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# Variables Influencing Breastfeeding among First Time Mothers

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Variables Influencing Breastfeeding among First Time Mothers

by

Myra Westbrooks

A thesis submitted to the faculty of  
Gardner-Webb University Hunt School of Nursing  
in partial fulfillment of the requirements for the  
Master of Science in Nursing Degree

Boiling Springs, North Carolina

2015

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## Abstract

This research examined the variables that influence breastfeeding in first time mothers. The study utilized Fishbein and Ajzen's Theory of Reasoned Action as the theoretical framework. The sample included 147 first time mothers and utilized a descriptive design with a retrospective chart review. The descriptive study allowed for the identification of variables and patterns or characteristics of first time mothers who chose to breastfeed. Associations between several demographic variables and breastfeeding were identified in this study. By identifying variables that have a significant influence on breastfeeding, focused action plans can be developed to improve both maternal and infant health outcomes.

*Keywords:* breastfeeding, breastfeeding initiation, exclusive breastfeeding, prenatal breastfeeding education, primiparous women

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iv

## TABLE OF CONTENTS

### CHAPTER I: INTRODUCTION

Significance.....	2
Problem Statement.....	2
Purpose.....	2
Theoretical or Conceptual Framework .....	3
Research Question .....	3

### CHAPTER II: LITERATURE REVIEW

Review of Literature .....	4
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### CHAPTER III: METHODOLOGY

Study Design.....	9
Setting and Sample .....	9
Design for Data Collection .....	10
Data Collection Procedure .....	10
Protection of Human Subjects .....	11
Data Analysis .....	11

### CHAPTER IV: RESULTS

Sample Characteristics.....	12
Major Findings.....	16
Summary.....	18

## CHAPTER V: DISCUSSION

Implication of Findings.....	19
Application to Theoretical/Conceptual Framework.....	21
Limitations .....	21
Implications for Nursing.....	22
Recommendations.....	22
Conclusion .....	23
REFERENCES .....	24

## List of Tables

Table 1: Summary of Demographic Data .....	14
Table 2: Variables Related to Birth Experience .....	15
Table 3: Prenatal Breastfeeding Education and Lactation Support Variables .....	17
Table 4: Time Interval Effect on Exclusive Breastfeeding.....	18



## CHAPTER I

### Introduction

Breast milk is the ultimate source of nutrition and tailored to meet an infant's individual needs (American Academy of Pediatrics (AAP), 2012). Breastfeeding has numerous benefits for mom and infant, it is inexpensive, convenient, and evidence suggests that it decreases risks for many diseases. The AAP endorses breastfeeding as the preferred choice of feeding for all infants. Breastfeeding is associated with improved nutritional, developmental, and immunological outcomes for infants. Maternal benefits include faster recovery from childbirth and a reduction in risk for breast and ovarian cancers and osteoporosis (Persad & Mensinger, 2008).

The lack of breastfeeding has consequences for both mother and infant. Infants who are not breastfed have higher rates of morbidity and mortality. Formula fed infants are at a greater risk for developing health problems such as respiratory and gastrointestinal infections, otitis media, pneumonia, dermatitis, and dying from Sudden Infant Death Syndrome (SIDS) (Bartick & Reinhold, 2010). Older children who were not breastfed have an increased risk for developing allergies, asthma, leukemia, celiac disease, diabetes, and obesity (Stuebe, 2009). Mothers who do not breastfeed are at a higher risk for postpartum hemorrhage, anemia, and postpartum depression (Stuebe, 2009). Long-term consequences for not breastfeeding include a higher risk for development of cardiovascular disease, diabetes, osteoporosis, obesity, and ovarian or breast cancer (Parikh et al., 2009; Stuebe, 2009).

### **Significance**

The AAP, along with numerous other national and international organizations such as the World Health Organization (WHO) have set forth recommendations for exclusive breastfeeding for at least the first six months, followed by continued breastfeeding along with the introduction of complementary foods for one year or longer (AAP, 2012). Goals set by Health People 2020, strived to increase breastfeeding rates to 81.9%. Despite these benefits and recommendations, breastfeeding initiation rates continue to remain low (United States Department of Health and Human Services, Healthy People 2020 [HHS], 2011).

