed (Fischer & Olson, 2014; Tenefelde, Finnegan & Hill, 2011).

WIC PEER COUNSELORS

WIC promotes breastfeeding as the optimal source of nutrition for infants by using WIC peer counselors (WPC) to help breastfeeding women (USDA, 2012). Breastfeeding women are counseled by WPCs who utilize breastfeeding interventions to protect, promote, motivate, and support breastfeeding among WIC participants. A WPCs primary role as a paraprofessional is to support, encourage, and provide breastfeeding information to pregnant and breastfeeding WIC mother's (Job description: WIC breastfeeding peer counselor, 2018). WPCs are uniquely qualified to help breastfeeding mothers because they must be a current or previous WIC participant who is breastfeeding or has breastfed at least one infant for six months or longer. Due to their own breastfeeding experience, WPCs are role-models who understand the nuances and barriers breastfeeding mothers experience and can provide breastfeeding assistance. In addition to having breastfed an infant, WPCs also attend intensive breastfeeding training, including observing other peer counselors in their role, and are required to stay abreast of breastfeeding research. In their caseloads, WPCs encounter and help prevent common breastfeeding issues. WPCs typically contact a woman during or after her pregnancy to encourage the woman to breastfeed.

The role of the Affordable Care Act (ACA) impacts breastfeeding rates through WPCs interventions. In 2010, the ACA included a \$100 million appropriation of funding to states to develop incentive-based programs within Medicaid to promote behavior change through the venue of preventive services (US Congress, 111th, 2010). Medicaid recipients automatically qualify for WIC benefits. The monetary endowment empowered WPCs to encourage mothers to breastfeed and to utilize other services such as WIC nutrition education, parenting resources, and well-baby visits. The effect of this return on investment which directly linked the ACA funding to improved outcomes was evident in one study where WPCs breastfeeding interventions coupled with their

referrals for well-child exams explained improved health outcomes of breastfed infants as evidenced by decreased rates of otitis media, gastrointestinal and respiratory illnesses, and allergies (Haider, Chang, Bolton, Gold & Olson, 2014).

One retrospective cross-sectional study suggested that women with WPC contact during pregnancy were more likely to initiate breastfeeding than women without WPC contact (Campbell, Wan, Speck, & Hartig, 2013). Another study by Dennis (2006) explained that the impact of peer counselors as role models increased a woman's confidence to breastfeed; the study explicated that breastfeeding self-efficacy is modifiable through modeling from woman to woman. The combination of peer counseling combined with the Baby-Friendly Hospital Initiative (BFHI) are the only effective methods identified by the US Preventive Services Task Force (USPSTF) to effectively impact breastfeeding rates (Srinivas, Benson, Worley, & Schulte, 2015). The Baby Friendly Initiative (BFI), launched by the World Health Organization (WHO) and UNICEF in 1991, is designed to give infants the best possible start in life by supporting improved care of mothers and infant by promoting and sustaining breastfeeding. The BFI includes the Baby Friendly Hospital Initiative (BFHI), which addresses the behaviors of hospital personnel in relation to the care of women and their babies during the neo-maternal period. Some tenets of the BFHI are that hospitals provide a written breastfeeding policy that is regularly communicated with staff and endorsed by training staff how to help women with breastfeeding.

One study revealed that adhering to six or more of the ten BFHI elements resulted in a six-fold increase in exclusive breastfeeding rates (Perrine, Scanlon, Li, Odom, & Grummer-Strawn, 2012). For this reason, it is crucial that hospital practitioners adhere to the BFHI such that WPCs advising breastfeeding mothers prenatally and postnatally can increase the woman's odds of initiating and sustaining breastfeeding (Srinivas, Benson, Worley, & Schulte, 2015). The

recommendations of the American Academy of Pediatrics (AAP), American Academy of Family Practitioners (AAFP), and the American College of Obstetricians and Gynecologists (ACOG) that women receive prenatal and postnatal breastfeeding education supports the role of WPCs in promoting breastfeeding exclusivity among WIC participants (US Preventive Services Task Force: Primary Care Interventions to Promote Breastfeeding Recommendation Statement, 2010).

Historical Context of WIC Peer Counselors

In 2004, WIC implemented the breastfeeding peer counselor initiative (WIC Program Overview and History, 2018). Recognizing that mother-to-mother support has proven to be one to the most successful approaches to help mothers breastfeed their infants, the WIC peer counselor role (WPC) was designed to identify and utilize women with breastfeeding experience to support and help other women with breastfeeding (WIC Program Overview and History). WPCs are likely to encounter guarded breastfeeding attitudes, lack of commitment, and poor intentions among their WIC clients (Carlson & Neuberger, 2017). However, the robust breastfeeding education that WPCs receive as well as their own breastfeeding experiences can help them mitigate these challenges when counseling mothers making their infant feeding decisions. WPCs are considered paraprofessionals who assist professionals but are not licensed or credentialed in their role. In 1991, Texas was one of the first states to pilot this program as a directive to institutionalize breastfeeding peer counseling as a core WIC service (Texas WIC Breastfeeding Peer Counselor Program, 2018). Since implementing the WPC program, more than 3,000 mothers have been trained as a WPC in Texas (Texas WIC Breastfeeding Peer Counselor Program). Currently, about 350 WPCs work an average of 32,650 hours per month in 64 WIC offices and 48 hospitals in Texas (Texas WIC Breastfeeding Peer Counselor Program).

GAPS IN LITERATURE

There is a dearth of literature exploring Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Peer Counselors (WPCs) interactions with new and expecting WIC mothers of all races who are making their infant feeding decisions. Only one article has been identified that examined the perceptions and experiences of WPCs who were working with WIC clients and that study focused on WPCs working with African-American (AA) WIC clients (Gross, Powell, Anderson, Hall, Davis & Hilyard, 2014). Other research has examined the role of WIC and WPCs as they pertain to breastfeeding. Cricco-Lizza (2005) explored WICs' influence on infant feeding decisions of AA mothers. The AA women considered the WIC environment a positive and welcoming influence on their decisions but thought that WIC food packages promoted formula-feeding. Half of the respondents in the study thought that individualized breastfeeding education and promotion, as well as their trusting relationship with the WPC enhanced their decision to breastfeed. Beal, Kuhlthau, & Perrin (2003) examined breastfeeding advice given to white and AA women by physicians and WPCs. The study findings revealed that AA women were less likely than white women to report having received breastfeeding advice and more likely to report formula feeding promotion by the WPCs, although AA and white women were equally likely to report receiving breastfeeding advice from physicians. The authors state the differences in WICs breastfeeding advice given to these groups of women is worrisome because of the disparities in mortality and morbidity between AA and white infants, and problematic because it increases the risk that AA women will not breastfeed (Beal, Kuhlthau, & Perrin). A study by Heinig, Ishii, Banuelos, Campbell, O'Loughlin, and Vera-Becerra (2009) revealed that caregivers with positive, supportive, and caring demeanors are more likely to facilitate information-seeking behaviors among WIC women of all races (Heinig et al.).

Little is known or understood about how WPCs interact with mothers of any race who are making infant feeding sessions, what happens during the counseling sessions, and what factors WPCs perceive affect the mothers' infant feeding decisions. The present study aimed to address some of the gaps in the literature by asking the research question, "What are the perceptions and experiences of Special Supplemental Nutrition Program for Women, Infants and Children (WIC) Peer Counselors (WPCs) as they interact with WIC mothers making their infant feeding decisions?"

SUMMARY

Chapter Two has presented relevant review of the literature including the aspects of the role of Special Supplemental Nutrition Program for Women, Infants and Children (WIC) Peer Counselors (WPCs) to encourage WIC clients to breastfeed and the importance of breastfeeding. The Chapter concluded by identifying the gaps in the extant literature and a statement of the purpose of the study.

PLAN FOR REMAINING CHAPTER

Chapter Three presents the research question and aim, the application of Naturalistic Inquiry methodology in the study, the recruitment strategy, data collection, management, and analysis, and procedures to ensure trustworthiness of the research. Chapter Four will provide a discussion of the research findings. Chapter Five presents a synopsis of the study, comparison of the findings to the extant literature, discussion of the implications of the study, the strengths and limitations of the study and suggestions for further research.

Chapter 3: Methods

INTRODUCTION

Chapter Three presents the research design and methodology implemented in this Naturalistic Inquiry (NI) (Erlandson et al., 1993; Lincoln & Guba, 1985) study that examined the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) peer counselors (WPC) perceptions and experiences as they interacted with women making their infant feeding decisions. Chapter Three begins with an overview of NI and the researcher's rationale for choosing this methodology, the research question that guided the study along with the application of NI methodology, data collection, and management. Additionally, this Chapter presents the procedures utilized to protect the confidentiality of the human participants and obtaining their informed consent.

NATURALISTIC INQUIRY

NI was chosen to explore WPCs' perceptions and experiences as they interacted with women making their infant feeding decisions. Naturalistic Inquiry, as proposed by Lincoln and Guba, (1985), and advanced by Erlandson et al. (1993) was an ideal approach for this study because it utilizes interpretive and exploratory methods to answer complex questions about unique social contexts and patterns of behavior. NI methodology assumes and acknowledges that there are multiple realities constructed by the study participants, and their constructs have richly-layered meanings from the participants' perspectives. NI peels back these complex layers by asking, "What is happening here?" and "Why are things the way they are?" (Erlandson et al., 1993, p.14).

Naturalistic Inquiry takes place in the natural setting, or context, in which the phenomena occurs. Interaction between the researcher and participants during data collection captures context-dependent details to provide a clearer picture of what is happening in the phenomenon (Erlandson

et al., 1993). NI methodology relies upon the interview process wherein the dialogue between the interviewer and participant is structured to "...reconstruct the past, interpret the present, and predict the future" (Erlandson et al., 1993, p.85). The informal interview is purposeful in that it helps the researcher understand the contexts of the social, cultural, and interpersonal aspects of the phenomenon being explored.

Naturalistic Inquiry enables the researcher to understand and make interpretations about the meanings of the research findings, which are enriched with the specificity of interrelationships and accumulation of concrete, rich details created within the setting (Erlandson et al., 1993). There is a paucity of data about the perceptions and experiences of WIC peer counselors as they interact with and support new mothers making their infant feeding decision in the early postnatal and postpartum days.

RESEARCH QUESTION AND AIM

The research question that guided this study was: What are the perceptions and experiences of WIC Peer Counselors (WPCs) as they interact with WIC mothers making their infant feeding decisions? The aims of this study were to explore what happens during WPCs' interactions with new mothers and the WPCs' perceptions of factors that influences the mother's infant feeding decisions.

METHODOLOGY

The following sections describe the application of NI methodology in this study that explored the perceptions and experiences of WPCs as they interact with mothers making their infant feeding decisions. The section describes participant recruitment, sample, setting, data collection procedures, data analysis, and data management strategies.

Participant Recruitment, Sample, and Setting

The University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) reviewed and approved the study protocol. Please review Appendix A for documentation of UTMB IRB approval. The researcher then received permission from the director of the WIC clinics located in the Southeast regions of Texas to post recruitment fliers in regional WIC offices. The WIC clinic director shared the flier with the WPC supervisor who then shared the recruitment material with the regional WPCs.

The flier (Appendix B) invited current or former WIC peer counselors to share their experiences and perceptions of working with mothers making their infant feeding decisions. Although the flier invited WPCs interested in learning about the study to contact the researcher, the WPCs' supervisor offered to coordinate scheduling of data collection sessions so it would not interfere with coverage in the WIC clinics.

Sample

Study participants were recruited via purposive and snowball sampling. Purposive sampling occurs when the researcher selects research participants based on their ability to provide rich information regarding a specific phenomenon (Polit & Beck, 2014). Snowball sampling enhances purposive sampling and entails the researcher asking research participants to refer their network of friends and/or colleagues to participate in the study (Polit & Beck). A total of nine participants, representing eight WIC clinics located in Southeast Texas, were recruited for the study. Seven study participants were recruited using purposive sampling and two were recruited using snowball sampling.

PARTICIPANT INCLUSION CRITERIA:

Participants in this study were WPCs who:

1. Were current or former WPC with at least six months of experience

- 2. Could speak and understand English
- 3. Were willing to participate in an initial interview lasting up to 90 minutes and one follow-up session lasting no more than 90 minutes

PARTICIPANT EXCLUSION CRITERIA:

Participants in this study were excluded if they:

- 1. Were not a current or former WPC who has not had at least six months of experience
- 2. Could not speak and understand English
- 3. Were not willing to participate in an initial interview lasting up to 90 minutes and one follow-up session lasting no more than 90 minutes

Eight of the study participants were currently working as WPCs and one had worked as a WPC. All understood and spoke English and were enthusiastic to participate in the study. Every Potential candidate met the inclusion criteria and none were excluded from the study. Table 4.1, which appears in Chapter Four, will provide a discussion of participant demographic data.

The researcher requested IRB approval for up to 30 WPCs estimating that about 16 WPCs would need to be recruited in order for data analysis to reveal data saturation and redundancy. Data saturation occurs when no new themes or ideas evolve. Redundancy occurs when data repeats itself. Data analysis revealed saturation and redundancy by the sixth participant. Nevertheless, three additional WPCs wanted to participate in the study and so they were interviewed; data analysis reconfirmed data saturation and redundancy.

SETTING

The researcher conducted data collection face-to-face with all study participants. Data collection occurred primarily in the WIC clinic at the conclusion of the WPC's workday. One exception was the final interview which was conducted at the participant's home.

DATA COLLECTION

Each WPC who planned to participate in the study received the "Fast Fact Sheet" (Appendix C) prior to the day they had agreed to participate in data collection. The "Fast Fact Sheet" provides the researcher's contact information, discussed the study's purpose, procedures, risks, and benefits and any costs or compensation for participating; it also provides information about how the participant's confidentiality is protected as well as the participant's right to withdraw from the study. Data for the study consisted of bio-demographic data, interview data, and the researcher's field notes, reflexive journaling, and memos.

The researcher met and greeted the WPC at the designated time and place. The researcher began by discussing the study and answered additional questions the WPC had about the study. Once the WPC's questions had been answered, the researcher verified the WPC's willingness to participate in the study. The WPC was informed of her right to withdraw from the study at any time for any reason and was given a hard copy of the Fast-Fact Sheet.

Once the WPC's questions were answered, the researcher read the Verbal Consent form (See Appendix E) which ends with the question, "Are you willing to participate in the study? Your verbal consent will allow me to turn on the recorders and begin the interview." The WPC's oral consent to participate prompted the researcher to turn on the recorders; the researcher asked the WPC to re-state her willingness to participate in the study; the verbal statement became a part of the recorded collection.

Data collection began with demographic data (See Appendix D). WIC requires that their peer counselors must have breastfed at least one infant a minimum of six months and the WPC must have been or is a current WIC participant (Gross et al., 2014). The bio-demographic data captured this and other information such as the WPC's age in years, the length of time she had

breastfed her infant(s), length of time she had worked in the WPC role, and the scope of her training. The bio-demographic information helped the researcher understand the participant's education and previous experiences could be relevant to the research question.

