ENSIGN GLOBAL COLLEGE, KPONG

EASTERN REGION, GHANA

FACULTY OF PUBLIC HEALTH DEPARTMENT OF COMMUNITY HEALTH

KNOWLEDGE AND PRACTICES OF NURSING MOTHERS ON EXCLUSIVE BREASTFEEDING IN THE SOUTH TONGU DISTRICT IN VOLTA REGION OF GHANA

BY

RICHARD FORSON

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A THESIS SUBMITTED TO THE DEPARTMENT OF COMMUNITY HEALTH, FACULTY OF PUBLIC HEALTH, ENSIGN GLOBAL COLLEGE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE MASTER OF PUBLIC HEALTH DEGREE

AUGUST, 2024

DECLARATION

I declare that this research work is the result of my original work and has not been used for any academic certificate. The references used in This work have been duly cited and referenced.

Signature

26/08/2023

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DR. STEPHEN MANORTEY		
(Head of Academic Program)	Signature	Date

DEDICATION

I dedicate this research to my Mum (Madam Diana Efua Evans-Appiah), siblings, friends, and loved ones.

ACKNOWLEDGEMENT

I am forever grateful to the Almighty God for giving me the strength and wisdom to complete this work. I acknowledge the contribution of the lactating mothers at South Tongu District Hospital, Sogakope. Without them, this work would not have been completed. My heartfelt appreciation goes to my Supervisor Dr. Steve Manortey for his patience and guidance in preparing this research.

I also deeply appreciate the efforts, encouragement, and love from my mum and friends who helped complete this study.

I also acknowledged the authors of the articles and studies I used in this study for their knowledge and contribution to this field.

ABSTRACT

Background: Breast milk is important for babies because it provides security, cleanliness, and antibodies. It offers energy and nutrients for the first few months before meeting half of a child's nutritional requirements in the second year. Children are facing a variety of dietary difficulties as a result of exclusive breastfeeding habits that do not meet the suggested six-month target. This study aimed to analyze nursing mothers' knowledge and practice of exclusive breastfeeding in Ghana's South Tongu District, Volta Region.

Methods: A cross-sectional quantitative research design was adopted, with 366 nursing moms recruited from South Tongu District Hospital in South Tongu District. Nursing moms were given questionnaires to complete that assessed their knowledge and practice on exclusive breastfeeding. Data was analyzed using SPSS, using frequencies and confidence intervals, and the Chi-Square test was performed to examine the amount of connection between chosen variables at a p-value of 0.05.

Results: In a study of 366 nursing mothers, the majority (63.7%) were well-informed and conscious of the benefits of exclusive breastfeeding, which is limited to giving infants breast milk for the first six months of life. While 6.6% stated breastfeeding should begin when the infant screams, the majority (92.2%) said it should begin on demand. Prenatal clinics provided the bulk of information on exclusive breastfeeding (47.0%), with radio providing 3.5% of the information. 11.3%, friends (18.1%), and family (19.0%) said they obtained the information from other sources. The moms were 30.5 years old on average and 31 years old on average. The survey also discovered that the majority of moms learned about exclusive breastfeeding via radio, friends, family, antenatal clinics, and 11.3% from other sources.

Conclusion: The study findings showed that the majority of the respondents were aware of the concept of exclusive breastfeeding. However, there was a noticeable gap in their practices. The majority, 63.39% reported they face challenges in exclusive breastfeeding with the top three breastfeeding challenges faced by mothers identified as a belief that breast milk alone is not sufficient, a short maternity leave period and low self-esteem.

LIST OF ABBREVIATIONS

AAP	-	American Academy of Paediatrics
ANC	-	Antenatal
ASHA	_	Accredited Social Health Activist
BFHI	_	Baby Friendly Hospital Initiative
BF	-	Breastfeeding
CWC	_	Child Welfare Clinic
EBF	-	Exclusive Breastfeeding
EIB	_	Early Initiation of Breastfeeding
LI	_	Legislative Instrument
NB	_	Newborn
SDG	_	Sustainable Development Goal
UNICEF	-	United Nations International Children's Emergency Fund
WHO	_	World Health Organization

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Breast milk is the best food for newborns. It is secure, hygienic, and loaded with antibodies that help fend off many common kid ailments. Breast milk supplies all the energy and nutrients an infant requires for the first few months of life. It also meets up to half or more of a child's nutritional demands in the second half of the first year and up to one-third in the second year of life.

The World Health Organization (WHO) and United Nations International Children's Emergency Fund (UNICEF) advise mothers to start breastfeeding as soon as possible after giving birth and to breastfeed their child only for the first six (6) months of life, at which point they should not be given any other food or liquids, including water. Breastfeeding should be done whenever a baby requests it, day or night. There's no need to utilize pacifiers, bottles, or teats. Children should start consuming safe, sufficient supplementary meals at six months of age, and they should continue to be breastfed until at least two years of age. (WHO, 2019).