### **Problem Statement**

The problem identified is low breastfeeding rates among first time mothers. What factors influence a mother's decision to breastfeed? The choice not to breastfeed can result in negative consequences and health disparities for mother and infant, as well as an increased incidence of morbidity and mortality (Bartick & Reinhold, 2010). According to the 2011 data from the Healthy People 2020 website, 79.2 % of infants born in the United States were breastfed at least once. The state breastfeeding initiation rate for South Carolina is approximately 73.4%, which is below the target goal of 81.9 % set by Healthy People 2020 (HHS, Healthy People 2020, 2011).

### **Purpose**

The purpose of this Masters of Science in Nursing (MSN) thesis was to determine what variables influence breastfeeding in first time mothers. The nursing significance of this topic was that if the variables can be identified, focused education can be provided to increase breastfeeding rates. Despite the recommendations made by WHO and AAP,

breastfeeding initiation rates in the community being studied are extremely low. The facility chosen for this study averages approximately 900 births per year with 64% of births being to primiparous women. “Low breastfeeding rates can negatively impact the health of women and children and the economic status of their families, communities, and the nation” (Johnston & Esposito, 2007, p. 9).

### **Theoretical or Conceptual Framework**

Social cognition models can be used as a framework for studying social norms in relation to health behaviors. Fishbein and Ajzen’s Theory of Reasoned Action (TRA) (1975) will provide the framework for the study. The Theory of Reasoned Action focuses on an individual’s behavioral intention and has been widely used as a model of behavioral prediction in many different health related studies. “According to Ajzen and Fishben, an individual’s intention to perform a behavior is the primary determinant for the behavior” (Persad & Mensinger, 2008, p. 54). Breastfeeding intent can be influenced by a variety of factors. Positive attitudes about breastfeeding, increased maternal age, higher education levels, increased levels of social support, and various others factors have been identified as having influence on breastfeeding intention (Persad & Mensinger, 2008).

### **Research Question**

Data collection and analysis will answer the following question:

What variables influence breastfeeding among first time mothers in a community hospital?

## CHAPTER II

### Literature Review

#### Review of Literature

A literature review was conducted to investigate the factors that influence breastfeeding in first time mothers and to identify current gaps in literature. A comprehensive online search was conducted using a variety of databases. The following databases were used: Cumulative Index for Nursing and Allied Health Literature (CINAHL), Science Direct, PubMed, SAGE Journal Online, and Medscape databases. The databases were accessed the University Library and Google Scholar. The terms used for the search include: *breastfeeding, breastfeeding initiation, social learning theory, exclusive breastfeeding, prenatal breastfeeding education, breastfeeding attitudes, factors influencing breastfeeding, breastfeeding among primiparous women, breastfeeding benefits, maternal benefits, recommendations for breastfeeding, and theory of reasoned action*. The multifaceted benefits of breastfeeding are widely known and the literature review showed that although breastfeeding rates are on the rise, there are a wide range of factors that affect the decision to breastfeed and the actual initiation of feeding.

#### Influencing Factors

A cross-sectional study conducted between September 2007 and March 2008 by Murmi, Dodge, Pope, and Erickson (2010) explored the factors that influence breastfeeding decisions among special supplemental nutrition program participants. According to Murmi et al. (2010), “barriers to breastfeeding include lack of knowledge about the benefits of breastfeeding, embarrassment, negative perception of breastfeeding, lack of family support, and the inconvenience when returning to work or school” (p.

624). The study reported that 88% of participants stated the availability of free formula from the supplemental program did not affect their breastfeeding decisions. The major barriers reported were a lack of motivation to breastfeed and having to return to work or school (Murmi et al., 2010). The study also found that breastfeeding decisions varied considerably by race, with more white subjects reporting that they breastfed their infants than did African-American subjects.