Data collection proceeded to the interview, which used a semi-structured interview guide (see Appendix D). Interview questions were developed to encourage the WPC to talk about her perceptions and experiences as she interacted with mothers making their infant feeding decisions. The interview began with the grand-tour question, "Could you please tell me about your perceptions and experiences as you interact with mothers making their infant feeding decisions?" The researcher used probes such as, "Could you tell me more about that?" to elicit more information from the participant or to clarify ambiguous statements. Prior to concluding the interview, the researcher asked the WPC if she had anything else she would like to add that may have not been covered in the interview. At the conclusion of the interview, the researcher asked the WPC if she would be willing to be contacted again if the researcher had any questions, or to clarify any data for member checking. The researcher also invited the WPC to email or phone her if the WPC had additional information to share with the researcher. No additional contacts with the WPCs were needed to clarify information and no WPCs contacted the researcher. The interview concluded with the researcher thanking the WPC for her time. The researcher then gave the WPC a one-time \$25 VisaTM gift card in appreciation for her participation in the study. The data collection sessions ranged from 44 to 90 minutes in length, with an average of 65.2 minutes including the member checking interviews.

The researcher maintained a reflexive journal and field notes during and after data collection sessions including descriptions of any critical incidents that occurred during the interviews. The field notes captured and recorded relevant and meaningful data about observations

during data collection sessions, including the data collection setting and the natural context of the WIC offices. In addition, the researcher kept a reflexive journal to provide guidance and insight for future data collection sessions and to enhance the trustworthiness, credibility, auditability, dependability, and confirmability of the study (Erlandson et al., 1993). The journal included the researcher's thoughts, questions, reflections, and ideas about the study as well as what should occur during the next data collection session, including improving the data collection techniques. The reflexive journaling became a part of the audit trail throughout the study where thick description informed auditors as they examined the process and product of the study to verify the study's trustworthiness (Lincoln & Guba, 1985).

DATA MANAGEMENT STRATEGIES

All interviews were audio-recorded using a digital recording device as well as the researcher's password-protected iPad and iPhone. The researcher personally transcribed the audio-recorded interviews then verified the accuracy of the transcription against the recordings while listening to the recordings. The raw data on the original transcripts were stored and kept in a locked firesafe in the researcher's home. A second copy of the transcript was deidentified by replacing the participant's name with a code and removing or masking any data within the transcript that could be linked to the participant; the second copy was used for data analysis purposes. The codebook linking a participants' name with the assigned code was stored with the original transcripts in a locked firesafe in the researcher's home. The deidentified transcripts and materials related to data analysis and writing up process were stored in the researcher's password protected laptop. All study data will be destroyed once all study reports have been completed. The researcher's home has a monitored security and camera system.

DATA ANALYSIS

Data analysis began the moment the researcher met the participant for the first interview. Naturalistic Inquiry data analysis is an interactive and interpretive process which requires the human instrument as the primary research instrument. Inductive analysis and data sorting into thematic categories using the exploratory methodology allowed the researcher to infer and discover meaning and patterns of behavior, to identify descriptive details about the WPC and the WIC setting, to draw conclusions, and to verify data (Erlandson et al., 1993). Negative case analysis involved searching the data for elements that did not support the emerging themes. No negative cases were apparent. While collecting data, the researcher was thinking constantly about the data, and how it informed her study in the moment as well as for subsequent interviews.

Data analysis using NI methodology began with unitizing the data, the breaking of data down in the smaller pieces. The researcher then sorted the data into categories reflecting similar ideas, which is called emergent category designation. Three categories emerged once the ideas had been sorted and organized.

The finding were verified by member-checking to ensure the themes accurately reflected the perceptions and experiences of the WIC peer counselors, and not that of the researcher. The researcher conducted member-checking with three of the participants. No additional data emerged from member checking that contributed to additional data categories. The ultimate categories that emerged were: WIC Peer Counselors: Who they are; Getting the Message Across; and Tracking Results.

TRUSTWORTHINESS

Trustworthiness in qualitative research is comparable to validity and reliability in quantitative research. Lincoln & Guba (1985) have established criteria for evaluating the trustworthiness in qualitative research. These criteria are to ensure the credibility, dependability,

transferability, and confirmability of the study data (Erlandson et al.,1993). Standards of trustworthiness described by Lincoln & Guba were employed in this Naturalistic Inquiry study to ensure that the procedures met the criteria of rigor. The following sections discuss Lincoln & Guba's criteria for trustworthiness, what each criterion means, as well as strategies that were employed to meet each criterion.

Credibility

Confidence and veracity of a study are essential to its trustworthiness and credibility. Credibility is the internal validity, or 'truth value,' of the constructs, that emerged from the data. The strategies employed assure credibility included: member checking, peer debriefing, and triangulation (Lincoln & Guba, 1985).

Triangulation occurs when the researcher explores different sources of information to determine if a theme evolves (Erlandson et al., 1993). Triangulation is an exercise which verifies a construct or theme, ensures rigor of the study, and provides validity of the construct. Sources of triangulation for this proposal included data from the study participants, documents, and observations made by the researcher. The researcher utilized a peer debriefer, her supervising professor, to assure credibility by ensuring the viability of the hypotheses or themes generated from the study (Erlandson et al). The researcher and her professor independently read and coded the transcripts to identify and categorize recurrent thoughts or themes. The peer debriefer critically examined and provided feedback about the study, which lead to refinement of the study (Erlandson et al).

Member checking also was employed. Member checking helps to verify whether the study findings reflect the realities of the persons in the study (Erlandson, et al., 1993). A third of the study participants were willing to participate in member checking to verify whether the study

findings were consistent with the experiences and perceptions as WIC peer counselors. The member checking process resulted in verification of the study findings. The strategies to assure credibility ensured that the constructs and patterns that evolved truly arose from the study participants, rather than the biases and thoughts of the researcher.

Dependability

Dependability is the extent to which the study results are consistent and reliable (Erlandson, et al., 1993) The peer debriefer ensured consistency and reliability of study procedures by reviewing each step of the study including the written report. The researcher also created an audit trail that could be utilized to determine the study's adequacy in meeting the trustworthiness criteria. The audit trail allows an independent reviewer to track the study procedures from beginning to end. The audit trail consisted of all study data, the researcher's field notes and journals, codebook, and documents reflecting the evolving conceptualization of the study findings and drafts of the written study report.

Transferability

Transferability is the replicability of the study by another researcher in a similar context with similar participants (Erlandson et al., 1993) with the realization that not all aspects of the study can be replicated exactly. Transferability also refers to the ability of the study findings to explain similar situations. The criterion of transferability was met by using thick descriptions, reflexive journaling, and the audit trail. Thick descriptions involved the researcher collecting and describing voluminous, layered details in her reflexive journal about the study including the context, sights, sounds, scene, and relationships of the environment (Erlandson et al). Transferability is supported by the audit trail.

Confirmability

Confirmability refers to the accuracy of the research findings of the data (Erlandson et al., 1993). Confirmability was assured in the study by the peer debriefer, member checking, and the audit trail. The reviews by the peer debriefer and the records within the audit trail demonstrated that the study findings emerged from the study data. Member checking verified the accuracy of the interpretations of the perceptions and experiences as the WIC peer counselors interacted with WIC clients making their infant feeding decisions.

HUMAN SUBJECTS

Procedures for this study were approved by the University of Texas Medical Branch (UTMB) Institutional Review Board (IRB) (see Appendix A). The foremost risks to the participants in this study were loss of confidentiality, evoking emotions, and fatigue during data collection. All study data were coded and deidentified as described in the data management section of this document. The participants' statements are reported utilizing their code to identify the source and information within the quotes to link back to the participants has been masked. The researcher described the possible risks of participation in the study and strategies utilized to mitigate the risks to each participant during the consenting process and provided an opportunity for the participants to refuse to participate or answer a question, and/or to stop the interview at any time for any reason.

In addition to the potential loss of confidentiality, the researcher informed the participants about the risks of emotional distress or fatigue caused by the interviewing. The researcher remained alert for any cues that could indicate the participant was uncomfortable answering a question or becoming fatigued. No participant became tired or distressed during the interview, and none of the WPCs refused to answer any questions.

SUMMARY OF METHODS

Chapter Three has described the implementation of Naturalistic Inquiry and explored the research question: What are the perceptions and experiences of WIC peer counselors as they interacted with mothers making their infant feeding decisions? The Chapter commenced with an explanation of NI as the methodology selected for the study. The Chapter continued with study strategies utilized for participant recruitment and sampling methods; data collection, management, and analysis techniques; and tactics to assure trustworthiness of the study, its procedures, and human subjects considerations.

PLAN FOR REMAINING CHAPTERS

Chapter Four will present the study results. Chapter Five will present a discussion of the findings.

Chapter 4: Findings

Introduction

Chapter Four will report the finding of this Naturalistic Inquiry (Erlandson et al., 1993, Lincoln & Guba, 1985) that explored the research question: What are the perceptions and experiences of WIC Peer counselors who interacted with mothers making their infant feeding decisions? The Chapter will begin with a description of the study participants' demographic data, followed by a discussion of the study findings. The Chapter will end with a summary of the research findings.

STUDY PARTICIPANTS

Nine Women, Infants and Children (WIC) peer counselors (WPC) participated in this study. Six of the participants were Hispanic and three self-identified as White. Table 4.1 summarizes their demographic data.

Table 4.1. Participants' Demographic Data

Participant	Age	Length of Time in WPC Role	Length of Time WPC Breastfed (maximum/child)	Currently Working as a WPC
1	31	11 years	18 months	Yes
2	26	4 years	8 months	Yes
3	34	5 years	6 months	Yes
4	61	8 years	6 months	Yes
5	48	10 years	12 months	Yes

6	29	7 years	8 months	Yes
7	24	17 months	22 months	Yes
8	32	13 months	4 years	No, Currently a Lactation Consultant at WIC
9	62	19 years	18 months	Yes
	Mean=38.5 years	Mean=7.4 years	Mean=16.22 months	

INTRODUCTION TO FINDINGS

The goal of this study was to explore the perceptions and experiences of Women, Infants and Children (WIC) peer counselors (WPC) as they interacted with women making their infant feeding decisions. Three categories evolved during data analysis: 1) WPCs: Who they are, 2) Getting the Message Across, and 3) Tracking Results. The first category will be discussed and followed by the remaining categories.

Table 4.2, which follows, reflects the categories and subcategories that emerged from the data.

Table 4.2. Categories and Subcategories

Category	WPCs: Who they are	Getting the Message Across	Tracking Results
Subcategories	1.Training	1. Assessing the Client's Attitudes and Knowledge about Feeding Preferences	1.From their client's
	2.Engagement	2.Intervening by Educating the WIC Client and her Support System	2.From Repeat Clients

3.Commitment	Intervening by	3.From Themselves
	Educating Using	
	Food Packages	
	Intervening by	
	Educating Using	
	Tools of the Trade	
	Intervening by	
	Educating	
	Intervening by	
	Facilitating	
	3.Sustaining	
	Breastfeeding in the	
	Long Term	
	Sustaining by	
	Countering	
	Healthcare Practices	
	Sustaining by	
	Neutralizing Qualms	
	Sustaining by	
	Incentivizing with	
	Material Resources	

The study findings are reported utilizing quotations from the participants' interview transcripts to support the findings. A participant quotation includes the participant's unique alphanumeric identifier (ex. P1) followed by the line of text where the quotation began and ended in the interview transcript (ex. 243-257).

WIC PEER COUNSELORS

Women, Infants and Children (WIC) peer counselors (WPC) are paraprofessionals who provide nutritional counseling to WIC participants. WPCs typically work in WIC offices located in their local community and provide individualized breastfeeding assistance, support, and counseling to WIC clients. WIC requires that their WPCs must have breastfed at least one infant a minimum of six months and must have been or is currently a WIC participant (Gross et al., 2014). WIC provides intensive and ongoing breastfeeding training to WPCs, which prepares them for

what WIC calls their "mom-to-mom" counseling role. The "mom-to-mom" role entails a former or current WIC breastfeeding client counseling a current WIC client about breastfeeding.

Part of WIC's goal is to encourage breastfeeding, ideally exclusively for six months, in congruence with the Healthy People 2020 breastfeeding goals (United States Breastfeeding Committee). Therefore, WIC hires WIC peer counselors (WPC) to encourage breastfeeding and provide nutritional counseling to their WIC clients regardless of the client's infant-feeding decisions. The participants in this study received breastfeeding support training from a curriculum developed by WIC. As required by WIC, all WPCs were current and former breastfeeding women. The findings reflect that all the WPCs who participated in this study demonstrated passion, commitment and engagement for their "mom-to-mom" role. The WPCs were generous with their time and with their own financial resources to support their role.

TRAINING

The WPCs' in this study were trained by WIC to prepare them for their role. Their range of years in practice as WPCs meant the training each WPC received varied in scope and to some extent style, but their initial training was rigorous and included a hands-on practicum dealing with complex breastfeeding situations. One WPC talked about her WIC breastfeeding education having a "focus on breastfeeding process and...classes that teach breastfeeding" (P1, 77-78). Another WPC described her initial training as, "Hands-on...problem-solving, and...rotations with lactation management...how to assess breastfeeding, assess infants...observing...and assessing the dyad of moms and babies" (P4, 19-52). The education the WPCs received, coupled with their personal breastfeeding experiences prepared them for their role as insightful paraprofessionals. As one WPC said, "...I've been there and I've seen that" (P1, 1053).

ENGAGEMENT

The WPCs were dedicated and engaged employees in their role and were committed to breastfeeding as the optimal nutritional choice for infants. A WPC said about her role, "It's so rewarding!" (P9, 478). Another WPC said, "I wouldn't change it for anything" (P2, 1159), while another exclaimed, "Oh, I love it! It's such a blessing! (P4, 444). Prior to becoming a WIC peer counselor (WPC), one participant talked about the birth of her firstborn child and her breastfeeding experience, "I just felt it [breastfeeding] was something that I wanted to do because I was really excited about how awesome the breastfeeding relationship was and how breastfeeding benefits your baby... because primary nutrition for infant is breastmilk!" (P8, 99-102, 913). The WPCs breastfeeding experiences contributed to their being passionate advocates of breastfeeding. A WPC summed up the breastfeeding enthusiasm of WPCs, "all the breastfeeding counselors I know are very passionate about breastfeeding as a form of feeding their babies" (P9, 81-83).

COMMITMENT

Each of the WPCs made comments that revealed their dedication to their positions and the clients in their care. They had occupied their WIC Peer Counselor roles 13 months to 19 years, with an average of 7.4 years. They were generous with their time, were willing to work beyond the hours for which they were being paid. Most were willing to be on unpaid call all hours of the day in order to be available to their breastfeeding WIC clients. One WPC said, "If I'm not available at work, I'm available by cellphone...I want to help all my moms" (P9, 245-248). Another WPC said, "When I go home my husband complains I'm on the phone with the moms yet I'm off the clock and not working" (P7, 616-618).