In addition, the World Health Organization (WHO) recommends exclusive breastfeeding throughout the first six months of a baby's life, or more than eight times a day during the first three months of life, for a duration of two years. Mothers who practice exclusive breastfeeding (EBF) benefit from longer lactation amenorrhea, and exclusively breastfed infants get fewer infections and less severe diseases. (Nukpezah, Nuvor and Ninnoni, 2018). Reducing the risk of mothers developing osteoporosis, breast cancer, and gestational diabetes is one of the many health benefits of nursing a baby exclusively for the first six months of life, and continuing the breastfeeding in addition to appropriate solid foods until the child is twelve months old and older. It can also help

women lose weight after giving birth and quickly restore their uterus to its pre-pregnancy form. Reduced chance of developing gastrointestinal illnesses, allergies, asthma, diabetes, obesity, certain childhood cancers, respiratory infections, and diarrhea are other benefits that the newborns may benefit from. (Faleke, Olorunfemi and Oloninefa, 2021).

The American Academy of Paediatrics (AAP) states in its breastfeeding policy statement that mothers should exclusively breastfeed their children for the first six months of life if they do not have any health issues. It is impossible to overstate the significance of proper baby nutrition and the indispensable role nursing plays in a child's survival, growth, and development. (Faleke, Olorunfemi and Oloninefa, 2021). Comparing some sub-Saharan African nations' exclusive breastfeeding practices to the ideal six-month time recommended by WHO and UNICEF, it is unsatisfactory. A few nations with low rates of exclusive breastfeeding are Sierra Leone (8%), Gabon (6%), Cote d'Ivoire (4%), and Chad (2%). Benin (70%), Rwanda (85%), and other nations in the area have also attained high rates of exclusive breastfeeding. Ghana's exclusive breastfeeding rate is around 63% (Tampah-Naah and Kumi-Kyereme, 2013).

In Ghana, a number of initiatives have been put in place to guarantee that babies receive just breast milk. The 1991 Baby-Friendly Hospital Initiative (BFHI) and the establishment of the BFHI Authority are two examples of similar approaches. The Ghana Breastfeeding Promotion Regulation 2000 (Legislative Instrument [LI] 1667) was another initiative. LI 1667's primary goal was to stop the aggressive marketing of breast milk substitutes and encourage breastfeeding across the nation. (Tampah-Naah and Kumi-Kyereme, 2013).

Aware of the significance of breastfeeding exclusively for babies, WHO and UNICEF introduced a number of initiatives in 2013, including the International Code of Marketing of Breast Milk Substitutes and the Breastfeeding Hypothesis Initiative. In response to the ongoing global drop in the breastfeeding rate, their goal was to encourage and support exclusive breastfeeding. Once more in 2018, the WHO, UNICEF, and other relevant parties emphasized the value of family-friendly laws, the encouragement of breastfeeding, and the assistance provided to moms in their efforts to care for and bond with their children. Despite all of WHO's and UNICEF's activities, statistics from 2020 showed that 66.0% of newborns are not nursed exclusively for the suggested six months, which raises concerns about exclusive breastfeeding's impact on public health. (Mohammed A L, Sumbo N R and Der E M, 2015).

Ghana's EBF rate is still below the WHO's target of 90%, even with the implementation of key international standards. According to a report from Ghana's Multiple Indicator Cluster Surveys, the country's EBF fell sharply from 63.7% in 2008 to 46% in 2022. Worldwide, the rate of EBF is low (39%), with 36% of cases occurring in low-income nations. (Nukpezah, Nuvor and Ninnoni, 2018).

In low- and middle-income nations with low EBF prevalence, childhood mortality is high. For example, in Ghana, the documented infant mortality rate is 53 per 1,000 live births, while the mortality rate for children under five is 31 per 1000 live births. These death rates are partially caused by women who do not follow adequate birth-feeding (EFB). (Nukpezah, Nuvor and Ninnoni, 2018).

However, from the literature reviewed for this thesis work, there was no known documented literature on the related factors associated with the knowledge and practice of breastfeeding in the South Tongu District and no known study has revealed a vast majority of EBF among lactating mothers in the major hospitals of the Volta Region.

1.2 Problem Statement

Breastfeeding is one of the most effective ways to promote a child's health and survival. As no breastfeeding has the potential to reduce infant mortality. Global estimates indicate that just 35 percent of newborns are exclusively breastfed, and over 85% of mothers do not follow recommended breastfeeding practices. According to the WHO's definition of exclusive breastfeeding, a woman should always be ready to nurse her child whenever he or she requests it.

Therefore, it has been determined that one of the primary areas of intervention Ghana has to focus on in order to achieve Sustainable Development Goal (SDG) 3, which is to enhance everyone's health and well-being, is good baby feeding practices (Sika-Bright and Oduro, 2013). However, almost 2 out of 3 newborns do not follow the recommended 6-month nursing period—a statistic that has not changed in 20 years. Nursing is virtually hard to do exclusively because of rising levels of education and job, which keep moms away most of the time. The practice of exclusive breastfeeding is not as common in Ghana as it is in other developing nations. The South Tongu District Health Directorate's 2023 annual performance assessment found that the percentage of nursing moms who exclusively breastfeed has decreased by 10%.

Many moms who suspect that their child's mild sickness is related to feeding habits send their kids to South Tongu District Hospital in Sogakope. The improper marketing of breast milk replacements continues to hinder global efforts to raise the rates and duration of breastfeeding. (WHO, 2016). To clarify concepts, encourage adherence, and show parents and medical professionals the advantages of exclusive breastfeeding, the data on this issue will be updated.

Despite all the intervention practices, exclusive breastfeeding keep on declining the South Tongu District of the Volta Region. This goes against the idea that exclusive breastfeeding might be advantageous for both the mother and the child. In light of this, the researchers chose to investigate how nursing mothers perceive the advantages of exclusive breastfeeding.