A study completed by Doulougeri, Panagopoulou, and Montgomery between 2009 and 2010 examined the impact of maternal stress on breastfeeding initiation. The study sample included 120 pregnant women who expressed intent to breastfeed. Stress levels were measured on the day of delivery using physiological and self-reported psychosocial measurements. Maternal cortisol levels were measured from the umbilical cord immediately after delivery and then from maternal blood at 10 minutes post-delivery. One hour post-delivery, mothers completed a four question survey related to their emotional status and labor and delivery experience. The study found that maternal stress can be a risk factor for delayed initiation of breastfeeding and can ultimately affect infant health related by compromising breastfeeding practices (Doulougeri, Panagopoulou, & Montgomery, 2013).

According to a systematic review by De Jager, Skouteris, Broadbent, Amir, and Mellor (2013), there is a substantial amount of literature available that describes socio-demographic predictors of the initiation of breastfeeding. Maternal age, socio-economic status, level of education, marital status, and location are some of the factors found to be associated with breastfeeding initiation (De Jager et al., 2013). Psychosocial factors were found to have a more profound influence on breastfeeding initiation and exclusivity than

demographic factors. Psychosocial factors include self-efficacy, postpartum depression, anxiety, maternal intent to breastfeed, breastfeeding attitudes, and social support (De Jager et al., 2013). Self-efficacy was noted to have the greatest impact for the study. “According to breastfeeding self-efficacy theory, mother’s with high self-efficacy are more likely to initiate breastfeeding, persist when they experience difficulties, adopt self-encouraging thoughts, and are more likely to react positively and able to overcome difficulties” (De Jager et al., 2013, p. 516). Maternal intention was also consistently reported as a strong predictor for initiation of breastfeeding.

### **Breastfeeding Attitudes**

A study conducted by Persad and Mensinger in 2008 explored maternal breastfeeding attitudes among urban primiparas and their association with breastfeeding intent and socio-demographics. The authors used Ajzen and Fishbein’s Theory of Reasoned Action (TRA) as the framework for the study stating that there were three variables of interest: maternal breastfeeding intent, maternal breastfeeding attitudes, and a mother’s subjective norm (Persad & Mensinger, 2008). The authors hypothesized that (1) mothers with more positive breastfeeding attitudes would be more likely to report intent to breastfeed, and (2) increased maternal age, higher education, higher household income, higher levels of social support, and various other factors will be associated with intent to breastfeed (Persad & Mensinger, 2008). The study recruited a convenience sample of participants from an inner city hospital. The study found that 79% of first time moms intended to breastfeed. The authors concluded that mothers were more likely to breastfeed if they had a positive attitude and felt support from their family/significant other, which was in accordance with the first hypothesis and supported the TRA. The

second hypothesis was partially supported and as with similar studies found that breastfeeding intent was significantly associated with higher education, higher annual income, being born outside the United States, and having attended a breastfeeding class (Persad & Mensinger, 2008).

### **Skin-to-Skin**

The initial postpartum period, especially the first two hours after birth are the optimum time to initiate breastfeeding (Aghdas, Talet, & Sepideh, 2014). When mother and infant are separated during this period, the infant's ability to initiate breastfeeding is decreased and maternal confidence and self-efficacy may also be affected. Studies have consistently shown the importance of maternal self-efficacy on breastfeeding initiation (Aghdas et al., 2014). Immediate mother-infant skin-to-skin contact is an excellent way to increase breastfeeding initiation and maternal self-efficacy levels.

### **Healthcare Provider Influence**

Demirci et al. (2013) conducted a study analysis that examined the characteristics of breastfeeding discussion between patients and obstetric providers during the first prenatal visit. According to Demirci et al. (2013), "half of women make the decision to breastfeed before conception, whereas the remaining half may make the decision during pregnancy" (p. 1263). This study was part of a larger ongoing National Institute of Health-funded parent study about patient-provider communication during prenatal care that included 69 health care providers and 377 patients. The first 172 visits were selected for this study analysis. Audio recordings were reviewed for breastfeeding discussion, occurrence, timing, and initiator of discussions, as well as for adherence to the American College of Obstetricians and Gynecologists (ACOG) breastfeeding guidelines. The

results of the analysis showed that breastfeeding discussions were infrequent and occurred at only 29% of the visits, lasted an average of 39 seconds and most often initiated by providers in an ambivalent manner. Furthermore only 69% of discussions followed the ACOG guidelines. Nurse midwives were more likely than physicians to initiate a conversation and to actually engage patients. The study concluded that breastfeeding education during the first prenatal visit was suboptimal. The study failed to address specific opinions of health care provider that may have influenced the breastfeeding discussions.