The WIC peer counselors were also generous with their money. The WPCs often used their own funds to enhance their services to their clients. For example, one WPC became interested in the mechanics of breastpumps, leading to her purchasing 23 different models of breastpumps so

she could examine how they worked and facilitated her work with her clients. She commented, "I got into the fascination of breastpumps and trying them out, I actually have 23 pumps now...I use them to educate my WIC moms" (P7, 174-181). She used the breastpumps she had purchased to teach other WPCs about the similarities and differences of each pump. The WPCs received minimal reimbursement for their phones but were willing to use their personal phones to be accessible to their clients: "I only get \$10 a month for my own phone, which means nothing to me. I have unlimited time and hours, luckily" (P7, 614-616). The same WPC used her own funds to pay for a party to support breastfeeding clients and encourage others to breastfeed. She reported, "So for our breastfeeding celebration I spent over \$200 of my own money. We have to beg for donations for food and decorations or buy our own" (P7, 611-613). Another WPC was planning on spending \$500 of her own money to renew her International Board Certified Lactation Consultants (IBCLC) certification although she was nearing retirement.

SUMMARY: WHO THEY ARE

The WPCs in this study were engaged in their role and were dedicated to and passionate about their job. All were committed to WIC, their employer, and to their clients. The WPCs were motivated by the love of the job and the fulfillment they found in their role. They were generous with their time and money. Their commitment to their clients and their jobs, rather than their salaries, motivated them to continue in their role.

GETTING THE MESSAGE ACROSS

Before the WPCs could work with an individual mother with her infant feeding decision and encourage her to breastfeed, the WPC had to figure out who the mother was. The WPCs assessed their clients in terms of their attitudes and feelings about their breasts and breastfeeding.

They also assessed how the opinions of people in their clients' lives influenced the client herself about infant feeding.

GETTING THE MESSAGE ACROSS BY ASSESSING THE CLIENT'S ATTITUDES AND KNOWLEDGE ABOUT FEEDING PREFERENCES

The WPCs began by assessing their clients' attitudes and knowledge about their infant feeding preferences in order to help them with their infant feeding decisions. They recognized that breastfeeding requires effort and discipline to successfully breastfeed.

A participant said she began the discussion of infant feeding methods with the question,

"What have you heard about breastfeeding? How do you feel about breastfeeding?" (P4, 289-291). They encountered women who were adamantly against the idea of breastfeeding:

"If a mom doesn't want to hear about breastfeeding, [we] go further and just ask them if there's a reason why. I always ask, and if they say they don't want to talk about it, we just leave them alone. It's something we don't push on them, um if they're open to disclosing the information, we'll proceed, but if not, we'll stop" (P3, 96-107).

When asked about how she approaches a WIC client making her infant feeding decisions, one WPC said, "The first thing I ask is what is her plan, or what has she heard about breastfeeding because not everyone around here has heard good stuff about breastfeeding. A lot of times they hear the negative things first and then the positive, or only hear one story" (P2, 458-466).

The WPCs were adept at assessing their client's attitudes and knowledge about infant feeding. They encountered women who were unsure about breastfeeding and often found that their clients were more inclined to both breast and formula feed their infants.

"I think it's. . . not having their minds set on what they want to do. . . I'll ask, "Are you interested in breastfeeding?" and they tell you, "No," but then kind of be hesitant, that's

the challenge there... and a lot of them will say, "Well, I went over the breastfeeding information, but I'm still not there yet, like convinced I want to do breastfeeding." I think that's the big challenge there because if you haven't made up your mind by the time baby gets here, it's a hard decision to make" (P3, 791-804). One WPC said,

"The majority of my experiences would be doing the partial where they're wanting to do breastfeeding and the formula. It's not that they're doing formula-feeding, it's that they want um, to have it there in case they need it" (P3, 733-736). A WPC discussed the WIC client's willing to breastfeed: "I think more of it is 90% determination and 10% milk supply. If she doesn't want to breastfeed, she won't. . . If she wants to . . . she will find time to breastfeed" (P9, 372-377). Another WPC remarked, "Well the thing with the moms here is that they want to do both" (P6, 149-150). Occasionally, the WPCs encountered women who were interested in exclusively breastfeeding: "And they come out and say, 'I'm gonna try exclusively breastfeeding. . . give me a few weeks" (P5, 500-501). Nevertheless, very few WIC clients were willing to commit to exclusive breastfeeding.

One WPC described the response most WPCs used when assessing their clients' attitudes about breastfeeding: "You've gotta take each one individually. I don't have a song and dance I do for each one, and I just listen to what they tell me" (P4, 294-296). A WPC reiterated this individualized approach, "Moms. . . come in and say. . . because [her] mom did not do it. . . then I shouldn't do it because they say it's painful, they say it's. . . not good for baby" (P5, 504-508).

A different WPC stated, "Sometimes they're not sure [they can breastfeed] because grandma couldn't" (P9, 319). The WPCs had to parse out what their clients' infant feeding thoughts were before she could help them make their decisions. Each WIC peer counselor took an individualized approach towards figuring out how to help their clients with their decisions. The WPCs realized

that family members' opinions about breastfeeding had a powerful effect on whether the woman would choose to breastfeed or formula-feed her infant.

While interacting with and assessing their client's attitudes and knowledge about infant feeding, some WPCs discerned that their clients were modest about exposing their breasts. Prior to being able to help their clients, the WPCs had to overcome this challenge by normalizing exposing one's breasts in order to breastfeed. "And she was very shy, and she pulled out her breast [but] she was covering [them], and I said, 'Don't worry honey! I don't care about your breasts! I care about your baby" (P4,417-420). As one WPC stated, "Some people. . . don't like to show themselves to anybody but their spouse" (P6, 326-327).

The WPCs also recognized that some clients were reluctant to have their breasts touched. One participant related the story of a mother who had come to her with breastfeeding problems. The WPC's intervention would have involved her touching the woman's breasts and observing her breastfeeding her infant, but her client became distressed saying, "No, just tell me! The WPCs comment was, "I can tell you everything, but. . . I think it's not comfortable for them having someone there helping and touching them or anything like that" (P6, 328-330). Another WPC described her approach with each client:

"They're wanting help and I do one-on-one [breastfeeding assistance]. 'Is it ok to help?' And they're like, 'No.' 'So things like that is hard because I like hands-on, it's a better way to help mom, and that way. . . I [can] see her putting baby on. . . but sometimes it's just like they need help but then no, they just want you to tell them about it.'" (P6, 311-318).

The WPCs also encountered women who thought their breast size determined their ability to breastfeed. A WPC related her experience with younger women's attitudes about the size of their breasts. She told a story about teaching about breastfeeding at a high school in her community.

Some of the students expressed their concerns about their breasts changing due to breastfeeding. "I went to do a. . . presentation. . . at the high school and. . . got a lot of, 'My breasts are gonna sag,' and. . . the guys were also concerned [about sagging breasts after breastfeeding]" (P1, 316-324). Another WPC talked about other clients who felt their breast size predicted their ability to breastfeed:

"Um especially moms that come in with small breasts, they're like, 'I don't want to because I don't have big breasts to produce milk. . . I can't, I wasn't able to [breastfeed] because my mom wasn't able to' I hear a lot of that as well." (P3, 45-48).

The WPCs encountered clients who were modest about exposing their breasts, and even having their breasts touched. Before the WPC could continue, she had to understand the client's feelings about showing her breasts and having them touched.

Although a great deal of the WPC's assessment of their clients' about breastfeeding occurred prenatally, they continued to assess the client each time they interacted with each other. Several WPCs described experiences with clients who initially had decided to breastfeed but vacillated with that decision when they returned to the WIC clinic after delivering their infant. Their indecision often began in the hospital when other members of their family, particularly the grandmothers, wanted to hold and formula feed the infant: "Family! They want to bottle feed that baby! Grandmothers!... They're thinking they're being helpful" (P4, 616-621). "And then they get to the hospital and the grandma wants to hold it the whole time and feed it the bottle [of formula]" (P4, 437-438).

The WPCs related their stories about how their client's significant other influenced the mother's infant feeding decisions. The infant's fathers also wanted to feed their infant. "Well the father doesn't want me to [breastfeed] anymore because he wants to feed the baby" (P8, 624-626).

Childbearing women are often influenced by the breastfeeding experiences of other people and family members. The WPCs discovered that their client's attitudes and knowledge were often influenced by their family members. The WPCs goal was to help the client make a decision before the infant's birth. The WPCs often encountered women whose relatives had been unsuccessful with breastfeeding and led them to expect they also would be unsuccessful. One WPC commented, "Sometimes they're not sure [they can breastfeed] because grandma couldn't" (P9, 319). Another WPC reported the response of their client, "I can't because my mom wasn't able to.' I hear a lot of that as well." (P3, 45-48). "Moms. . . come in and say. . . because [her] mom did not do it. . . then I shouldn't do it because they say it's painful, they say it's. . . not good for baby" (P5, 504-508). As one WPC stated, "Sometimes they're not sure [they can breastfeed] because grandma couldn't" (P9, 319). One WPC said, "You have them come in and say no one breastfeeds in their family and they don't have no milk and it's no good" (P7, 533-534). Other women reported that family members did not like breastfeeding: "Oh! My mother didn't like doing it, I'm not doing it, nobody in my family did it" (P4, 289-300).

One WPC observed that African-American women seemed particularly averse to breastfeeding. She believed this attitude arose in response to their history of enslavement in the US: "It goes back to those days where their milk [was] for their masters and not their [own] babies" (P7, 533-536). Some WPCs encountered clients who found the idea of breastfeeding repugnant. "They think it's nasty!" (P4, 461-466). "But with pregnant moms [whose response to being asked about breastfeeding] either was silence, or it was just nasty and I'd get that a lot. . . with black moms, not Hispanic moms, but the idea it's nasty from young white moms and the black mom I did see, it was just nasty" (P8,702-708).

Occasionally, the client's physician had given the woman information that could interfere with breastfeeding: "They'll come in and say they can't breastfeed [or] I can breastfeed, but my doctor says I can't breastfeed, I say, 'Why?' they say, "Because I'm taking hydrocodone for the C-Section pain" (P5, 509-512).

SUMMARY: GETTING THE MESSAGE ACROSS BY ASSESSING THE CLIENT'S ATTITUDES AND KNOWLEDGE ABOUT FEEDING PREFERENCES

Although the primary role of the WPC was to encourage WIC clients to breastfeed, they accepted the opinions of women who did not want to do so and moved on to other aspects of their role. The WPC's assessment included determining the mother's thoughts and attitudes specifically about breastfeeding. The WPCs' first step in getting their message across was to understand the client's attitudes and knowledge about breastfeeding and their own breasts. They assessed the client's initial decisions or leanings regarding infant feeding; the client's attitudes and knowledge about breastfeeding; any erroneous ideas the client might have about breasts and breastfeeding, such as whether the size of the breasts affected the ability to breastfeed; and the client's attitudes toward her own breasts, such as modesty, or reluctance about having her breasts touched were factors that might interfere with breastfeeding. The WPCs also assessed the client's understanding of the beliefs and attitudes about breastfeeding on the part of people in the client's life, such as the infant's father or grandmother, and other people in the woman's support system. Although the WPCs' assessment of their clients was extensive upon the first meeting with the client, they continued their assessment during every encounter with the client.

GETTING THE MESSAGE ACROSS BY INTERVENING BY EDUCATING THE WIC CLIENT AND HER SUPPORT SYSTEM

Once the WPCs had a good understanding of their clients' attitudes and knowledge about breastfeeding prenatally and postnatally, they could utilize a variety of strategies to getting their message across to the clients as well as their client's support system. Their interventions included a variety of educational methods as well as facilitating their clients' breastfeeding by providing referrals and use of self. They utilized different approaches to educate their clients, drawing on resources provided by WIC as well as techniques they had developed themselves, in order to help their clients understand breastfeeding and its advantages.

The WPCs educational interventions to getting their message across about breastfeeding were innovative yet pragmatic. The WPC recognized the importance of educating their client and their support system. They used tools of their trade to impact their clients infant feeding decisions.

The WPC began by educating their clients about breastfeeding before educating their support system. The WPCS provided directives to their client and support system, so the mother's breastfeeding decision was supported. The WPCs discussed their WIC clients who came to them for breastfeeding help and education. At times, they had to consider what impact social or cultural ideals had upon breastfeeding.

"Depending on who you're speaking with, I'm not going to give all the information. . . that I give to an African-American mom that I give to a Hispanic mom because it depends on where they're at and what they need. Hispanic moms would probably come in already wanting to breastfeed, so they have more questions about latching and keeping up their supply. . . whereas some other moms I may have to give all the benefits of breastfeeding and explain why it's so important for her to do it try to convince her to try. I take what I know. . . to help the particular mom" (P1, 99-109).

Another WPC described her approach:

"We have moms that come in and they need a lot of help. . . they don't. . . have information as they come in; they don't know what's gonna happen when they deliver their baby, or sometimes they do know because it's their second or third child. But they still tell me you know, 'I never got information with my first one, this is my second one, and uh, I didn't know this, I didn't know that. . . about breastfeeding'. . . 'There's some. . . that they transfer from another state, or other [WIC] clinics, and they tell me they didn't know about this information [about what WIC does and about breastfeeding]'" (P5, 102-116).

The WPCs discussed the impact culture had on their client's infant feeding decision. The WPCs often had to counter myths and misconceptions with evidence-based research as they educated their clients. The WPCs considered the client's culture when selecting how they educated the client:

"With some of those moms, it's cultural...they have a lot of questions like, 'If I'm very stressed can I not breastfeed? Am I supposed to pump and dump? Or is it true that I cannot eat beans because it'll make the baby colicky? Is it true that I can't eat certain things here and there?' I try to word it in the nicest, most respectful way and say, 'You know there's a lot of studies and a lot of research-based information on the opposite.' And then I go in and show them, 'This says you can eat beans, and this says it's ok you can breastfeed even if you're stressed out' and that will usually calm them down, because sometimes there's usually that one myth you know, that cultural opinion maybe from their mom or grandmother that can make the difference and be the game-changer. Maybe they really wanted to breastfeed, and now they don't, or the other way around. Sometimes it's a little hard especially when all the part about breastfeeding is negative, but I try to show them, I have to have my back up of research-based information'" (P2, 707-739).

Some WPCs knew that they could boost their client's confidence by educating them about the benefits of breastfeeding was helpful: "So it's just reassuring them. . . 'Just think about what they're gonna do for their baby, the baby is getting the best of what they have and pushing them towards the benefits of breastfeeding'" (P6, 519-523).

Another WPC talked to her client about the benefits of breastfeeding for the mother such as: "Let's talk a minute, about the benefits for the baby and for mommy you know what, it takes nine months to have a baby and that long to drop that weight but when you breastfeed, nature kind of helps you out and makes your uterus contract and shrink back to its prepregnant size, and helps you get back to your prepregnant weight, much faster and easier than giving your baby a bottle, and that gets their attention. And then I tell them if you start off giving baby breast and not solid foods, then you usually don't have your period coming back until you give your baby solids. I tell them it's not birth control, so I mention breastmilk is the perfect food, at the right temperature, the right ingredient, and it's very easy to carry around, no costs, and always available, no matter the time of day'" (P9, 290-304).

The WPCs understood that some of their clients had negative views about their breasts and attempted to counter these viewpoints. Several of the WPCs commented that their clients felt breastfeeding needed to be done in private, or that breastfeeding was repugnant. The WPCs normalized breastfeeding stressing that breastfeeding is a natural way to nurture an infant. One WPC told about a client who was modest about exposing her breasts while breastfeeding. She quoted the client who said,

"I'm trying to cover up. . . [or] go to another room when I'm breastfeeding because I don't want my children to see it.' I said, 'Why did you feel like you have to hide. . . you should be teaching your daughter that this is the normal-that with today's society we see breasts as sexual

items, and they're not! They are there because they were meant to breastfeed your baby, that's what they're designed to do! And your body knows that's what they're designed to do!" (P1, 900-911).