1.3 Rationale of study

The results of the study will help policymakers in Ghana integrate policies into standard breastfeeding guidelines. This integration will assist in developing tailored interventions and support programs for malnourished babies. By incorporating policies and creating awareness, the study will help healthcare providers ensure they are competent in identifying and addressing challenges that prevent mothers from adhering to breastfeeding protocols. This comprehensive approach can transform policies in Ghana, creating a supportive environment that prioritizes the holistic well-being of affected babies and their mothers. Additionally, the study will serve as a literature review for other researchers and will be published to create further research opportunities on Exclusive Breastfeeding.

1.4 Conceptual framework

The conceptual framework proposes three levels of factors that influence breastfeeding practices: individual, group and society. The framework can be used to generate hypotheses about factors affecting breastfeeding and the types of interventions that might be used to address them. Individual level factors relate directly to the mother, infant, and the 'mother-infant dyad'. They include the mother's intention to breastfeed, her knowledge, skills and parenting experience, the birth experience, health and risk status of mothers and infants, and the nature of early interaction between mother and infant. Group-level factors are the attributes of the environments in which mothers and infants find themselves, the attributes that enable mothers to breastfeed. Societal level factors influence the acceptability and expectations of breastfeeding and provide the background or the context in which mothers' feeding practices occur.

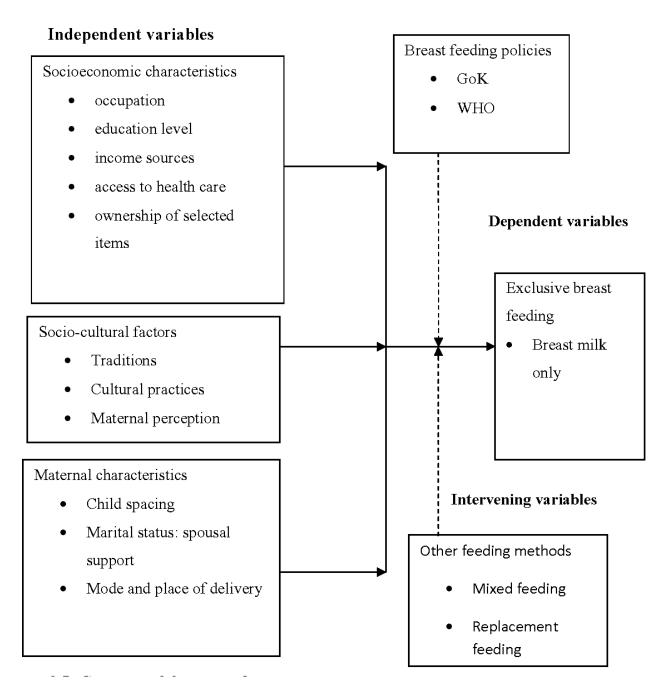


Figure 1: Conceptual Framework adapted and modified

Source: (Hector *et al.*, 2005).

1.5 Research Questions:

- What knowledge do nursing mothers have on exclusive breastfeeding at South Tongu District Hospital?
- 2. What is the perception of exclusive breastfeeding among nursing mothers at the South Tongu District?
- 3. What factors prevent exclusive breastfeeding among nursing mothers at the South Tongu District?

1.6 General Objective:

To determine the level of exclusive breastfeeding among lactating mothers with children aged 0-6 months in the South Tongu District.

1.7 Specific Objective:

- To assess the knowledge of nursing mothers on exclusive breastfeeding in the South Tongu District.
- To assess the perception of benefits of exclusive breastfeeding among nursing mothers at the South Tongu District.
- To explore the factors that prevent exclusive breastfeeding among nursing mothers at the South Tongu District Hospital.

1.8 Profile of study area

South Tongu District

The South Tongu District is located along the Volta River in the southern part of the Volta Region. The district is bordered by Akatsi South, Adaklu, Ada East, Keta, Asuogyaman, Lower Manya Krobo, Shai Osudoku, Ningo Prampram, Ho Municipal, and Ada West. In Tongu, patrilineal inheritance is the primary source of passing on property or possessions within families. Formerly called Tongu District, it was located in Sogakofe (South Tongu) and served as the district capital of the three Tongu Districts that currently exist. North Tongu was created out of the former Tongu District. Central Tongu, formerly known as the North Tongu District, was established in 2012.

Afterward, Adidome, Mafi-Kumase, and the nearby region were split into two distinct administrative districts. The northern section is now known as North Tongu and comprises Battor, Mepe, Juapong, Volo, and Dorfor Area Council, along with several other locations. Meanwhile, the remaining area including Adidome, Dove, Mafi-Kumase, Bakpa, and the surrounding areas, is referred to as Central Tongu. The former District North Tongu, which encompassed Adidome, Battor, Mafi-Kumase, Dove, Juapong, Bakpa, Mepe, Volo, Dorfor, and its surroundings, is the source of the name for the present District North Tongu. Currently, there exist three Tongu enclaves: North Tongu, where the district capital is Battor; Central Tongu, where the district capital is Adidome

The South Tongu District Assembly was created by Legislative Instrument (L.I.) 1466 of 1989, with Sogakofe as its administrative capital. It is located between latitudes 6°10' and 5°45' North and longitudes 30°30' and 0°45' East. To the north, it is surrounded by the Central and North Tongu Districts and is located in the southern portion of the Lower Volta Basin. The Keta Municipality is

located to the south, while the Ada East District of the Greater Accra Region is situated to the west. The Akatsi South District lies to the east. The district covers an area of 643.57 square kilometers, which is equivalent to 3.1% of the total land area of the Volta Region. The district is located in the coastal savannah vegetation zone. As per the 2021 population and housing census, the district has a population of 113,114, with 52,488 males and 60,626 females. Each settlement in the district has a unique festival, with the area divided into five traditional regions: Agave, Fievie, Tefle, Sokpoe, and Vume.