## **CHAPTER III**

### **Methodology**

The purpose of this study was to identify the variables that influence breastfeeding in first time mothers in a community hospital. The study was conducted at a 209 bed, community hospital in the upstate of South Carolina. A retrospective chart review was used to identify variables that had statistical significance for breastfeeding in first time mothers. The following chapter presents the design, sample, setting, data collection procedure, and data analysis procedure used in this study.

### **Study Design**

This study utilized a descriptive design with a retrospective chart review. The descriptive study allowed for the identification of variables and then examined the relationship between the identified variables. The retrospective chart review involved the use of existing data, documents, and records. This type of study had the potential to provide valuable research opportunities, quality assessment and improvement strategies.

### **Setting and Sample**

The setting chosen for the study was a 209 bed, for profit hospital located in upstate South Carolina. The facility included 36 postpartum rooms, six labor and delivery suites, well baby and special care nursery. The facility had approximately 900 births per year. The local community had a population of 284,307 and is the twelfth largest county in the state.

### **Design for Data Collection**

A retrospective chart audit was conducted. Approximately 125 charts of first time mothers during the time frame of January 1, 2015 through June 30, 2015 was included. Data was analyzed related to maternal age, ethnicity, educational level, marital status, payer source, type of delivery, skin to skin, length of time from birth until initiation of breastfeeding, infant health issue requiring admission to a special care nursery (SCN), lactation consult, and prenatal breastfeeding education.

### **Data Collection Procedure**

Data was collected from medical records accessed through the facility electronic medical record (EMR) database. The data was accessed and collected only by the researcher. All cases that met criteria during the time frame of January 1, 2015 through June 30, 2015 was included. In order to protect PHI, no patient identifiers were used in the data collection process. Numbers or letters were assigned to the each variable for data collection. The following classifications were used:

- Race - Caucasian (1), African American (2), Hispanic (3), Asian (4), Other (5)
- Age - 12-17 (1), 18-24 (2), 25-44 (3), 45-54 (4)
- Education - less than high school (1), high school diploma (2), some college (3), 2 year degree (4), 4 year degree (5), advanced degree (6)
- Marital Status - married (1), divorced/separated (2), widowed (3), never married (4)
- Payer Source – private insurance (1), Medicaid (2), Self-Pay (3)
- Feeding Type – breast (1), formula (2)

- Delivery Type - vaginal (1), cesarean (2)
- Skin to skin after delivery - yes (Y), no (N)
- Length of time from delivery until initiation of breastfeeding – did not breastfeed (0), 0-1 hour (1), 1-2 hours (2), 2-3 hours (3), Over 3 hours (4)
- Nursery type - well baby nursery (1), special care nursery (2)
- Lactation consult post-delivery - yes (Y), no (N)
- Prenatal breastfeeding class - yes (Y), no (N)
- Formula supplementation - yes (Y), no (N)
- Breastfeeding at discharge - yes (Y), no (N)

### **Protection of Human Subjects**

The proposed study received approval from the institutional review boards for the University and the Hospital System before data collection began. The chart reviews will not include any patient identifies. Numbers or letters were assigned to the different elements of each variable addressed. The researcher was the only person accessing and transcribing the data; therefore, minimal risk was involved.

### **Data Analysis**

Data was entered into a personal computer by the researcher and analyzed using the Statistical Package of Social Sciences (SPSS). Descriptive statistics included means, frequencies, and percentages. The data was analyzed to identify which variables had a close association with breastfeeding.

## **CHAPTER IV**

### **Results**

Breastfeeding is the internationally accepted ideal in infant feeding. Ensuring mothers and babies receive optimal benefits, in both the short and long term, is dependent upon successful initiations and establishment of breastfeeding. Despite the recommendations made by WHO and AAP, breastfeeding initiation rates in the community being studied were extremely low. The purpose of this study was identify variables that influenced breastfeeding among first time mothers in the given community setting. Results from this study can be used to better understand the variables identified and develop action plans to increase breastfeeding rates among first time mothers.