Another WPC reported her experience with her clients who were reluctant to breastfeed:

"I had. . . pregnant moms. . . I just didn't know what to do with those because either it was silence, or it was just nasty. I'd say, 'All right let's talk about formula'. . . this is what your baby's getting [from formula], that's their nutrition and then I'd do the breastmilk. . . because even if they were thinking it's nasty to [breastfeed], they may be thinking about pumping their milk because they'd be seeing how much. . . better. . . quality of what they'd be giving their baby'" (P8, 702-727).

The WPCs also were eager to educate other people in their clients' lives, particularly the significant other and grandmother. One WPC said,

"I think it's important to bring in dad when they're here, especially when they're pregnant, and I'm able to tell them in front of him, 'These are the benefits [of breastfeeding] for your baby.' [And the father's response is] 'Oh yeah, our baby has to get the best.' 'So they're kind of like pushing her and giving her the support'" (P5, 737-742). Another WPC liked to have family members accompany her clients:

"So it's very important to have someone in the room. . . her spouse, her boyfriend, baby daddy, or whoever, come in the room.' 'And listen! . . . Here's what daddy's role is.' I'd like you to follow these instructions. . . And he will say, 'That's in my manual, I'd like to do that'. . . they need lists to follow'" (P4, 234-319).

One WPC relayed the story of a client who had been having problems getting her infant to latch to her breasts. The WPC decided to go to the client's home so she could teach the mother and the father how to express the breastmilk and spoon-feed the breastmilk to the infant.

"This mom. . . was expressing her milk and the baby was not feeding at the breast. . .so I did a home visit . . . the baby wasn't taking to the bottle. . . and I was sitting with her and [the client] was pumping, pumping, and she turned off the pump and . . . was getting ready to do hand expression and her husband brings a spoon, and she goes squirt, squirt in the spoon" (P8, 562-586). The couple was able to nourish their newborn by pumping and spoon-feeding in the early postnatal days.

The WPCs recognized the importance of garnering the father or significant other's agreement to support their WIC client's breastfeeding. The WPC educated them about things to do that would show their support and allow the woman to focus on breastfeeding.

"Look, you gotta take a case of water in the momma's room. And make sure she's taking her prenatal vitamins. Make sure she's eating right. Everything you were doing before you had the baby, we gotta keep doing [this] with momma so she can nurse baby comfortably, and well. And we need someone helping her clean house, we need someone to cook meals and it's always important to have a second person in the room. . . Another pair of ears" (P4, 234-246).

Another WPC talked about her approach by telling the fathers:

"We want to give mom a little glass of champagne. . . a foot massage, and a granola bar, and that's always my big, especially when I have mom and dad duo, I tell dad to give mom foot massages so mom can pump, and they can massage mom's breasts and they get so excited. You have to bring both in and dad wants to hold and feed baby. . .needs to help mom. . . like cooking and cleaning. . . I make it family-centered" (P7 386-376).

The WPCs taught the fathers how they could place the infant skin-to-skin to help facilitate breastfeeding. "So I tell them all the benefits about why it's important to do skin-to-skin. It's great bonding for mom and dad, and it gives moms a break when [the fathers are] able to do it" (P5, 723-725). Another WPC said, "Daddys can do skin-to-skin. Daddys love to do skin-to-skin.' 'So I just go over what they should do in the hospital. . . [especially] that first golden hour'" (P4, 426-429).

The WPCs educated their clients and the fathers about the importance of the first hour of the infant's life, the "golden hour," when the infant is adapting to extrauterine life. One WPC had taught a same-sex couple how to initiate skin-to-skin in the hospital to help with breastfeeding. "Yes, then the same thing I just let them [the same-sex couple] know they need to do skin-to-skin with the baby. (P5,728-729).

The WPCs also taught the grandmothers how they could support their WIC client's decision to breastfeed: "We'll just explain it to them, ask if they have any questions, ask what they have heard about breastfeeding, and have them tell us what experiences they've had, if their friends have heard good things. . . about breastfeeding" (P3, 113-118). One WPC discussed how she helped one grandmother overcome her misgivings about breastfeeding: "Baby's nursing, I say, 'Come here grandma, scootch your chair up and look at this!' And the baby's 'guh-guh' (making guttural nursing noises)"" (P4, 463-466). Another WPC said, "And then I tell grandmother, 'Just help her and those times she's taking a little nap, you're taking baby" (P5, 765-766).

The WPCs often had to give their clients permission to advocate for personal decision to breastfeed with the grandmothers of the infant.

"When I have a mom out in the lobby, I'm like, 'Is that grandma?' Because I want her coming in with her. . . in my room while I'm counseling mom to hear the instructions I'm giving them,

because grandma knows what formula's about, not what breastfeeding is about, but grandma wants what's best for you, and she's giving her opinion. . . For example, I had a client, and bless her heart, she's had four or five kids, and on round three she calls my cell phone [because the grandmother didn't want the mother to breastfeed]. I say, 'Your mom loves you and your mom wants what's best for your baby, [but] did your mom breastfeed? No? Well, ok, you tell mom, that you love her and thank you for all your support, then you change the topic, because this is your third child and you know what's going on'" (P9, 203-217).

Another WPC commented: "Those grandma's they looovvvee to feed the baby but tell them to feed *you* so *you* can feed the baby" (P4, 321-322).

The WPCs met with their clients often before or soon after they gave birth and frequently thereafter. During these meetings, the WPCs educated their clients about breastfeeding. They also educated the fathers and grandmothers about supporting their client's breastfeeding decision. At times, the WPCs coached them about ways to advocate for themselves and their breastfeeding decision.

GETTING THE MESSAGE ACROSS BY INTERVENING BY EDUCATING USING FOOD PACKAGES

WIC supplies food packages to WIC clients and their infants, beginning with the infant's birth. The WIC food packages are designed to complement the woman's infant feeding choices and to encourage breastfeeding. Food products are provided to each family member under age five and the mother for a specified period of time. WIC offers three food packages to the mother and her infant: the Exclusively Breastfeeding Package, the Partial Breastfeeding Package, and the Full Formula package. Each package varies in quantity and how long the food products are supplied. The Exclusive package lasts for one year and contains the most food for the mother, her infant, and her other children; this is the only package that provides meat products to the infant starting

at six months. The amount of food in the Exclusive Breastfeeding package for the mother and children in the family does not change over the year. The Partial package also lasts one year, but since this package also provides formula for the infant, the formula is only provided the first six months of the infant's life. The infant is switched to infant foods and cereal at six months, and both the infant and mother's food supply ends at one year. The amount of food for the mother is significantly less than the Exclusive package. The Full Formula package offers food for the mother for six months and formula for six months; the package contains significantly less food for the infant and mother. The WPCs stressed the advantages of the Exclusive Food Package as a way to encourage the woman to decide to breastfeed and to continue to breastfeed.

Some of the WPCs encountered clients who wanted to make their own baby food using fresh organic produce. In such cases, the WPCs stressed the advantages of the Exclusive Package.

"Sometimes the moms want to naturally make these baby foods. I do mention that.' 'You could use those fruits and vegetables to pure them and make your own baby food. So that's at least one way to kind of sway them a little bit towards that option [to exclusively breastfeed]" (P2, 850-865).

Another WPC stated,

"They come in asking for fresh food and want to exchange the baby food for fresh food. We're starting to see the moms making their own baby food now, which is good, and when they [choose] the Exclusive [food package], they like that tuna is on there and they like all the vegetables for making the baby food" (P6, 292-298).

A WPC related her experience with clients who wanted to make their own infant food:

"A lot of the times we hear. . . that baby doesn't like the baby food we offer, so they have to make [their] own. Or a lot of times, the baby is being formula-fed so they don't get

offered as much of the foods as the babies that are being exclusively breastfed or as much as the exclusively breastfeeding mom would get. But we do have recipes we can give them to make their own baby foods; a lot of them are making their own baby food because their baby doesn't like the jar food; they want the real food and that's when they call me, they want organic, fresh, and that's what they want" (P3, 1001-1011).

GETTING THE MESSAGE ACROSS BY INTERVENING BY EDUCATING USING TOOLS OF THE TRADE

As the WPCs were interacting with their clients and helping them make their infant feeding decisions, they had to 'sell' the idea of breastfeeding to most of their WIC clients. They used a variety of visual or kinesthetic aids to convey information about breastfeeding.

A WPC used a folded piece of paper to create a timeline. As she folded the paper to depict the time of the infant's life, the passage of time, and emphasized what little time her WIC client would be breastfeeding her infant:

"I show them a piece of paper, a white sheet of paper. I say, 'This is your baby living 100 years. Cause they're gonna live a 100 years, right? Cause we're living 80, 90 years. With the medications and technology today, your baby's are gonna live to be a 100'. . . I fold the paper and said, 'This is 50 years' and I fold the paper again and say, 'This is 25 years' I say, 'Look at the *one* year, you're gonna nurse your baby and give him a kickstart into life, it's a beautiful thing, you can say you did it.'. . . 'Listen to me, this is one year, one little line, just one little year, that's rockin' your baby the best milk in all the world. Human milk for human babies!" (P4, 297-312).

Several WPCs appealed to their client's tactile and visual senses by using cloth breast models to show them how their breasts would change with pregnancy and breastfeeding.

"They are so surprised when they're pregnant, we show them how big their breasts will get. . . 'Your alveoli will grow to the size of grapes' [pointing to picture in book and to a cloth breast [model] on her desk showing mammary glands as you flip up the breast] and I make them touch it and they can feel the knots" (P5, 368-373).

The WPCs used wooden "belly-balls" to demonstrate the size of an infant's stomach:

"A lot of them are visual. . . I tell them this is day one; this is the size of a dime (pointing to belly balls) and a quarter and then the size of an egg. . . this is day three. . . and this is day 10 (pointing to the egg). . . and so, when they see they go, 'OMG, are you serious? This is day 1?!' and I say, 'This is day 1.' So they say, 'I don't have to give that much milk because not that much milk can go in here'" (P5, 381-391).

Their purpose in using the belly balls was to emphasize that infants do not require large amounts of breastmilk to fill their stomachs.

One WPC used building blocks to demonstrate the differences between breastmilk and formula and to emphasize the superiority of breastmilk:

"We have little building blocks. . . where each one represents different things in breastmilk than formula; once you get done with the activity, the ones in the breastmilk [stack] are so much taller than the formula [stack] and it shows these. . . protective factors, antifungals, and brain growth, growth hormone and all that. So. . . they'd be seeing how much taller and better and the quality of what they'd be giving their baby at least in that moment that they see it. They're like, 'Maybe I'll change my mind [and start breastfeeding]'" (P8, 731-739).

One of the WPCs used a baby doll to role-play to teach the mother how to position her infant to breastfeed. The role-play helped the WPC educate the mother about breastfeeding and

positioning the infant correctly: "Well, I pull out my props. . . then I give the baby to the momma and say, 'Show me how you'd feed and nurse the baby'" (P7, 660-663).

SUMMARY: GETTING THE MESSAGE ACROSS BY INTERVENING BY EDUCATING USING TOOLS OF THE TRADE

The WPCs used a variety of visual and kinesthetic aids to educate their clients and encourage them to breastfeed. They stressed the importance of breastmilk and how it benefitted the infant in contrast to formula. The WPCs also emphasized the size of the infant's stomach to demonstrate the infant did not require a large volume to satisfy its hunger. The WPCs understood that using the tools of their trade enabled them to educate their clients.

GETTING THE MESSAGE ACROSS BY INTERVENING BY EDUCATING

The WPCs recognized the value of conducting client-centered classes and allowing their WIC clients to share their stories and breastfeeding experiences as a way to educate their WIC clients:

"Everyone's breastfeeding experience is a little different so I love to let them [WIC clients] just talk and learn from each other, and those are some of my best classes...rather than let them just sit there, and read off something they're given of information, I just let them get in there and talk amongst themselves because everyone's experiences are a little different" (P2, 236-245).

Another WPC used a similar approach:

"We are implementing more mom-group-like classes, we just changed the name, but we make it more client-centered now. It used to be I would get up in front of a group of moms and teach them about breastfeeding and. . .[now] I make it more where the moms are talking, so the pregnant mom can ask the twin mom who's breastfeeding across the room

from her, or the mom with one baby, asking another pregnant mom how she did it, I make it more about breastfeeding moms" (P7, 326-373).

SUMMARY: GETTING THE MESSAGE ACROSS BY INTERVENING BY EDUCATING

The WPCs educated their clients and people in their support system using a variety of methods to get their message across about breastfeeding. The WPC taught the fathers/significant others and grandmothers of the infant how to take care of the new mother so that she could focus on breastfeeding. She also had to teach the woman about the function of her breasts by countering negative misconceptions and viewpoints. They taught the woman how to advocate for her breastfeeding decision. The WPCs explained the WIC food packages and how they could support the woman's infant feeding decisions. The WPC encouraged their clients to choose the Exclusively Breastfeeding Package so they could use the fresh produce to make their infant food organically and so they could have the most amount of food for the longest period of time. The WPCs utilized a variety of visual and kinesthetic aids to illustrate and emphasize the points they were making. They also recognized the power of placing their WIC clients in groups so the clients could educate each other.

GETTING THE MESSAGE ACROSS BY INTERVENING BY FACILITATING

The WPCs intervened with their clients by identifying problems their client was experiencing. Then the WPC facilitated a solution to the problem either by referring the client to other providers or by using their own caring and compassion.

At times the WPCs recognized when a breastfeeding problem was out of the scope of their practice and the clients needed to be seen by a provider. The WPCs in this study referred their WIC clients to WIC lactation consultants and physicians depending on the infant or woman's needs. They referred their clients for psychiatric evaluation for depression, or a safe place to stay

if the woman was a victim of domestic violence. A WPC talked about her response to clients who appeared to have problems at home:

"They come in and say they're breastfeeding fine, and I say, 'No girl! I see it in your face! What's going on?!' 'Sometimes, you have to put them in their place and be real with them, if it's breastfeeding or something going on at home, let them know you're real too, because that's hindering their breastfeeding!' 'If your husband is going to beat you, or your son or daughter going without food, this is hindering you because you're stressing about something else and you need to relax and enjoy and breastfeed your baby!' We have an extensive list of resources from domestic violence, to food, postpartum depression, we have lots of lists, doctors and dentists...'" (P7, 219-242).

Another WPC told about helping a client with latching her infant to the breast and ultimately realized the infant should be referred to their physician:

"Recently, we had a mom come in and. . . she was having problems with the baby latching. So we tried latch[ing] and. . . she came back and she said, 'Still something's not right, this isn't normal, like I feel like he's not putting his tongue underneath and he's hurting me.' And so we called [a lactation consultant]. . . and she was like, 'Does she need to be referred to somebody else?" So [the consultant] talked to her and said, 'She needs to go see her doctor;' 'Sure enough, she went to her doctor and he said that yeah, [the baby] did have a tongue-tie'" (P1, 1117-1131).