In traditional areas, Agave is considered to be the most expansive. Each region has its own paramount chief and queen mother, and they have autonomous rule. The residents of Agave hold a yearly Dzawuwuza festival. The inhabitants of Sokpoe celebrate Tortsogbeza biennially. Afenorto is commemorated by the residents of Tefle, while Kporleza is often celebrated by the people of Fievie.



Figure 2: Map of the South Tongu District

Source: Ghana Statistical Service

1.9 Scope of study

This study is focused on determining the level of exclusive breastfeeding among lactating mothers with children aged 0-6 months in the South Tongu District. It involved interviewing about 422 mothers who had babies within the a year's duration from the data of the survey. The respondents would use the structured questionnaire as means of data collection. The study is expected to span for three months.

1.10 Organisation of report

This research project report is organized into six chapters. Chapter One is the introduction, which outlines the context of the study, including the background, statement of the problem, rationale of the study, conceptual framework, research questions, and objectives of the study. Chapter Two is a review of the related literature concerning the study. Chapter Three provides the research design and the methodology used in carrying out the study. In this section, there is also a discussion on sampling techniques, research instruments, and procedures of data collection, data analysis techniques. Chapter Four focuses on the results coming from the analysis of the generated study data. Chapter Five discusses the key findings in the context of published literature and Chapter Six gives a conclusion and provides targeted recommendations for the study.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

Breastfeeding provides the best health results for moms and infants and is crucial for a baby's sustenance. Despite its importance, the breastfeeding rate is still below desirable levels in many parts of the world. This review of the literature aims to identify the factors influencing nursing mothers' exclusive breastfeeding practices and to provide an overview of the amount of research on this topic.

2.2 Knowledge of exclusive breastfeeding

Beyond its many advantages for the mother and community, EBF is the best feeding source for the Newborn (NB). The World Health Organization (WHO) advises against introducing supplemental feeding until after exclusive breastfeeding (EBF) has been maintained for at least two years, or for up to six months. (Suárez-Cotelo *et al.*, 2019). The beginning and length of BF have been correlated with both good and negative aspects. Since BF is not an innate trait, those connected to the social and cultural environment are given specific attention. (Suárez-Cotelo *et al.*, 2019).

For the first six months of an infant's life, all women should exclusively breastfeed their child as the global aim for optimal maternal-child health and nutrition. For every newborn, breastfeeding is thought to be the most affordable and convenient source of full nourishment. (Anjum, Ashfaq and Siddiqui, 2007). It has been estimated that if newborns were exclusively breastfed for six months after birth, 1.3 million deaths may be avoided annually. (Afrose *et al.*, 2012). As a social activity, breastfeeding has changed over time in a number of ways. It is crucial to continuously address and research this topic since it is a complicated and significant problem for mother-child

health. (Fonseca-Machado *et al.*, 2012). To achieve the health and optimal growth of infants, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend that all infants should be exclusively breastfed for the first 6 months and continue to receive breast milk until 2 years of age to supplement other foods. Moreover, nursing is recommended as the best method of newborn nourishment in the American Academy of Paediatrics' policy statement since it has positive effects on the health of both moms and babies. (Chen, Shu and Chi, 2001).

The majority of participants thought that it would be best to feed their infant extracted breast milk while they were apart. Only 40% of moms, however, were aware of how long breast milk collected at room temperature should be stored. As this is a common justification for stopping breastfeeding too soon, it emphasizes the importance of counseling women—especially working mothers—on how to conserve their breast milk in order to help them reintegrate into society (Suárez-Cotelo *et al.*, 2019). Professionals in this sector can take action to identify mothers with poor levels of knowledge in order to establish educational programs to boost BF rates, as BF knowledge influences the kind and intention of NB feeding. (Suárez-Cotelo *et al.*, 2019).

While the preclinical group had less information about nursing than the clinical group did, the clinical group's understanding of breastfeeding was higher overall. Future doctors, who are medical students, will be the ones to assist moms with issues linked to breastfeeding (Anjum, Ashfaq and Siddiqui, 2007). The results show that in certain contexts, health professional students' understanding of breastfeeding was inadequate, especially with regard to assessment and management of breastfeeding, and that this knowledge did not always increase after completing a typical curriculum (Chen, Shu and Chi, 2001). The responders lacked enough breastfeeding information, particularly about the impact of medicine on nursing, the necessity of giving water

together with breast milk, the justification for introducing milk formula alongside breastfeeding, the significance of breastfeeding on demand, etc (Čatipović *et al.*, 2017).