### **Sample Characteristics**

The target population for this study reflected specific characteristics. All first time mothers who delivered at the chosen facility during the period of January 1, 2015 through June 30, 2015 were included in the study. A total of 147 cases were identified and reviewed. There were no exclusions from the study.

Basic demographic information was obtained by retrospective chart audit for each case. Maternal demographics included maternal age, race, educational level, marital status, and payer source. Maternal age of the sample population ranged from 15 to 44 years of age with the largest percentage (51%) of mothers falling in the 25 to 44 year old age group. The sample included 113 Caucasians (77%), 30 African Americans (20%), one Hispanic (0.7%) and three Asians (2%). In regards to educational level; 13 mothers (8.8%) had less than a high school education, 72 mothers (48.9%) were high school graduates and 36 mothers (24.4%) had either a two or four year college degree.

Advanced degrees were held by three mothers (2%). The majority (72.1%) of mothers in the study were single, 27.2% were married and less than 1% of mothers were widowed. A total of 57 mothers (38.8%) had private insurance, one mother was self-pay and the largest portion of women (59.9%) were enrolled in Medicaid. Results are displayed in Table 1.

Table 1

*Summary of Demographic Data*

	Characteristic	Frequency	Percent
Age	12 to 17	4	2.7%
	18 to 24	68	46.3%
	25 to 44	75	51%
Race	Caucasian	113	76.9%
	African American	30	20.4%
	Hispanic	1	0.7%
	Asian	3	2.0%
Education	< HS	13	8.8%
	HS Diploma	72	48.9%
	Some College	23	15.6%
	2 or 4 Year Degree	36	24.4%
	Advanced Degree	3	2.0%
Marital Status	Married	40	27.2%
	Widowed	1	0.7%
	Never Married	106	72.1%
Payer	Insurance	57	38.8%
	Medicaid	88	59.9%
	Self-Pay	2	1.4%

Variables related to the birth experience included; feeding type, method of delivery, skin-to-skin, nursery level, lactation consult, prenatal breastfeeding education, time lapse from birth to initial feeding, and supplementation of formula. There were 110 mothers who breastfed and 37 mothers that formula fed their infants. The deliveries in the study consisted of 96 vaginal (65.3%) births and 51 cesareans (34.7%). Out of the 147 cases, 134 infants were admitted to a well-baby nursery and 13 required admission to the special care nursery (SCN). Results displayed in Table 2.

Table 2

*Variables Related to Birth Experience*

	Characteristic	Frequency	Percent
Feeding Type	Breast	110	74.8%
	Bottle	37	25.2%
Delivery Type	Vaginal	96	65.3%
	Cesarean	51	34.7%
Nursery Level	Well-Baby	134	91.2%
	SCN	13	8.8%

### Major Findings

There were 147 cases which were identified as first time mothers and met criteria for the study. One hundred ten mothers (74.8%) breastfed their infants. Out of the mothers that breastfed, 65 of those breastfed exclusively (did not supplement with formula). There were 96 vaginal deliveries and 51 cesarean deliveries. In regards to feeding type, 75 (78.1%) mothers who had a vaginal delivery chose to breastfeed and 35 mothers (68.6%) who had a cesarean breastfed their infants. These results could be attributed to the fact that there were almost twice as many vaginal deliveries as there were cesareans. The study found that out of 13 babies admitted to the SCN, seven were breastfed and all seven were supplemented with formula.

Professional lactation support and prenatal lactation education have been shown to increase breastfeeding initiation. The study examined the association between professional lactation support and exclusive breastfeeding as well as prenatal breastfeeding education and exclusive breastfeeding in the identified population. Data did show a close association for both. Out of the 110 mothers who breastfed their infants, 22 of those attended a breastfeeding class during the prenatal period and 15 of those 22 moms breastfed exclusively during the hospital stay. A certified lactation consultant saw 79 of the 110 breastfeeding mothers during the hospital stay and 49 of those mothers (62%) breastfed exclusively. Even though a relatively low number attended a prenatal breastfeeding class, over half of the participants breastfed exclusively. Also more than half the mothers seen by the lactation consultant breastfed exclusively. Refer to Table 3.