Although the primary goal of the WPCs was to facilitate breastfeeding, they recognized when the woman's ability to breastfeeding might be related to other issues and the woman might need a referral to the appropriate provider.

Another WPC shared a story of a woman who had been dealing with postpartum depression. The woman returned a week later with her infant and seemed to have improved. The WPC comforted the client and allowed her to talk: "They just need reassurance; it's more than sitting over there [pointing to a table and chairs] and filling out papers. You've gotta be compassionate to be able to help these women who are in a weird state of mind." (P4,369-384).

The WPCs made themselves available to their WIC clients during non-working hours as way to support the client's breastfeeding. The WPCs typically gave their WIC clients their cell phone and work phone numbers when they first met and assured their clients that they were available to help them with breastfeeding at any time. As one WPC said, "I always repeat to my moms that no matter what, I'm here for them to call me, call me, so I keep it [cell phone] close with me" (P7, 104-106).

Another WPC said:

"I'm always there to be available by phone call; every mom I see I give them my personal cell phone number and my work number. . . my help is geared for their personal goals and what's going on with them. . . Prenatally, I always tell moms my cell phone [number] hands down, and I give them general advice and I tell them, 'I'll try to call you a few weeks before the delivery and I'll give you materials; I'd love to answer any questions you may have.' And then I tell them to call me when they have the baby. They all know that if I'm not available at work I'm available by cellphone" (P9, 88-97; 235-246).

SUMMARY: GETTING THE MESSAGE ACROSS BY INTERVENING BY FACILITATING

The WPCs encountered WIC clients whose needs often required attention by a healthcare provider or a WIC lactation consultant. The WPCs provided referrals to the appropriate providers.

The WPCs also made themselves available to their clients. The WIC clients were given the WPCs personal phone numbers to reach them anytime for breastfeeding help.

GETTING THE MESSAGE ACROSS BY SUSTAINING BREASTFEEDING IN THE LONG TERM

WIC clients are encouraged to visit the WIC office as soon as possible after their infant's birth so they can begin receiving their food packages. Although WIC expects any breastfeeding woman to be seen by the WPC, most of the study participants preferred to meet with all the mothers, even those who were only formula-feeding. The WPCs recognized breastfeeding could be more difficult than formula feeding, particularly in the early postpartum period, and it would be necessary for WPCs to support their WIC clients to sustain breastfeeding beginning immediately after discharge from the hospital and continuing over time. The WPCs realized that breastfeeding mothers often wavered in their commitment to breastfeeding and they utilized a variety of support techniques as well as material resources to encourage and reward clients to continue to breastfeed.

GETTING THE MESSAGE ACROSS BY SUSTAINING BY COUNTERING HEALTHCARE PRACTICES

The WPCs dealt with clients whose infants had been given formula in the hospital even though the woman had planned to breastfeed exclusively. The WPCs were often frustrated that they had to spend a lot of time countering hospital practices that did not support breastfeeding. They realized that if they did not address such issues their clients might encounter problems sustaining breastfeeding. One WPC said:

"They get confused because they get two-ounce [formula] bottles at the hospital. . . and then they call you. . . saying they don't have any breastmilk.' 'I need formula.' So, [I say] 'Right now all you have is colostrum so give it a few days and it's gonna change!' And

sure enough they come in and their breasts are full and now [the baby is] latching and I'm like, 'Why didn't you latch day one [in the hospital]?' (P1, 583-590).

Another WPC talked about her exasperation with her clients who came to the WPC after formula-feeding their infant in the hospital.

"The thing that frustrates me the most is the momma comes home with the same mentality that they trained her for in the hospital for two days and then they come and say, 'Well, I'm doing what the hospital told me.' I say, 'Well, you ain't in the hospital no more! Let's do what you want to do and let me help you.' I had a lady say, 'Well, I nurse for 15 minutes and I take the baby off, and nurse for 15 minutes over here, that's what the hospital told me to do.' I say, 'Well that's fine, but your milk's here, you're three weeks postpartum' and I went through the whole rigamarole about the hind feeding" (P4, 216-227).

The WPCs were acutely aware that many hospitals do not provide adequate support to mothers who want to breastfeed. They also knew that newborn infants frequently are given formula while in the hospital, a practice that has the potential to undermine breastfeeding.

GETTING THE MESSAGE ACROSS BY SUSTAINING BY NEUTRALIZING QUALMS

Breastfeeding mothers have no way of knowing at the time of the feeding whether their infant is getting enough breastmilk. The WPCs recognized that the breastfeeding WIC clients needed continuing support to overcome the woman's uncertainty about her ability to nourish her infant. The WPCs relied on their relationships with their clients to understand the woman's qualms about breastfeeding, to reassure her and remind her about the breastfeeding supply and demand process.

One WPC said: "It goes back to challenges, to reassure them because a lot of times they're doing great, but they don't know they are, especially first-time moms" (P9, 194-196).

The WPCs often found that their client needed reassurance to continue breastfeeding once their WIC clients delivered their infant. Even women that had breastfeed an infant before needed affirmation that they were feeding their infant well. A WPC related her experience with breastfeeding mothers:

"I find those are the ones that need the reassurance, that they're doing a good job, their latching is good. . . but with the ones who actually sit there and wait, they just need reassurance that they're doing a good job because they know everything, they breastfed other babies before, they're just not sure, because it's been a while, so. . . I say, 'Show me what you're doing at home. You're having a good latch. Baby is gaining weight! The baby's having stools.' They want to know, 'Hey, you're doing a good job! Keep continuing to do it!'" (P3, 691-704).

Another commented, "We tell them they're doing great, even the exclusive breastfeeding momsthey just want reassurance the baby's not going to be hungry" (P6, 223-225).

The WPCs often encountered clients who thought that their milk supply was insufficient and wanted to supplement with formula or switch to formula. The WPCs began by exploring what was going on:

"Sometimes there's a mom, they come, and they think they've already made up their mind [to switch to formula]. Uh, but really it's one thing really, like maybe a growth spurt, they're thinking their supply has already dropped, but it hasn't. Sometimes it just takes probing a little bit, asking those questions a little bit more to see if they change their mind" (P2, 596-614).

Another WPC described similar situations:

"I think sometimes they wonder, 'I don't think my baby's getting enough.' I say, 'Well, we're gonna check the baby's weight today.' And then they just smile when they see the weight gain. And I say, 'You're doing a good job!' and they know THEY did that! And it's just the worry. Over-worrying. I tell them, 'Don't stress about it. Keep on doing what you're doing'" (P3, 252-259).

A WPC related a story she about how she encouraged and supported a breastfeeding client who had twins:

"I had a mom come in with twins and they were doing good and we put one on each breast, and OMG they were just, it was just beautiful. But it was very exhausting for mom the very first weeks. I kept calling mom on the phone, asking how she was doing with the babies. She did come here so I could help her latch babies on, they did great, they latched on very good, didn't need help with nipple shields or anything like that, and she breastfed until the babies were like 13 months" (P5, 283-291).

The WPCs stressed the importance of supporting breastfeeding clients who were doing well, but needed encouragement:

"Positive reinforcement, and they're like, 'OMG, he's taking it! The weight's going up!' and they're happy, and they're coming out and like, 'I'm continuing doing this, like forget it, I'm not even gonna doubt in doing this, I'm not gonna want formula anymore. And I was thinking this wasn't working out. I was thinking baby was losing weight instead of gaining" (P5, 536-534).

Another WPC reported,

"I had one mom come in my office. . . and everyone's telling her to quit breastfeeding. I asked her how she felt about it. She walked away confident because I gave her validation

and permission to keep breastfeeding. I tell her the AAP [American Academy of Pediatrics] recommends exclusive breastfeeding for six months and tell her the best time to stop is when her and her baby say it's time to stop, whether it's six months-old or three years-old and no one gets to tell you to stop breastfeeding" (P9, 483-490).

One WPC continued to use a timeline she created to encourage women who were already breastfeeding to continue to do so. The timeline started at birth and continued through the infant's first year of life. The WPC would point to the timeline to illustrate how long their WIC client had breastfed. "I loved my timeline on the wall! And I'd point out, 'Look you're at four-months, congratulations, this is what you're doing, and you're giving all breastmilk!" (P8, 381-383).

The WPCs often encountered WIC clients who did not understand the principle that breastfeeding is based on supply and demand. Many of their clients also did not understand that they should breastfeed their infants during the night to prevent engorgement but also to maintain their milk supply and avoid formula supplementation.

"We do have some that are exclusively breastfeeding and they come in and they do want formula, and the majority of them . . . see a decrease in their supply and then we tell them, 'You know you can still build your supply up, continue latching, maybe continue waking your baby up at night' because a lot of the times the decrease happens because the baby's not being woken up at night to feed. So they'll say, 'Well, my breasts are engorged, but they're not producing as much as they were before' so one of the questions is, 'Are they waking baby up?' and they say, 'No.' We'll say, 'Well, that's important. You have to wake the baby up, or at least pump, that way you can take the breastmilk out and then start building your supply again.' So then they'll go from breastfeeding, to formula, and then go

back to exclusively breastfeeding again, once they've gotten their supply back" (P3, 920-936).

Another WPC talked about a client who did not understand about the need to simulate her breasts to produce milk:

"Yesterday I counseled somebody over the phone [whose] primary concern was not enough milk production. The baby was three-weeks-old so we've got a growth spurt going on. She wasn't doing hind feeding either! She was latching and letting three to four hours go for breastfeeding. I said, 'When you're breastfeeding, you need to do two hours, three max during the day. And she needs to nurse at night as well. Nighttime feeding is very, very important because your prolactin hormones are working more when she's resting. She's making more milk at night.' Some people want to sleep through the night and let daddy take care of the baby. And they wake up with milk all over the place. They need to be waking up and nursing at night'" (P4, 155-184).

One WPC likened supply and demand to placing an order at a restaurant:

"If the mom is breastfeeding, I share [that]. . . your body makes specific milk your baby needs at that gestational age, whether it's preterm or full-term, the mom's milk is different because it's designed for that baby and it's constantly changing to meet the baby's growing needs. So that's what I talk to them about. Then I talk to them about their milk supply and pointers, and massaging, supply and demand, and the more you pump, the more you produce, and it's like going to a restaurant and putting an order every day, day after day, week and week, and we know how much to supply, we talk a lot about supply and demand" (P9, 100-113).

The WPCs' clients who were breastfeeding required a lot of support to overcome their fears that their breastmilk was not meeting their infants' needs which could lead the client to request supplementing with formula or to switch entirely to formula-feeding. The WPCs reassured and supported these women and reiterated how successful breastfeeding depends on supply and demand.

GETTING THE MESSAGE ACROSS BY SUSTAINING BREASTFEEDING BY INCENTIVIZING WITH MATERIAL RESOURCES

Every WPC gave their breastfeeding clients gifts to incentivize them to continue to breastfeed. These material resources were provided by WIC for the WPCs to use at their discretion. The WPCS gave clients who had been breastfeeding a short amount of time, small items such as a pen or lip balm; if the client had been breastfeeding longer, the WPC might give a more valuable item such as a onesie. The WPCs' goal when giving these gifts was to acknowledge the mothers and to encourage them to continue breastfeeding.

When asked about what items she might give to a breastfeeding client, one WPC commented:

"If they come back in three months, I ask if they're still breastfeeding, I ask how it's going. If they're still breastfeeding, I'll give them something as an incentive, like pens, chip clips, plastic clips that say, 'Breastfeeding is Best,' or lip balm that says they're breastfeeding. When the baby comes back at one-year and is certified [to have been breastfed] at a whole year, we'll give them a nice little silver keychain and they just love that keychain! And if I have a onesie, I'll give them a onesie. it's really fun, and we have a compact, and pens, the pen is their favorite thing too! If they're breastfeeding, but not exclusive, I still give them incentives; the little onesies, they're expensive and they're only for exclusive

breastfeeding moms. For all the moms breastfeeding partially or fully [breastfeeding] we always have some sort of incentive" (P9, 261-287).

Another material resource the WPCs used to encourage breastfeeding was the Welcome Bag. Every woman who becomes a WIC client receives a Welcome Bag on her first visit to WIC. The bag contains items such as a carabiner clip that the WIC mother can use as a reminder to inform healthcare providers at the time of delivery that she plans to breastfeed her infant. The bag also contains a variety of breastfeeding information for the mother and her support system: "The main thing is the information we give them at the beginning which is the black bag... that makes a big difference because they're equipped with so much information that they start thinking, 'I do want to start breastfeeding'" (P5, 632-635).

Another WPC talked about the importance of the bag: "So any pregnant mom that comes in gets a prenatal bag. That bag is designed to encourage family support; it's a great way to think about breastfeeding" (P1, 357-361). Another WPC used the contents of the Welcome Bag to inform the grandmothers about how they can help the woman be successful with breastfeeding: "We try to give every pregnant mom all the things that [show] grandparents how they can help when mom gets home from the hospital. This is the information [in the Welcome Bag] for how they can help them out at home" (P5, 116-125).

While some WIC clients chose to breastfeed exclusively, other clients who breastfed used formula to supplement their infant's diet. In such cases, the WPCs used other items to encourage the client to continue breastfeeding. One such item, the "MilkieTM," is a breastmilk collection device that prevents breastmilk wastage and allows the mother to store the collected breastmilk. The mother places the device inside her bra to collect dripping breastmilk from the non-nursing breast while she is breastfeeding and/or pumping. "We try to give out goodies…That will usually

motivate them... we give out MilkiesTM" (P2, 536-542). Another WPC stated, "We give away gifts like... these milk cups" (P5, 770-771).

The WPCs gave other items to their clients who were actively breastfeeding. A WPC talked about what gifts she gave:

"They get nursing scarves here at the clinic... we give out bras... especially if they don't have any... but we do try to offer it to them, especially if they need it, because having a regular bra is harder, it's harder to get the baby to feed, especially if you're out in the public... we just try to facilitate it for them" (P2, 573-584).

The WPCs gave nursing mother other items such as a nursing tank top; they also might give water bottles, and BoppyTM breastfeeding pillows which support the infant during breastfeeding and are particularly helpful to women who have had a Cesarean-section. "Sometimes, like every August during Breastfeeding Celebration Month, we play Bingo and we give out BoppyTM pillows." (P2, 540-542). Another WPC commented, "During World Breastfeeding Month in August we give baby showers for the moms. They love it. We give away gifts like Boppy'sTM, and these milk cups, bras, and all kinds of neat breastfeeding items" (P6, 768-772).

The WPCs stressed the benefits of the Exclusive Breastfeeding food package to encourage their clients to continue breastfeeding. The WPCs hoped that the amount of food offered in this package for both the mother and infant would inspire their client to choose breastfeeding in order to receive the Exclusively Breastfeeding Package. One WPC told about a client who came to the clinic to switch from the Exclusively Breastfeeding Package to the Partially Breastfeeding Package:

"They come in and are switching food packages, [I] let them tell me a little bit about what's going on. [The client may say] 'They're nursing all day long and I didn't know like what's

going on.' It could be something as simple as a growth spurt, and so we talk about growth spurts and we give them that information, check the baby's weight. And so if she knows the baby's doing ok, is gaining weight, then she probably will be just fine staying on this Exclusive Breastfeeding Package'" (P1, 425-437).