The general level of understanding of breast milk is greatly influenced by maternal education. It was discovered that moms who were more educated knew more about breast milk than mothers who were less educated or illiterate. A mother's level of education appeared to have a direct impact on her child's life. greater educated women know how to take greater advantage of life's resources, including health services, child care, and proper feeding practices (Afrose *et al.*, 2012). The bivariate analysis revealed a weak relationship between the mean score on the knowledge exam and the frequency of breastfeeding advice given to expectant mothers during the third trimester. This indicates that the participants frequently gave the pregnant women advice on this social activity, regardless of their degree of nursing knowledge. Because part of what nursing mothers know comes from healthcare professionals' advice, this circumstance may have a detrimental impact on the practice of breastfeeding. Early weaning might result from any information that is inaccurate, devoid of scientific support, or incomplete (Fonseca-Machado *et al.*, 2012).

2.3 Benefits of Exclusive Breast Feeding

There is ample evidence supporting the advantages of exclusive breastfeeding for a child's development, growth, and survival. Mothers who exclusively breastfeed also benefit from improved health. Colostrum is the first vaccine given to babies and has special nutritional and health benefits. Numerous nutrients, including protein, fat, carbs, vitamins, and minerals, are also present in colostrum (Afrose *et al.*, 2012). Breastfeeding appears to be protective against premenopausal and maybe postmenopausal breast cancer, according to strong data.

There is strong evidence of a dose-response impact, with more exclusive breastfeeding for longer periods of time providing more protection (Allen and Hector, 2005). Research has repeatedly demonstrated that the hormonal shifts brought about by nursing promote postpartum healing and reduce mother fertility. Once more, the frequency, intensity, and length of breastfeeding determine how much these modifications will vary (Allen and Hector, 2005). Mothers who breastfeed and lactate also benefit greatly from these health benefits. Benefits include reduced menstrual blood loss and increased child spacing due to lactational amenorrhea, faster uterine involution and decreased postpartum bleeding due to elevated oxytocin concentrations, and a lower risk of ovarian and breast cancer (Anatolitou, 2012). There are known health benefits for moms and babies as well as benefits to the economy, family, and environment.

These advantages could include lower annual health care expenses, lower expenditures for public health initiatives, lower parental employee absenteeism and the resulting loss of family income, more time for attending to siblings and other family matters due to fewer infant illnesses, lower environmental impact from formula can and bottle disposal, and lower energy requirements for the manufacture and delivery of artificial feeding products (Anatolitou, 2012). It is obvious that choosing to breastfeed a baby has a positive impact on the child's health, but the family will also financially gain from this decision (J Clark and Bungum, 2003). Providing family-centered care requires effective breastfeeding support.

Throughout many years, the American Academy of Family Physicians and other prominent health organizations have advised that newborns be breastfed throughout the first 12 months of life, and exclusively breastfed for the first six months. Still, just 19% of American moms achieved these targets in 2011. Currently, fewer than 7% of births in the United States take place in maternity facilities dedicated to these "baby-friendly" practices, despite the fact that the Centers for Disease

Control and Prevention and the World Health Organization have identified ten evidence-based methods that maternity care facilities may support breastfeeding.

This is regrettable because breastfeeding has been shown to lower the risk of pediatric infections (such as pneumonia and otitis), immune system problems (including leukemia and inflammatory bowel disease), and mortality during the first year of life (Schwarz and Nothnagle, 2015). Although the benefits of breastfeeding therapy for children have long been recognized and documented, its prevalence and how its advantages are communicated to nursing mothers are not sufficient in many regions of the world. Despite that vast understanding, relatively little progress has been achieved in improving BF outcomes, such as early initiation and exclusive breastfeeding for 6 months (del Ciampo and del Ciampo, 2018).

2.4 Factors affecting Exclusive breastfeeding

A research indicated that women who gave birth vaginally and nursed their infants during the first hour following delivery had much greater breastfeeding rates. The inability of the baby to nurse, the lack of breast milk, the discomfort experienced by the mother during childbirth, and medical procedures that forbade nursing were all noted as factors that hindered breastfeeding within the first hour following delivery. Additionally, although the LATCH scale score and the amount of time spent nursing did not substantially correlate within the parameters of the study, a study by Gercek et al. (2017) indicated that individuals who began breastfeeding within the first 30 minutes had a considerably higher LATCH score. One of the factors that facilitates nursing is the baby's physiological readiness, which is higher in the first half hour following delivery (Keloglan, Yilmaz and Gumus, 2018). Greater possibilities for breastfeeding, direct mother-infant contact, and integrated nursing care are provided with a normal delivery. The length of nursing and breastfeeding self-efficacy are anticipated to be influenced by delivery style separately. Additionally, it helped hospitals enrich their formulas (Awaliyah, Rachmawati and Rahmah, 2019).

Lack of understanding about the benefits of breastfeeding, how often to breastfeed, and how to store breast milk were the main issues. Comparing the findings to other variables including age, marital status, and family income, they demonstrated that a lack of education was a significant contributor to the lack of breastfeeding information (Afrose *et al.*, 2012). Elements at the individual level are intimately related to the mother, child, and the "mother-infant dyad." These consist of the woman's plan to breastfeed, her expertise, abilities, and past experiences as a parent, the childbirth experience, the health and risk status of both moms and babies and the type of early interactions between the mother and child. All of these have a direct impact on when and how long a person breastfeeds, and they are often linked to social and demographic factors.