Table 3

*Prenatal Breastfeeding Education and Lactation Support Variables*

Independent Variables	Exclusive Breastfeeding	
	Yes	No
Prenatal Breastfeeding Ed	15 (68%)	7 (32%)
Lactation Consult	49 (62%)	30 (38%)

The review of literature showed that the first two hours after birth are the optimum time to initiate breastfeeding (Aghdas et al., 2014). Fifty-five mothers initiated breastfeeding within the first hour after birth, 13 initiated between the first and second hour, 23 fed between hours two and three, and 19 mothers did not initiate breastfeeding until after three hours of age. The study examined the relationship that feeding time lapse had on exclusive breastfeeding and found that 45 of the 55 mothers who breastfed during the initial hour after delivery, breastfed exclusively. As the time interval increased, so did the number of mothers who supplemented with formula. Results displayed in Table 4.

Table 4

*Time Interval Effect on Exclusive Breastfeeding*

	Interval from Birth to First Feeding			
	1 <sup>st</sup> Hour	1-2 Hours	2-3 Hours	>3 Hours
Total Number	55	13	23	19
Breastfed Exclusively	45 (82%)	6 (46%)	8 (35%)	6 (32%)
Supplemented with Formula	10 (18%)	7 (53%)	15 (65%)	13 (68%)

**Summary**

In this retrospective chart audit, 147 charts of first time mothers were studied. Demographic variables including age, race, educational level, marital status, and payer source were reviewed. A close association was noted between maternal educational level and breastfeeding. Variable such as delivery type, skin-to-skin, time interval before first feeding, lactation consult, prenatal education, and supplementation with formula were also examined. The time interval from delivery until first feeding was found to have a close association to whether or not the mother chose to exclusively breastfeed.

## **CHAPTER V**

### **Discussion**

The health benefits of breastfeeding are well documented. Breastfeeding is inexpensive, convenient, and evidence suggested that it decreased risks for many diseases. Endorsed by AAP, breastfeeding is the preferred choice of feeding for all infants. Breastfeeding is associated with improved nutritional, developmental and immunological outcomes for infants. Maternal benefits include faster recovery from childbirth and a reduction in risk for breast and ovarian cancers and osteoporosis (Persad & Mensinger, 2008). Current nationwide breastfeeding rates fall short of the goals set by Healthy People 2020. What factors influence a mother's decision to breastfeed? The choice not to breastfeed can result in negative consequences and health disparities for mother and infant. The purpose of this study was to determine what variables influenced breastfeeding in first time mothers. If variables can be identified, focused education can be provided to increase breastfeeding rates.

### **Implication of Findings**

The study examined multiple demographic variables to determine if there was any significance between each variable and the initiation of breastfeeding among first time mothers. The greatest percent of women who breastfed were between the ages of 25-44. Mothers with less than a high school education had a higher percentage for formula feeding. The study showed an association between higher education levels and an increased incidence of breastfeeding. This was noted as 29 out of 36 mothers with a two or four year college degree chose to breastfeed and all three mothers with an advanced degree breastfed their infants.

In regards to race, 87 out of 113 Caucasian mothers breastfed compared to 19 out of 30 mothers who were African American. This could be related directly to the higher number of Caucasians that met criteria for the study. One Hispanic mother and three Asian mothers were included in the study and all four breastfed. Although the study included twice as many single mothers as married mothers, data did not show a significant difference in breastfeeding among single and married mothers. One mother in the study was a widow and did not breastfeed.

The results of this study also suggested that there was an obvious association between the time intervals from delivery to initiation of breastfeeding on exclusive breastfeeding. Studies showed that mothers who breastfed within the first hour after delivery, were more likely to exclusively breastfeed and breastfeed for a longer duration. The study indicated that the longer the interval between birth and first breastfeeding resulted in an increased likelihood of supplementation with formula.