The WPCs also utilized the partial breastfeeding food package to encourage their clients continue to breastfeed. Although this package has less food than the exclusive package, it offers both the mother and infant food for one year. The WPCs try to persuade their client to choose this package if the woman wants to supplement her infant with formula. The WPC's goal was to persuade the mother to provide her infant as much breastmilk and for as long as possible. One WPC described her strategy:

"I had a lady the other day with a two-year-old; nursing an eight-month-old; a three-year-old, a four-year-old. What do you do with that? 'I can't breastfeed anymore. I tried and it's getting too hard.' I say, 'What about supplementing? Want to supplement?' 'What does that mean?' 'You get to stay on the program. You still get to get food for you. Not only for the baby, but for the baby too. Uh, and you keep nursing your baby as much as you can.' It's not all about, push, push, push breastfeeding, but we have to take their lives into consideration as well'" (P4, 505-514).

The WPCs recognized the value of providing a breastpump to their clients as a way to maintain breastmilk as the infant's source of nutrition. They were adept at recognizing which clients would be reluctant to nurse their infant at the breast but would be open to the idea of expressing their breastmilk and offering the infant breastmilk in a bottle. The WPCs gave such women a breastpump: "There are moms not comfortable latching the baby. . . they may have had some traumatic experience where they're not ok putting them to the breast. So if pumping is what

she wants to do, then we can offer her a pump and we can talk about providing breastmilk by pumping and giving it to the baby" (P1, 745-751).

The WPC understood that if their client could express and offer her infant the breastmilk, she could sustain the length of time the infant received breastmilk. Another WPC described how clients with several small children could offer their infants breastmilk by using a breastpump:

"They're very willing to breastfeed as well [but] when they have a lot of kids it's easier for them to rely on more pumping than latching, especially if they're going back to work and they want to continue the breastfeeding. . . but they do have more kids and then going back to work, they're really asking for a pump, which is awesome to me because it's better for them to be asking for a pump than nothing at all" (P2, 94-103).

Some WIC clients wanted to stop, or dry up, their milk supply and asked the WPC to help them do this. In such cases, the WPC might suggest alternative approaches so the client could continue providing breastmilk for the infant.

"Some moms come in asking how they can dry up. I say, 'Well, you're already releasing it [breastmilk], why don't you give it to baby in a spoon? There are ways to save it and give it to the baby in a bottle at least.' Some of them say yes, and some say no, others want to dry up as fast as they can... I say we can issue a pump to them, to get it out'" (P6, 446-470).

Some WIC clients sought the WPCs' advice about dealing with full breasts causing the infant to have difficulty with latching onto the breast. Latching is the term used to describe an infant attaching to the breast and suckling the breastmilk. In addition to teaching the client how to manually express her milk to relieve engorgement, the WPCs might offer a pump the woman could use to decrease her breast fullness so the infant was able to latch on the breast: "They're having a hard time latching and their breasts are very full... So we talk about hand-expressing, maybe issue

a hand pump.. to relieve some of the fullness." (P1, 408-411). One WPC related how she teaches clients to pump their breasts:

"You know with that manual pump, I tell my moms to use it in the shower. 'Don't soap up! Put your hair up, get in there, under the hot water a few minutes, and then your milk sinuses are gonna open up, and that milk's gonna start going down the drain. That hand pump I gave you, turn your back to the shower, let the water fall over you, then take the milk out in both. . Then you just put your milk out there and then you just finish your shower!" (P4, 829-837).

Another WPC related a story about how she had supported a woman whose breasts were engorged: "She was like, 'Just help me, just help me' So I helped her hand-express, and it was painful to her, she couldn't even touch herself. I was like, 'Well, if you want to keep using the pump right now it's available to you.' And she did. All she did was, [demonstrating by raising her arms up] 'Ok! GO!' and in that case I asked if it was ok if I helped and she said, 'Go ahead!' She was desperate so all she did was pull her hands back and yeah, sat straight, and was doing the pumping, I was doing the massaging and stuff'" (P3, 753-761).

The WPCs also were able to offer a breastpump to clients who only wanted to pump their breasts and offer their infant the expressed breastmilk (EBM) rather than putting the infant to the breast:

"I have a lady who exclusively pumped for three babies. Three babies. Pumping only. Hey, we gave her two pumps, a hospital grade pump to use for a month and she used it for another month and she said she couldn't get as much out as with the multi-user. I said, 'Well look, we gotta give you one of these. I need that back. You've gotta give that back

to us.' So she did and she kept pumping and pumping and never latched any of those three

kids on, but she did exclusively [breastfeed] three kids!" (P4, 760-767).

Some WPCs had clients whose infants were in the neonatal intensive care unit (NICU) but

wanted to breastfeed the infant. The WPCs could loan such clients hospital-grade breastpumps on

a month-to-month basis. The pumps are electric, and rapidly express the breastmilk out of each

breast simultaneously.

"A lot of parents [have to] leave their baby in the NICU and they come here for the pump.

They come looking for me saying their baby is in the hospital and they need a pump. We

give them a hospital-grade one. . . it's a double and it's bigger. . . we give it to them for

one month, and if they need it for more time, we just talk on the phone, and we'll extend it

for one more month, and if they need more time, we'll extend it more, depending on

everybody's case. But we do have that permission to extend pumps as needed. Moms have

to be pumping to take milk to NICU and uh, that is very important to have help from WIC

clinic for those moms" (P5, 258-272).

The WPCs used material resources available from WIC to help their clients sustain

breastfeeding. They chose which items to give their client depending on how long they had been

breastfeeding. All women received the Welcome Bag prenatally, but the breastfeeding mothers

were rewarded with gifts such as pens, breastfeeding pillows, or onesies. The WPCs used the

longevity and amount of foods provided to the mother and infant in the Exclusive and Partial

Breastfeeding Packages to entice their clients to breastfeed longer. If the WPC felt that providing

a breastpump was necessary to enhance the infant's chance of getting breastmilk, the WPC gave

the client a pump.

SUMMARY: GETTING THE MESSAGE ACROSS BY SUSTAINING BREASTFEEDING IN THE LONG TERM

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The WPCs believed that any breastfeeding was better than none, and they utilized strategies that would likely help the woman sustain breastfeeding. Mothers who are breastfeeding, particularly in the first few days of their infant's life, may find their infants being given formula in the hospital or want to use formula once they return home. Many mothers fear that their breastmilk will not adequately nourish their infants. The WPCs' relationship with their WIC clients made it possible for them to know when their breastfeeding clients were experiencing potential or actual obstacles to their breastfeeding success. The WPCs knew their clients would need support and encouragement in order to sustain breastfeeding. They used their own interpersonal skills as well as material resources available from WIC to help their clients sustain breastfeeding or continue to feed their infants breastmilk as long as possible.

SUMMARY: GETTING THE MESSAGE ACROSS

The Women, Infants and Children (WIC) peer counselors (WPC) were committed to breastfeeding. The WPCs first assessed the attitudes of their clients and of people in their support systems about breastfeeding. They then implemented strategies to educate their clients' and the clients support system about the benefits of breastfeeding and ways other people could interact with the infant without feeding it. They identified problems that might interfere with the client's breastfeeding and referred the client to appropriate providers. They also used their own skills and caring to help their clients through difficulties. While part of the WPCs' goal was to guide their clients to choose to breastfeed their infants, the WPCs realized that supporting and encouraging their client to sustain breastfeeding could require a long-term effort. The WPCs believed that any breastfeeding is better than none at all, so they were realistic when helping their clients find ways to supply as much breastmilk as possible and for as long as possible to their infants.

TRACKING RESULTS

Each of the WPCs who participated in the study reflected on their roles as WPCs. They measured their success with information that came from their clients, repeat clients, as well as their own responses to evaluate the outcomes of their efforts.

The WPCs saw their clients frequently in the WIC clinic. They also saw their clients long after their client's WIC benefits had expired when former clients brought their older children back to the WPC for a visit. One WPC told about a breastfeeding client she had helped. The woman had experienced postpartum blues and the WPC had talked with her and supported her. When the woman returned for her next appointment at the WIC clinic she said to the WPC,

"Before I came in last week, on Monday, you remember, I came in here when you were helping me breastfeed?' She's holding this gorgeous baby, this beautiful African-American woman. She said, 'You remember me?' I said, 'Oh yes! I do! You look so wonderful! Your baby's so cute!' And she said, 'You prayed for me, and I was in a real bad depression, and you prayed for me.' And I said, 'That's right!' And I said, 'And we cried together, didn't we?' She said, 'Yes, I remember. Look at me now!' And I said, 'You look fabulous!'" (P4, 370-384).

Another WPC talked about her client texting her:

"This was her fourth baby and had breastfed just a few months with the other ones. The baby is six-months and she's still breastfeeding! [The mom] sent me a message and said, '[Your] support is the key!' and I'm like, 'I'm happy! I'm glad! I told you, you could do it! You can do it all!'" (P1, 949-954).

A WPC reported her success helping a breastfeeding woman who had a supernumerary, or an extra nipple:

"She was very excited, she was like, 'Oh my gosh! I've been asking what it is, and everybody's like no one could tell me and now I come here and you tell me this is all I have to do,' and she was very confident. She came back three months later and said it had gone away just by massaging and continuing with breastfeeding.' 'Hey this person at the WIC office was able to help me and I'm a successful breastfeeding mom because of the help'" (P3, 342-420).

The WPCs developed personal relationships with their clients. One WPC said she had been offered another higher paying job but declined because she did not want to leave her clients:

"I am close to 'my moms' even though they've graduated and aren't in the breastfeeding category anymore. They come in for nutrition modules and ask to come see me even though they're past the one-year mark when WIC doesn't count them anymore. They still come see me. So my moms are what makes me stay here, because I've gotten full-time offers at other clinics, where I'll get paid more, but I can't leave my moms! These are "MY MOMS" (P7, 106-114).

Another WPC told about seeing her clients inside and outside the WIC clinic:

"There's moms I've seen over the years with their children and they've been coming to me and they're comfortable with me and it's good! Yeah, because they know they can count on me and reach me, and they're more open if they have any more issues. . . I've been doing it for a few years, I don't think I would change it now. Just keep doing it, especially when I see these moms and they're comfortable with me and they see me outside of work, um and they recognize me and I'm like, 'Yeah, it's me! I'm the WIC lady! It's nice!'" (P2, 1047-1052; 1163-1169).

The WPCs also talked about their satisfaction that resulted when they knew they had made a difference with their clients.

"It does make a difference. That's what I've noticed throughout these years. I mean it's just good knowing you're helping. And just things like that, it makes me feel better, because I did something productive in my job, and OMG, I helped somebody else. So it's exciting, and something new every day. That's why I love my job! 'It's just the satisfaction, I get a lot of, 'Well, I helped her today'" (P6, 87-105).

The WPCs often reflected on their successful impact on clients who were struggling with breastfeeding. One WPC related the story of a breastfeeding mother whose infant was not gaining weight and the mother came to the WPC for help. The WPC realized the mother had breast implants, but the WPC was able to help the woman breastfeed for a year while supplementing her infant.

"I've had one. . . mom [with] implants. They were done well, I didn't see the scars, and couldn't feel them. . . So finally, I'm sitting there and I ask about her tissue growing up, because we do a finger roll going up and she finally said she had small boobs growing up and she had surgery, and I was like, 'You had surgery?!?' They went through her armpits and it blocked everything and so baby wasn't gaining weight and it was a month and so she did supplement with full formula because she had too but she did breastfeed a year!" (P7, 483-493).

As one WPC stated, "It's so rewarding, especially the ones on the fence, they walk away 10-foot-tall and bullet-proof!" (P9, 478-480).

The WPCs clearly found joy working with their clients. Even though their work could be difficult, the WPCs derived satisfaction from helping their clients. One WPC told about an experience she had found very satisfying:

"When we finally get the baby to latch, there's a moment when um she just kind-of smiles and relaxes and so that just makes your day....and so that make me happy. . . I think peer counselors are really awesome! I think we should have had many, many peer counselors" (P1, 301-303; 969-970).

Another WPC talked about the emotional attachment she had with her clients:

"I show them my kids, they show me theirs, so it's more like. . . you have to have heart to be a WPC. . . I told my workers, you have to have heart and some kind of emotional attachment and a passion about it because yes, you can talk about boobs and lactation all day long, but to really get a mom interested in it, you have to speak not only to her, but her heart, and unborn baby. You have to be emotional to work it" (P7, 116-125).

One WPC summarized her thoughts about WPCs:

"All the breastfeeding counselors I know are very passionate about breastfeeding as a form of feeding their babies, and we share our experiences. For moms nurturing their baby's, it's the one thing moms have control over that she can do for her baby, it's very empowering!" (P9, 81-84; 332-334).

The WPCs derived personal satisfaction from their personal relationships with their clients and helping them breastfeed. Their ability to help their clients as they nurtured their infants lead to the WPCs viewing themselves as being successful.

The WPCs viewed their success in terms of whether the client chose to breastfeed their current infant in the moment or at a later time. If the client shared their breastfeeding knowledge

with others then the WPCs counted this as success as well. Their goal was to embed the idea of breastfeeding in hopes that their time educating their clients would be bear fruit now or in the future. They also hoped the help they had given their client would make her more likely to breastfeeding a subsequent infant.

The WPCs believed that any breastfeeding was meaningful and important. They were pragmatic with their expectations and non-judgmental. One WPC described how she deals with clients who did not breastfeed:

"I do try to follow-up with these moms as well to see if they need to change their food package, [if] they want to come back and get the 100% breastfeeding package. You never know, they maybe want to change it to a full formula package, you never know. I never make them feel bad about it. I usually tell them that 'every drop counts'" (P4, 359-368).

Another WPC endeavored to support her clients regardless of their breastfeeding duration:

'I try not to uh never make them feel bad about [stopping breastfeeding]. I just you know ask them, 'What happened? Is there something I can still help you with maybe?' Sometimes it just takes probing a little bit, asking those questions a little bit more to see if they change their mind. But if they haven't they just say, 'No, I'm just gonna do formula,' then I go, 'You did a great job feeding as long as you did. You can't say you didn't try.' And we just kind of leave it at that and just give them my information and tell them, 'If you're still wanting to breastfeed in the future, if you still have some milk supply by then, you're more than welcome to call me, and we can pick up on that topic again'" (P2, 592-614).

The WPCs supported their clients regardless of their infant feeding decisions. They were hopeful that their energies spent encouraging their clients to breastfeed, would be beneficial and they encouraged their clients to breastfeed, if even a little. A WPC commented:

"We plant a seed. Even if they decide they're not going to do it this time, you still left something there that if they you know, they may either decide to do it, maybe not with this baby, but maybe down the line? Or they will share the information with someone they know. And so, that's what we do! Plant seeds!" (P1, 327-332).

The WPCs defined success in terms of any breastfeeding in the present but also had hopes for them to breastfeed in the future. The WPCs supported their clients who chose to formula feed their infants as well as those who chose to breastfeed and supplement their infant. Ultimately, the WPCs tracked their outcomes in their ability to embed the desire to breastfeed, whether in the short-term, or at a later time.

SUMMARY: TRACKING RESULTS

The WPCs were realistic about their breastfeeding objectives and how they measured success. They tracked their outcomes with information from their clients and also from themselves. They saw themselves successful when they were able to convince their clients to breastfeed and sustain it. Even in the case of clients who had initially chosen to breastfeed returned to the change to formula, the WPCs considered themselves successful because they considered any amount of breastfeeding successful and meaningful. Their intended outcome of any breastfeeding was met.