2.5 Factors contributing to Exclusive breastfeeding

The research review emphasizes how crucial it is to have modifiable elements, such as intention, confidence, and support, during the breastfeeding process. The aforementioned data underscores the significance of mother confidence in nursing as a means of maintaining breastfeeding. By creating treatments that honor breastfeeding self-efficacy, health care providers can alter a mother's nursing habits. When paired with knowledge of the other variables influencing breastfeeding, self-efficacy may offer a conceptual framework to direct successful treatments (Meedya, Fahy and Kable, 2010). Prenatal intervention can frequently address the psychological variables that impact breastfeeding. Antenatal treatments have the potential to enhance several factors, such as the woman's confidence in nursing, the degree of support from her family and spouse, and the strength of her wish to breastfeed (Meedya, Fahy,. The degree of breastfeeding knowledge and attitudes

toward breastfeeding were found to be influenced by a number of factors, including gender, cultural customs, government legislation, prior personal breastfeeding experience, and the stage of student enrollment (e.g., first year versus final year students) (Chen, Shu and Chi, 2001).

Other research have also reported a detrimental connection between the duration of exclusive breastfeeding and birth weight less than 2,500g.6, 16, and 18 Low birth weight babies may require longer periods of exclusive breastfeeding than other babies because they have a harder time sucking. Additionally, some medical professionals believe that weight gain is the most crucial factor for these babies, so they are given infant formulae, powdered milk, cow's milk, and sugar (Chaves, Lamounier and César, 2007). EIB is correlated with the mother's knowledge, attitude, and the role of midwives, according to the findings and debate. The most important EIB variable is attitude (Ariyani and Handayani, 2015). Midwives are required to provide EIB-related data. They may educate the woman while she is receiving prenatal care. It is intended that the mother will have a greater understanding of the importance of EIB. Additionally, expecting moms received a handbook that contained details on the EIB and its implementation procedures (Ariyani and Handayani, 2015). Some notable correlations between breastfeeding and sociodemographic characteristics were found in the area-based study; these correlations remained even after controlling for other variables. For instance, a 30% increase in the chances of any breastfeeding at the area level at 6-8 weeks is linked to a 15% rise in the number of women 35 years of age or older to 20%. (Oakley et al., 2013).

Reduced breastfeeding start, length, and exclusivity are all significantly impacted by obesity. We came to the conclusion that a large body of research at this time suggests that physiological reasons, such as challenging childbirth, a delayed start to lactogenesis II, and hormone and adipokine imbalances, are probably responsible for obese women's decreased breastfeeding rates (Bever

Babendure *et al.*, 2015). Low exclusive breastfeeding practice was statistically linked to a mother's lack of formal education, income of less than \$100 per month, being a female kid, attending an ANC visit, and having a spouse who does not support her (Jama *et al.*, 2020). To enhance exclusive breastfeeding, it was advised to support women's education, husbands' involvement, prenatal care encouragement, and exclusive breastfeeding counseling during antenatal care (Jama *et al.*, 2020). Research indicates that coworkers' experience and expertise serve as a mediating factor in the assistance provided to nursing moms in the workplace. Furthermore, negative attitudes against breastfeeding and the stigma associated with it in the workplace are significant indicators of a lack of support (Vilar-Compte *et al.*, 2021).

2.6 Myths about Exclusive Breastfeeding

One of the biggest obstacles to the continuation of breastfeeding is thought to be misconceptions regarding the practice. Myths vary by socioeconomic class, developing nation to developing nation, and nation to nation. Health professionals should be able to address myths with a scientific foundation and dispel them in order to encourage breastfeeding among mothers (Koura, 2019a).

Exclusive breastfeeding failure is negatively associated with breastfeeding myths. Beliefs concerning breastfeeding and breast milk that cannot be supported by research are considered negative myths in this study (Isytiaroh, 2018). While not all women practice exclusive breastfeeding, they are aware of it. This is a result of our society's ingrained traditions and practices. Older women have a vital part in the family as well. To dispel these stereotypes, community health workers, ASHAs, and others must put up a lot of effort (Eram, 2017). There are a lot of benefits to on-demand feeding. A complete milk supply may be brought in in the first few days after delivery by putting a newborn to the breast at any and all signs of hunger. In short, there

will be a greater milk supply the more breast stimulation there is. On-demand feeding is also a smart approach to guarantee that the infant will get enough milk to grow correctly. Every newborn takes in varied quantities, and mothers' breasts have varying capacity for storing food. Throughout the day, even the same baby will require different quantities (Koura, 2019b).

The misconceptions related to nursing that participants believed to be true included things like their kids being sick, becoming dimwitted, or developing stained teeth if they didn't nurse in a certain style or at a certain time (Acheampong and Abukari, 2024). Little milk is produced by small breasts. The amount of fat in the breast, not the milk-producing alveoli, dictates its size. The amount of breast tissue needed to nurse a newborn grows throughout pregnancy, regardless of the mother's breast size. Mothers with smaller breasts may still generate enough milk to provide a decent supply as long as they recognize their baby's needs and breastfeed when needed (Koura, 2019b).