Previous studies have shown that prenatal lactation education and professional lactation support after delivery increased the chances of breastfeeding initiation and exclusive breastfeeding (Busch, Logan, & Wilkinson, 2014). Sixty-eight percent of mothers who attended a prenatal breastfeeding class exclusively breastfed during the hospital stay. It was also noted that 62% of mothers that were seen by the Lactation consultant breastfed exclusively. Therefore we can conclude that both prenatal breastfeeding education and lactation support during the hospital stay have a significance influence on whether and not a mother chooses to exclusively breastfeed.

### **Application to Theoretical/Conceptual Framework**

The conceptual framework used for this study was Fishbein and Ajzen's Theory of Reasoned Action. This theory stated that an individual's behavior is governed by a person's attitude toward the behavior, subjective norms relating to the behavior and perceived control. Out of the three components, perceived behavior control was the only one believed to influence behavior directly. Attitudes toward the behavior refer to the person's negative or positive evaluation of performing the behavior. Subjective norms are how a person perceives society's view of the behavior and perceived control refers to how easily a person feels they can perform the behavior. Perceived control can be based external factors (time, money) or internal factors such as ability and confidence. Most mothers made the decision on a feeding method prior to delivery, therefore putting this theory to action. Attitudes about breastfeeding can be influenced by maternal beliefs, social support, and knowledge about the desired action. Prenatal breastfeeding education can provide mothers with the knowledge and confidence needed to breastfeed.

### **Limitations**

There were several limitations in this study. The study took place in a small rural hospital that has a limited representation of ethnic groups and cultures. The measurement used for prenatal education included attendance at a breastfeeding class taught by the lactation consultant as the only choice. Mothers may have attended a breastfeeding class at the local WIC (Women, Infants and Children) office or obtained education from other sources including online and brochures from the physician office. The study did not take this into consideration.

The study does not distinguish between elective and non-elective cesareans nor did it specify operative or spontaneous vaginal deliveries. Studies have shown that cesareans and operative deliveries resulted in longer intervals from time of birth to first feeding. The practice of putting the infant skin-to-skin immediately after delivery was listed as a variable but documentation in the EMR did not clarify if the infant was put skin-to-skin immediately after delivery or within the first hour. Therefore this variable could not be accurately measured.

### **Implications for Nursing**

This topic is significant to nursing because of the low rate associated with exclusive breastfeeding despite the recommendations by numerous professional organizations. The short and long term benefits are multiple. Studies showed a significant correlation between lack of breastfeeding and an increase in both maternal and infant health risks (Busch et al., 2014). Nurses need to encourage and support the breastfeeding mother and implement interventions aimed at improving breastfeeding rates and health outcomes.

“The cornerstone of health for an infant begins with being breastfed” (Busch et al., 2014, p. 10). Breastfeeding is no longer viewed as a natural process but as a learned behavior. For this reason, the provision of focused education during the prenatal period could have a positive impact on rates of breastfeeding among first time mothers.

### **Recommendations**

It would be beneficial to complete more studies on how these study variables affect breastfeeding duration and exclusivity. How do these variable influence the mother’s decision to continue breastfeeding? More studies are needed to determine if

increasing maternal breastfeeding knowledge and confidence through social support has a direct impact on the decision to breastfeed? Education of the mother should begin in the physician office during the initial prenatal visit. Standardized educational materials should be provided and discussed by the primary care provider at each visit. Physicians and nursing staff need to be provided with extensive training and knowledge on breastfeeding promotion and support. In-service education on the importance of placing the infant skin-to-skin immediately after delivery and the initiation of breastfeeding within the first hour after delivery would be beneficial.

### **Conclusion**

Since 2005, professional organizations such as AAP, WHO, AWHONN, and the American Dietetic Association (ADA) have recommended six months of exclusive breastfeeding with the addition of iron-fortified foods along with breastfeeding until at least one year of age (Johnston & Esposito, 2007). “Low breastfeeding rates can negatively impact the health of women and children and the economic status of their families, communities, and the nation (Johnston & Esposito, 2009). Goals set by the U.S. Department of Health and Human Services for Healthy People 2020 that 81.9% of all new mothers initiate breastfeeding remains unmet in the state of South Carolina.

The decision to breastfeed is considered a matter of individual choice. As health care professionals, it is our responsibility to provide mothers with the knowledge and resources they need to make an informed decision.

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