SUMMARY OF FINDINGS

The WPCs who participated in this study were committed, dedicated, and passionate about their roles. They also were generous, using their time and money to enhance their services. They got their message across by first assessing their clients and people in their support systems' attitudes and feelings about breastfeeding. They were adept in selecting from a variety of material resources provided by WIC including educational tools, and their own knowledge and skills, to get their message across in each unique client situation. The WPCs referred their clients to their

network of resource services and healthcare providers when they identified conditions that may interfere with their client's ability to breastfeed. They recognized that sustaining breastfeeding was a challenge for their WIC clients. Their clients needed ongoing support and encouragement in order to continue supplying breastmilk to their infants, whether by feeding at the breast, feeding expressed breastmilk, or by feeding the infant a combination of breastmilk and formula. The WPCs evaluated their performance of their role by utilizing data from their clients and their personal experiences. The WPCs considered any breastfeeding a success, even in cases when client's stopped providing breastmilk to their infants. While their goal was that all their WIC clients supply breastmilk to their infants, the WPCs were realistic and supportive of clients who used formula and cleaved to the idea that those women might breastfeed future infants or might share the information about breastfeeding with other people. The WPCs believed that merely getting their message across made them a success.

PLAN FOR REMAINING CHAPTER

The plan for the remaining Chapter will be to present a summary of the study and compare the findings to the extant literature. The Chapter will also discuss the implications of the study findings as well as strengths and limitations, and suggestions for future research.

Chapter 5: Discussion

INTRODUCTION

This Naturalistic Inquiry (NI) study (Erlandson et al., 1993; Lincoln & Guba, 1985) explored the research question: What are the perceptions and experiences of women, infants and children (WIC) peer counselors (WPC) as they interact with mothers making their infant feeding decisions? Chapter Five presents a brief synopsis of this study beginning with the statement of the problem and methodology utilized to address the phenomenon of interest, followed by research findings. The study results are then compared to the extant literature. The Chapter presents the study implications, as well as the strengths and limitations, suggestions for future research, and conclusions.

STATEMENT OF THE PROBLEM

The Special Supplemental Nutrition Program for Women, Infants and Children, also called WIC, was created to improve the nutrition of women, infants, and children and to encourage breastfeeding among WIC clients. Nevertheless, breastfeeding rates among WIC participants meet none of the Healthy People 2020 breastfeeding goals. The WPC role was created to encourage breastfeeding, to help women with breastfeeding, and to counsel women who are making their infant feeding decision. Women, infants and children peer counselors (WPC) are in an ideal position to influence WIC mothers to breastfeed or provide breastmilk to their infants. Little is known about the perceptions and experiences of WPCs as they interact with and support new mothers making their infant feeding decision in the prenatal and early postpartum period. No research to date has addressed WPCs' perceptions and experiences as they interact with mothers making their infant feeding decisions.

REVIEW OF THE METHODOLOGY

Naturalistic Inquiry (NI) (Lincoln and Guba, 1985; Erlandson et al., 1993) was utilized to investigate the research question: "What are the perceptions and experiences of WIC peer counselors as they interact with mothers making their infant feeding decisions?" Naturalistic Inquiry was an ideal method to explore this social phenomenon about which little is known. Naturalistic inquiry recognizes there are multiple realities constructed by the study participants who create richly-layered meanings from their experiences. The researcher is the primary instrument in NI research collecting, recording analyzing, and writing up study findings.

The researcher used purposeful and snowball sampling to recruit nine women, infants and children (WIC) peer counselors (WPC) into the study. Study participants ranged in age from 26 to 62 years (mean=38.5 years) and had been in their WPC role from 13 months to 19 years (mean=7.4 years).

Data for the study included demographic data, interview data, and the researcher's reflexive journal. The face-to-face interviews were conducted at the location of the WPC's choosing. All interviews were recorded and transcribed by the researcher who confirmed the accuracy of the transcription against the recorded interview while reading the transcript. The researcher deidentified each transcript and gave each participant a unique code to prevent data being linked back to the participant. A pristine copy of each transcribed interview was kept in a locked firesafe in the researcher's home that is protected with a monitored security and camera system. The researcher then used a second deidentified copy of each transcript for data analysis.

Data analysis was conducted using Lincoln and Guba's (1985) approach, which involves unitizing the data, negative case analysis, and emergent category designation. There were no negative cases. Trustworthiness of the study was maintained using Lincoln and Guba's four criteria of credibility, transferability, confirmability, and dependability. Dependability was assured by peer

debriefing and conducting audit trails against the data which included the researcher's reflexive journal, transcribed interviews, codebook, and interview guide. The audit trail outlined the researcher's study procedures throughout the study to provide confirmability of the study. Transferability, or the ability of another researcher to assess and replicate the study, was approached by providing richly layered details of the study procedures and data findings. Lastly, credibility, or truth value of the study, was addressed by purposefully recruiting WPCs who were intimately involved in the nuances of helping breastfeeding WIC clients. The WPCs in this study were willing to elaborate on their daily interactions with mothers making their infant feeding decisions. Throughout the study, the researcher utilized her research advisor as a peer debriefer to critique the study methods to assure credibility. The researcher used three of the nine WPCs for member checking to discuss whether the study findings sufficiently reflected the perceptions and experiences of the WPCs as they interacted with mothers making their infant feeding decisions. The WPCs who participated in member checking agreed with all the study findings.

INTERPRETATION OF THE FINDINGS

The purpose of the study was to explore and understand the perceptions and experiences of WPCs who interacted with mothers making their infant feeding decisions. Data analysis revealed three categories: 1) WPCs: Who they are, 2) Getting the Message Across, and 3) Tracking Results. The first category, WPCs: Who they are, revealed that WPCs are dedicated, generous, and passionate about their role. The second category, Getting the Message Across, describes how the WPCs used their skills, knowledge, and training as well as the material resources provided by WIC to get their message across about breastfeeding. They initially assessed their client's attitudes and feelings about breastfeeding in order to implement their educational interventions to encourage their clients to breastfeed. The WPCs also assessed the people in the client's support system to

understand their thoughts, feelings, and knowledge about breastfeeding because they recognized that other people could either support or inhibit their client's breastfeeding decisions. The WPCs spent a great deal of time educating their clients and their clients support system about the advantages and benefits of breastfeeding for both the mother and infant. The WPCs also recognized that even if a client decided to breastfeed her infant, the client needed enormous support to sustain breastfeeding. The third category, Tracking Results, arose from the WPCs' reflections on their roles as WPCs. The WPCs were always positive that regardless of their client's infant decision, they knew they had 'planted a seed' for their client to breastfeed in the moment, perhaps at a later time, or at least share their breastfeeding knowledge with another woman.

Being a WPC is complex role that involves the WPC utilizing innovative strategies to get the WIC client to consider breastfeeding. The WPCs acknowledged that breastfeeding could be difficult and had to implement novel tactics using tools available to them to enhance their services and to sustain their clients' breastfeeding. The WPCs has to constantly reassure their breastfeeding clients that they were doing well, while simultaneously reminding the family, particularly the grandmothers, to support the woman's breastfeeding decision. Despite their efforts to support their clients to choose and sustain breastfeeding, WIC participants could choose to formula feed. Nevertheless, the WPCs continued to see their breastfeeding endeavors successful. The WPCs believed that any breastfeeding was meaningful and hoped that they had "planted a seed" so even if the client chose not to breastfeed, she might breastfeed later, or she might share their knowledge about breastfeeding with others.

COMPARISON TO EXTANT LITERATURE

There is a dearth of literature exploring the perceptions and experiences of WIC peer counselors as they conduct their role. Little is known about how they fulfill their mandate in their

peer-to-peer role designed to increase breastfeeding among WIC participants. The current study is the only study identified to date that explores the perspectives of WPCs as they perform their job and how WPCs promote and support breastfeeding. The study highlights the nuances of the WPC role given their limited resources. To date, only one published study has been identified that explored the perceptions and experiences of WIC peer counselors as they interacted with WIC mothers. The study focuses on the perceptions and experiences of WPCs interacting with African-American women of lower-income (Gross et al., 2014).

Nevertheless, the current study supports Gross et al., (2014) findings in a number of ways. First, "generational barriers" resulting from slavery has stigmatized African-American women. The findings from the current study concur with the Gross et al study in that lack of family support and poor breastfeeding confidence in terms of lack of family members breastfeeding experience and therefore ability to support the breastfeeding mother, and perceived low milk supply can impact the woman's decision and ability to breastfeed. The findings agree that WIC participants need constant reassurance about their breastfeeding efforts and to be reminded that breastmilk depends on supply and demand to sustain breastfeeding. Like the Gross et al study, the WPCs in this study provided breastpumps to augment the WIC participant's long-term breastfeeding commitment. The current study findings also agree with the findings of Gross et al., that despite WIC participants getting breastfeeding information, they still lack knowledge about breastfeeding and have limited awareness of breastfeeding resources. The WPCs in the Gross et al study, like this current study, commented that many of their clients found breastfeeding "nasty," repugnant," and "disgusting;" many WIC clients were uncomfortable having their breasts touched; believed the size of their breasts affected their ability to breastfeed; and were reluctant to nurse at the breast but would consider using a breastpump to provide breastmilk to their infant. The WPCs in this study and in Gross et al's., study had to normalize breastfeeding as a natural way to provide optimal nutrition to an infant.

The goal of the current study was not to understand the perceptions and experiences of WPCs who interacted with African-American women making their infant feeding decisions but to explore the WPCs' perceptions and experiences of their role. The WPCs in this study saw their role as complex and occasionally frustrating because their clients too often returned to the WIC clinic requesting formula. Nevertheless, the WPCs emphasized their support of the WIC client's autonomy deciding how to feed her infant, and underscoring their role was to respect and support their WIC clients in any way they could.

The current study provides an important contribution to the nursing literature because it is the first to explore the perceptions and experiences of WIC peer counselors in their role as they interact with mothers making their infant feeding decisions. Most of the existing literature addresses the perceptions and experiences from the WIC client's point of view. This study addressed how the WPCs used the tools of their trade and material resources as strategies to normalize breastfeeding and encourage women to breastfeed. The study also revealed how the WPCs often used their own money to purchase supplies and gifts that might sustain their client's breastfeeding.

The study provides a contribution to the nursing literature by highlighting the importance of the role of the WPC in supporting breastfeeding among WIC clients; it also emphasizes the lack of knowledge about breastfeeding and medication among healthcare providers. The study also revealed the WPCs' frustrations dealing with healthcare providers and hospital practices that countered breastfeeding.

STUDY IMPLICATIONS

The goal of WIC is to support and promote breastfeeding among WIC participants and thereby contribute to improving the health of the nation and the findings of this study underscore issues related to their ability to do so. During member checking, participants remarked that there is a mismatch between WIC's goals to support breastfeeding and their financial backing by formula companies. WIC accepts financial support from formula companies while stating that a goal of WIC is to promote breastfeeding which has created the reputation that WIC is a purveyor of formula, a practice that has led to confusion among WIC clients about what WIC's goal truly is. The study findings suggest that money provided to WIC should originate from the US government rather that formula companies. In order for WIC to meet its goals, WIC needs money without being obligated to formula companies. Perhaps WIC should become a provider of breastfeeding services exclusively.

Another policy related implication of the study findings relates to the value of the services provided by WPCs in relation to what the WPCs are paid. WPCs should receive decent wages and support so they can fulfill their duties without using their own funds to do so. Funding is needed to increase the presence of WIC and WPCs in hospital settings, especially to bridge the gap between healthcare providers, including nurses, WPCs and WIC participants.

The study findings have implications for nurses, those who provide inpatient care to mothers and newborns, those who care for women and their infants after they are discharged from the hospital, and any nurse who is concerned about the wellbeing of women, infants, and children. The findings from this study can inform such nurses about the services, commitment, and dedication of the WPC. WPCs support the ongoing efforts of bedside nurses and IBCLC nurses who expend much of their time helping new mothers breastfeed. WPCs are astute observers who provide services beginning very early after the woman is discharged home from the hospital with

her infant, so are in an ideal position to recognize and intervene when early problems arise with either the mother or infant.

The research findings also suggest more education of nurses, physicians, and other providers is needed to increase awareness about the services provided by WIC. Such education should emphasize the breastfeeding promotion and support provided by WPCs, both prenatally and postnatally. Healthcare providers stand to benefit from this education by understanding the skills and knowledge WPCs possess to encourage and sustain breastfeeding as well as the resources and services available from WIC. Perhaps breastfeeding continuing education (CE) should be mandatory when healthcare providers renew their licensure. If physicians and nurses can refer their clients to WPCs if they qualify for WIC prenatally, perhaps the woman will be more likely to breastfeed successfully. The WPCs who participated in member checking commented that there is a gap between the moment a WIC client is discharged home from the hospital and when she is seen at WIC. Once the WIC client has delivered her infant and is discharged home from the hospital, she should be encouraged to visit the WIC office as soon as possible. Breastfeeding problems such as poor latching, nipple soreness, mastitis, and engorgement could be mitigated.

The findings also suggest the need for more education of healthcare providers regarding safety of medications for the women who are breastfeeding or providing breastmilk to their infants. Breastfeeding women are often ill-advised by their healthcare providers to stop breastfeeding when taking a pain medication or an antibiotic. Technological platforms are available to give healthcare providers information about which medications are contraindicated for breastfeeding women. Healthcare providers also need to be educated about what constitutes normal infant weight loss and when formula supplementation should be recommended. Rather than sabotaging

breastfeeding, providers should examine how to better support, promote, protect, and refer their breastfeeding clients for breastfeeding help.

STRENGTHS

To date, only one study has been identified that explored the perceptions and experiences of WPCs of their role helping women with their infant feeding decisions. The findings from this study may add to the extant literature. Naturalistic Inquiry was the ideal paradigm to explore the perceptions and experiences of WPCs who worked with mothers making their infant feeding decisions.

Although the perceptions and experiences WIC participants have been largely examined, this study examined the perceptions and experiences of WPCs and how they conduct their work, including their frustrations and efforts to promote breastfeeding among WIC participants who are often disinterested in breastfeeding. The study gave voice to WPCs by encouraging them to share their perceptions and experiences with the researcher and the public and potentially make a difference in future policy developments as well as education among healthcare providers about WICs breastfeeding promotion and services. The process of member checking revealed the study had provided validation, encouragement, and support to the WPCs who participated. Each WPC in the member checking session expressed gratitude for the study. Moreover, they learned new strategies they can use in their own practice.

Naturalistic Inquiry methodology also provided the opportunity for unexpected findings to emerge regarding the WPC role and how WPCs encourage breastfeeding despite limited material resources. The study highlighted the contributions WPCs make to improving the welfare of women, infants, and children, regardless of their client's infant feeding decision. The findings may

inform future researchers how to develop effective breastfeeding interventions for WPCs to implement during their sessions with WIC clients to meet Healthy people 2030 goals.