2.7 Strategies to improve Exclusive breastfeeding

A designated private space for nursing or expressing milk (such as lactation rooms) and the support of coworkers or supervisors were the most often used strategies and actions to promote, protect, and support breastfeeding in the workplace. These were followed by allowing flexible scheduling to support milk expression during work and having written policies to support breastfeeding mothers (Vilar-Compte *et al.*, 2021). Improving workplace rules that provide women access to appropriate child care, lactation breaks, and maternity leave can also make it more likely for women to breastfeed exclusively for up to six months and to continue nursing with supplementary meals until their children are two years old and older (Requejo and Black, 2014). Even though there was a significant 6-fold rise in EBF at 6 months, the intervention groups were still unable to reach high EBF rates, and the increase was still significantly below guidelines. This confirms the finding that EBF is challenging and suggests that raising the rate of EBF in both developing and rich nations would need much more than just providing mothers with knowledge and assistance (Keister and Werner, 2010).

Such protections for women are included in the Maternity Protection Convention 183, but convention ratification is moving very slowly. As of 2012, just three of the 75 Countdown countries—where over 95% of all maternal and child deaths occur—had ratified the treaty (Requejo and Black, 2014). In poor nations as opposed to industrialized nations, we have observed a higher rise in breastfeeding rates as a result of promotion initiatives. The first and most important reason is that research conducted in developed and developing nations used different methodologies. The fact that women in underdeveloped countries often have lower levels of knowledge and education than women in industrialized countries might be one of the other factors (Keister and Werner, 2010). Medical professionals should inform breastfeeding working women about breast pumps and how to store expressed breast milk. When prescribing medicines, doctors need to be aware of their patients' lactation status since some drugs might impair milk production or be harmful to nursing infants. The national goals for breastfeeding can be achieved by encouraging and supporting breastfeeding.

2.8 Steps to successful exclusive breastfeeding

Given the unique advantages of breast milk and breastfeeding for mothers and children in neonatal intensive/intermediate care, it is critical that lactation and breastfeeding assistance be provided by professionals and that the information provided is evidence-based, tailored to the needs of the individual, and consistent. The stages of lactation and breastfeeding consist of the following: the beginning of lactation, achieving and maintaining adequate milk production, the beginning of breastfeeding, and the mother achieving her breastfeeding objectives (ideally, exclusive breastfeeding), all of which are combined with a transition phase that features feeding practices and dietary guidelines that support breastfeeding (Nyqvist *et al.*, 2012). To enhance and broaden BFHI, healthcare facilities must assess their present postnatal and prenatal education initiatives. A decision on the mother's preferences for skin-to-skin contact, rooming-in, and feeding style is made as part of prenatal education. As early as 32 weeks of gestation, maternal confidence in attaining exclusive breastfeeding was found to be predictive of breastfeeding at 6 months of age (Gomez-Pomar and Blubaugh, 2018). Appropriate breastfeeding techniques are crucial for an infant's continued physiological and psychological development as well as for a healthy start in life. BFHI is regarded as one of the most effective global initiatives ever launched to safeguard, encourage, and assist breastfeeding (Kakrani *et al.*, 2015). Therefore, the most important instrument for future practice improvement for medical and nursing students is to acquire accurate knowledge about the same. In addition to teaching BFHI as part of their usual curriculum, lactation specialists can assist with workshops, seminars, and ongoing medical education to promote BFHI (Kakrani *et al.*, 2015).

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This section on Study Design and Methodology covers information regarding the study methodology and data sources, the sample needed, study variables, ethical considerations, and the planned statistical analysis. The details are presented below:

3.2 Study design

A cross-sectional quantitative design was employed in this study because it allowed me to examine the relationship between the variables without manipulating them. The cross-sectional design allows for the examination of multiple independent variables and their relationship with a dependent variable at a particular point in time. Moreover, the variables of interest are already present in the respondents, and the variables were not manipulated.

3.3 Data collection methods and tools

A questionnaire was carefully constructed to elicit responses that would answer the research questions. The research questions guided the construction of the questionnaire. It was made up of three sections. **Section A** entails demographic information, which covers areas such as age, educational background, marital status, number of children respondents have, age of current baby, occupation, and who they were staying with. **Section B** covers the perception of exclusive breastfeeding, and **Section C** entails the factors that prevent the practice of exclusive breastfeeding among nursing mothers.

3.4 Study population

The targeted population includes all resident lactating mothers receiving care at the Postnatal Unit and attending the Child Welfare Clinic (CWC) of the South Tongu District Hospital, located in Sogakope.

3.5 Study site

The study site for this project was the South Tongu District in the Volta Region of Ghana—specifically, the South Tongu District Hospital, Sogakope.

3.6 Inclusion and exclusion criteria

3.6.1 Inclusion criteria

Respondents who are at least 18 years of age, which makes them legally able to decide on their own. Respondents who are also currently breastfeeding their babies. Those who voluntarily agreed to participate in the study were included.

3.6.2 Exclusion criteria

Breastfeeding mothers who are less than 18 years of age were not selected, nor were those who are not currently breastfeeding their babies. Those who were unwilling to take part in the study were also not included in the study.