LIMITATIONS

The study's exploration of WPCs' perceptions and experiences as they interacted with WIC mothers making their infant feeding decisions has limitations. The study participants all came from the geographical limitations of southeast Texas. The study participants either were Hispanic (six) or White (three); no participants were African-American. Moreover, the study sample was small. Although the COVID-19 pandemic could have affected sample selection, data analysis revealed saturation.

SUGGESTIONS FOR FURTHER RESEARCH

This study, informed by the framework of Naturalist Inquiry, was the first to explore the perceptions and experiences of WPCs who interact with WIC mothers making their infant feeding decisions. Future research studies should attempt to recruit a more diverse sample, including African-American and Asian participants and representing other geographic regions to explore the WPCs' perceptions and experiences. Further research could explore WIC participants' perceptions of using donor human milk to augment their breastfeeding efforts. Future research is also recommended to assess the feasibility of using donor human milk among WIC participants to help them reach Healthy People 2020 and 2030 breastfeeding goals.

CONCLUSIONS

Being a women, infants, and children (WIC) peer counselor (WPC) is a complex job considering that WIC participants are less likely to breastfeed. The WPCs in this study were tasked with promoting breastfeeding with limited resources. Exclusive breastfeeding WIC clients constitute a small portion of participants in the WPCs' workday, yet WPCs expend extensive time

and effort to persuade WIC clients to breastfeed and to sustain breastfeeding. The WPCs often spent their own money to enhance their services and regardless of their frustrations, they were committed to their job and remained in that position despite other employment opportunities. The WPCs are skilled, knowledgeable, valuable, and yet relatively untapped resources for pregnant and breastfeeding women. They are enthusiastic supporters of breastfeeding and believe all infants should receive breastmilk. WPCs are astute observers, adept at holistically assessing and understanding how to "plant the seeds" and getting their message across. For this, WPCs should be lauded and highly valued among all healthcare providers who work with pregnant and/or breastfeeding women.

Appendix A-UTMB Study Approval



Institutional Review Board 301 University Blvd. Galveston, TX 77555-0158 Submission Page

20-Dec-2019

MEMORANDUM

TO: Lisa Wagner

Grad School Biomedical Science GSBS9999

Shili Guzz, CIP

FROM: Jacqueline Stout-Aguilar, PhD

Vice-Chairman, IRB #1

RE: Initial Study Approval

IRB #: IRB # 19-0206

Submission Number: 19-0206.004

TITLE: The Perceptions and Experiences of WIC Peer Counselors as they Interact with

Mothers Making their Infant Feeding Decisions

DOCUMENTS: Protocol Version 4, November 17, 2019

Narrative Verbal Consent Script v3 Information Fact Sheet for Participants v3

The UTMB Institutional Review Board (IRB) reviewed the above-referenced research protocol via an expedited review procedure on **18-Dec-2019** in accordance with 45 CFR 46.110(a)-(b)(1). Having met all applicable requirements, the research protocol is approved. The approval for this research protocol begins on **20-Dec-2019**. Continuing Review for this protocol is not required, as outlined in 45 CFR 46.109.

Written documentation of consent is waived in accordance with 45 CFR 46.117(c).

The research protocol cannot continue beyond the approval period without continuing review and approval by the IRB. In order to avoid a lapse in IRB approval, the Principal Investigator must apply for continuing review of the protocol and related documents before the expiration date. A reminder will be sent to you approximately $\underline{90}$ days prior to the expiration date.

The approved number of subjects/specimens to be enrolled/utilized for this project is **30.00**. If, the approved number needs to be increased, you first must obtain permission from the IRB to increase the approved sample size.

If you have any questions related to this approval letter or about IRB policies and procedures, contact the IRB office via email at IRB@utmb.edu.

Appendix B- Recruitment Flier

Are you a WIC Lactation Counselor?

Have you worked at least six months in the role of a WIC peer counselor?

Are you willing to participate in a research study regarding your experiences and perceptions of working with new mothers who are making their infant feeding choices?



If interested, please contact:

Lisa Wagner, MPH, BA, RNC, BSN

lrwagner@utmb.edu

281-678-9694 (call or text)

UTMB Doctoral Nursing Program Student

ELIGIBILITY CRITERIA:

- 1. Must have had at least six months of experience counseling breastfeeding mothers at WIC
- 2. can speak and understand English
 - 3. are willing to participate in the interview lasting up to 90 minutes.

REIMBURSEMENT FOR TIME WILL BE GIVEN TO ALL PARTICIPANTS

Image: https://pixabay.com/en/breastfeeding-mother-and-child-baby-2730855/

Appendix C-IRB Fast Fact Sheet



FAST FACT SHEET: This form is yours to keep. IRB#: 19-0206

Study Name: The Perceptions and Experiences of WIC Peer Counselors (WPC) as they Interact

with Mothers Making their Infant feeding Decisions

Contact Information:

their infant feeding decisions.

Principal Investigator: Lisa Wagner Office 281-678-9694

Dissertation Chair: Dr. Carolyn Phillips Office 409-772-8234

What is the purpose of this research study? The objective of this study is to enhance understanding of WPCs' perceptions of their interventions with WIC mothers who are making

What are the Research Procedures? The researcher will conduct one face-to-face interview using an audio recording device with the WPC lasting no more than 90 minutes in a quiet location of the WPCs choice. The investigator may need to follow-up with you once the interview has been concluded to clarify any information from the initial interview. Should the data collection appear to be requiring more time than the designated 90 minutes, the researcher will ask you whether you are willing to extend the time, end the session, or schedule another meeting. During the initial interview, the investigator will ask you if she may re-contact you after the initial interview for clarification via your phone-number you provided. You may refuse to be re-contacted.

What are the Risks and Benefits? Any time information is collected; there is a potential risk for loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. There may be minor risks involved with your participation, one risk is the potential for evoking emotions as you answer questions. If this occurs, you may stop the

interview at any time for any reason, or continue the interview including your thoughts about those emotions. If you wish to restart the interview at that time, you may do so, but is not required. You may also become fatigued by participating in the study. You may stop the interview at any time, for any reason. You may not receive any personal benefits from being in this study. We hope the information learned from this study will benefit other people with similar conditions in the future.

Costs and Compensation: There will be no costs other than your time and fuel to meet at the location of your choice; however, a one-time \$25 Visa® gift card will be given to you to thank you for your time.

How will my information be protected? Information we learn about you in this study will be handled in a confidential manner. If we publish the results of the study in a scientific journal or book, we will not identify you. The researcher will keep all deidentified study materials pertaining to this research study in a locked cabinet in her home which is monitored by a camera and security system.

Who can I contact with questions about this research study? This study has been approved by the UTMB Institutional Review Board (IRB). If you have any complaints, concerns, input or questions regarding your rights as a subject participating in this research study or you would like more information about the protection of human subjects in research, you may contact the IRB Office, at (409) 266-9400 or irb@utmb.edu.For questions about the study, please contact the investigator at the number provided above.

Before you agree to participate, make sure you have read (or been read) the information provided above; your questions have been answered to your satisfaction; you have been informed that your participation is voluntary, and you have freely decided to participate in this research. You may change your mind and stop the study at any time for any reason.

Appendix D-Interview Guide

Interview Guide

Demographic Information:

Age:

Number of months you breastfed your infant(s):

Length of time in WIC Peer Counselor role:

Do you currently work in the role as a WIC Peer Counselor?

What kind of training did you receive to prepare for the role as a WIC Peer Counselor?

What is the primary racial makeup of your WIC mothers?

What is the secondary racial makeup of your WIC mothers?

What is the age range of your WIC mothers?

Do you work in the Houston/Galveston area?

General Questions:

Grand Tour question:

You know that I am interested in the perceptions and experiences of WIC peer counselors who work with mothers making their infant feeding decisions. I would like to hear about your experiences and perceptions in your role as a WIC peer counselor.

Probes:

1. Tell me about your experiences dealing with women in early pregnancy as they are making their infant feeding decisions.

2. Tell me about your experiences dealing with women right after delivery when they come to the

WIC office for the first time.

3. How do you deal with women who initially choose to exclusively breastfeed and then decide to

start supplementing or completely switching to formula?

4. Tell me about some of the challenges you encounter as you interact with women in the early

postnatal days as they are making their infant feeding decisions?

5. Tell me about the kinds of advice or support do you offer women in the prenatal or postpartum

period as they are making their infant feeding decisions?

6. Tell me about the kinds of approaches do you use with women who are undecided in how they

want to feed their baby?

7. Tell me about the kinds of approaches do you use with women to help them choose their food

package?

8. Tell me about the kinds of approaches do you use with women to help them choose the

exclusive breastfeeding package over the other packages?

9. Do you have anything else to add?

10. May I contact you again for more questions or for a follow-up interview?

Concluding comments

If you think of anything to add, please feel free to contact me. My phone number is: 281-678-9694.

My email is: lrwagner@utmb.edu.

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Appendix E-Narrative for Obtaining Verbal Consent

Narrative for Obtaining Verbal Consent

I am a doctoral student at the University of Texas Medical Branch, at Galveston, Texas, and this research is part of my program of study. You have said you are interested in participating in my study about your perceptions and experiences as a WIC peer counselor who work with new mothers making their infant feeding decisions.

You have identified yourself as a WIC peer counselor who has breastfed an infant for six months and have at least six months of experience helping breastfeeding mothers. There may be minor risks involved with your participation, one risk is the potential for evoking emotions as you answer questions. If this occurs, you may stop the interview at any time for any reason, or continue the interview including your thoughts about those emotions. If you wish to restart the interview at that time, you may do so, but is not required. You may also become fatigued by participating in the study. You may stop the interview at any time, for any reason.

There also is a risk that your privacy and confidentiality could be compromised. Your privacy and confidentiality are a priority. I will assign an alphanumerical code and de-identify any information with your name or anything that could be linked to you, to protect your information. I also will keep my records pertaining to this research in a locked safe in my home which is monitored with a security and camera system. You may not receive any personal benefits from being in this study. We hope the information learned from this study will benefit other people with similar conditions in the future.

I will ask you some questions about yourself then ask you to discuss your perceptions and experiences as a WIC peer counselor. Our initial interview will not exceed 90 minutes. We may need an

additional interview to complete data collection, but no interview will exceed 90 minutes. If we need more time, I will ask your permission to re-contact you, or whether you would be willing to extend the time, end the session, or schedule another meeting.

I may need to re-contact you if I have questions pertaining to the interview, or to seek clarification from the interview. Alternatively, should you need to contact me or my dissertation chair, Dr. Phillips, concerning the study you may contact us at 281-678-9694, or 409-772-8234, respectively. There are no costs, except your time, and voluntarily sharing your knowledge. You may not receive personal benefits from participating in the study, but we hope the information learned will benefit society and other researchers. At the end of our interview, I am offering you a one-time gift card to thank you for your time for participating in this study.

Do you have any questions for me? Do you have any questions about this research? Are you still willing to participate? If you are, we will begin the interview. I will now turn on my recorders and we can begin.

This study has been approved by the UTMB Institutional Review Board (IRB). If you have any complaints, concerns, input or questions regarding your rights as a subject participating in this research study or you would like more information about the protection of human subjects in research, you may contact the IRB Office, at (409) 266-9400 or **irb@utmb.edu**. For questions about the study, please contact the investigator at the number provided above.

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Vita

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Born February 21, 1973, in Houston, Texas

Parents are Keith and Deborah Gressett

Spouse is Joseph E. Wagner

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Present Positions:

- Charge Nurse, NICU, Houston Methodist Baytown Hospital, since 1999
- Adjunct Faculty, Texas A&M, since January 2020
- Adjunct Faculty, UTMB, since June 2020

Education:

University of Texas Medical Branch (GSBS), Galveston, TX- PhD(C)-01/2020

UT School of Public Health, Houston (UTSPH), TX-MPH-12/2018

UT Health Science Center Houston School of Nursing- BSN-05/2008

University of Houston, Clear Lake-BA-05/2005

Houston Community College-ADN-05/1999

Certification:

06/20/2004-Inpatient Obstetrics

Licensure information:

RN-1994-Present #6042936

Professional Experience:

6/2020-Present Maternal Child Clinical Faculty UTMB, Galveston, TX

1/2020-Present Maternal Child Clinical Faculty Texas A&M College of Nursing

Bryan, TX

5/1999-Present Houston Methodist Baytown Hospital (HMBH), Baytown, TX

Registered Nurse, Charge Nurse, part-time

Perinatal and Medical Surgical Nursing (Antepartum, Postpartum, Labor and Delivery,

Gynecological Surgery; Medical-Surgical care; Nursery (Newborn and NICU)

Founder and Member of "Issues with Tissues" Committee, HMBH

Founder and Coordinator of Donor Milk Depot, HMBH

1999-Present-NRP Instructor, HMBH

Research Activities:

Dissertation Title: Planting Seeds: A Naturalistic Inquiry of the Perceptions and

Experiences of WIC Peer Counselors as they Interact with Mothers Making their Infant

Feeding Decisions

Grant support: NA

Committees:

• UTMB: 2019-Present: Curriculum Committee UTMB-SON: review new and current

curriculum, provide approval for credit transfers and rationale for denial

• Co-Chair AWHONN: Baytown, TX Chapter

Membership in Scientific Societies/Professional Organizations:

2019-Present: AWHONN, Baytown Chapter, CoChair

Honors:

2020-Recipient of UTMB 2020 School of Nursing Scholarship, Galveston, TX

2019-Recipient of Crawford and Hattie Foundation Scholarship, Galveston, TX

2018-Recipient of Regina R. and Alfonso J. Mercatante Memorial Scholarship, Galveston, TX

2018-Podium speaker for UTSPH: Maternal Child Health, Houston, TX

2017-Recipient of John McGovern Healing in Nursing Scholarship, UTMB Galveston, TX

2017-Maternal Child Fellowship, UTSPH, Houston, TX

2017-Present-Ambassador, UTMB-GSBS/Nursing Program, Galveston, TX

2016-Houston Chronicle Salute to Nurses-Houston's Top 100 Nurses, Houston, TX

2016 Podium speaker for UTSPH

2016-Guest speaker for Regional Shared Governance Conference for Houston Methodist

2016-Recognized as an Exemplar for Nurse Autonomy during Magnet designation at

HMBH

2015-Daisy Award, HMBH

2008-2010-Customer Service Representative for Maternal Child Services, HMBH

2010-Daisy Award, HMBH

Publications:

2017-Infant Mortality: Preconception Health; developed curriculum under HRSA Grant-

UTSPH, Houston, TX

2017-Breastfeeding curriculum developed under HRSA Grant, UTSPH, Houston, TX

2017-Developed curriculum: Breastfeeding Support; under HRSA Grant, UTSPH, Houston, TX

Invited Lectures at Symposia/Conferences:

2020-Mitigating the Donor Human Milk Deficit through Donor Milk Depots at TAMU AWHONN meeting, Bryan, TX

Invited Lectures-Off Campus:

2020-Podium speaker, TX A&M

2019-Podium speaker, TX A&M

2018-Podium speaker for UTSPH: Maternal Child Health; Houston, TX

2016 Podium speaker for UTSPH: Maternal Child Health; Houston, TX

2016 Podium speaker for UTSPH: Policy and Management; UTSPH, Houston, TX

2015-Podium presenter: "Evidence-Based Practice: Donor Milk Depot at

Houston Methodist Baytown Hospital"

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This dissertation was typed by Lisa R. Wagner.