3.7 Sampling Technique and Sample Size

A Systematic Sampling technique was employed where a skip pattern of two (2) was used to ensure that every respondent had the same chance of being represented in the sample and that the respondents were fairly represented. A sample of 366 lactating mothers who attend the Postnatal and Child Welfare Clinic at South Tongu District Hospital were selected. Since the sampling population is not very large, the appropriate percentage of respondents was selected. The sample size was calculated using the formula by Snedecor and Cochran (1989).

$$n_{o} = \frac{(Z_{\alpha/2})^{2} * p(1-p)}{d^{2}}$$

Where,

n = required sample size,

 $\mathbf{Z}_{\alpha/2}$ = reliability co-efficient = 1.96 at a 95% confidence level

 \mathbf{p} = proportion of study population = 0.8 conventional breastfeeding mothers

(Hector et al., 2005)

 $\mathbf{d} = \text{margin of error} = 5\% \text{ or } 0.05$

Therefore,

$$n = \frac{(1.96)^2 \times 0.8 (1 - 0.8)}{(0.05)^2}$$

$$n = \frac{3.66 * 0.25}{0.025} = 366$$

A 10% non-response rate was estimated on the calculated sample, resulting in about 37 additional respondents. The number was then added to the projected sample. Therefore, bringing the total working sample to 403.

3.8 Data collection procedure

After administrative permission was granted by the District Director of Health Services and the Heads of the South Tongu District Hospital, the researcher and his research assistants visited the hospital on specified dates. On the days of the data collection, the eligible breastfeeding mothers were randomly selected and seated. The printed questionnaires were administered to them and each participant was given between 20 and 30 minutes to complete the questionnaires after signing the consent form/assent form. The instructions were read by the researcher, and clarifications were provided to any participant who requested clarifications. Research assistants were on standby to assist the participants throughout the study period. The completed questionnaires were retrieved for data entry and analysis.

3.9 Pre-testing

The questionnaire was administered to 20 breastfeeding mothers at Richard Novati Hospital for pretesting. This is a private hospital located in Sogakope in the Volta Region of Ghana where the respondents were perceived to have the same sociodemographic characteristics as those in the chosen study sites. The pretesting helped to evaluate respondents' comprehension of the questionnaire and identify and address potential problems with the questionnaire, making it more reliable and valid. Results from the pretesting were included in the analysis.

3.10 Data Handling and Analysis

Data collected from the hospital was entered into the SPSS analytic software for analysis. Data was cleaned by removing missing data and duplicates. The collected data will be securely kept for

10 years before disposal. To address the first objective, percentages with confidence intervals were used to determine the knowledge of nursing mothers on exclusive breastfeeding. Objectives two, three, and four were analyzed with Pearson's Chi-Square test at a p-value threshold set at 0.05.

3.11 Ethical Considerations

The researcher sought ethical approval from the Institutional Review Board of the Ensign Global College. Administrative approval was further sought from the Ghana Health Service and the hospital's Medical Superintendent. Respondents were duly informed about the purpose of the study, and consent was sought before answering the questionnaire. Any information regarding the identity of the respondents was not required to ensure anonymity and confidentiality.

3.12 Limitations of study

The researchers encountered several challenges during the study. Many lactating mothers were unwilling to participate after all efforts were made to explain the study's rationale. Furthermore, the cost of printing and carrying out the research was financially challenging. There was also the potential of recall bias creeping into the study as some of the participating mothers found it very difficult to mention their own birthdates and recount vividly whether they had not fed their babies just the breastmilk in the last couple of weeks. Finally, it was realized that the sample size was too small to generalize the key findings to all lactating mothers in Ghana.

3.13 Assumptions

Some assumptions related to the research were encountered

- Mothers generally understand the basics of breastfeeding but may not have comprehensive knowledge of exclusive breastfeeding.
- 2. Nursing mothers who have received education on EBF are more likely to practice it.
- 3. Socio-cultural factors influence nursing mothers' decisions to practice EBF.
- 4. Nursing mothers who have support from healthcare providers, family, and friends are more likely to practice EBF.
- 5. Nursing mothers who have experienced difficulties with breastfeeding in the past may be less likely to practice EBF.

CHAPTER FOUR

4.0 RESULTS

4.1 Socio-demographic characteristics of the participants

Of the four hundred and three (403) questionnaires distributed, only three hundred and sixty-six nursing moms (n= 366) completed them, bringing the study response rate to around 90.81%. The participants' ages ranged from 18 to 44 years or older. Participants aged 18 to 22 formed around 16.7%. Those aged 23-27 years made up 18.0% of the total, those aged 28-33% made up 26.0%, those aged 34-38 made up 23.0%, those aged 39-43 years made up 11.2%, and those aged 44 and over made up 5.2%.

Regarding the participants' highest attained educational qualification at the time the study was conducted, it was noted that approximately 20.8% of them had no formal education, 16.1% had only basic/elementary education, 24.3% had secondary-level education, 14.8% had vocational training, and 24.0% had tertiary education.

Regarding marital status, 52.7% of participants stated that they were married at the time of the engagement, 30.1% were single, 11.2% admitted to cohabitation with their partners, 3.0% were dating, and 3.0% had been divorced.

The question determining whether the participants were actively engaged in any occupation yielded the following: 50.8% were businesswomen/traders, 20.2% were career public servants, 3.8% were skilled workers/artisans, and 25.1% were jobless. Mothers in this study had an average age of 31 years with a standard deviation of 1.41, and the median age was similarly 30.5 years (Table 1).

Demographic characteristics	Frequency (n=366)	Percentages, %
Age Range (years)		
S.D= 1.41		
Mean Age =31yrs		
Median age =30.5yrs		
Age Groups		
18-22	61	16.7
23-27	66	18.0
28-33	95	26.0
34-38	84	23.0
39-43	41	11.2
44+	19	5.2
Educational Qualification		
No formal educ.	76	20.8
Basic/Elementary	59	16.1
SHS/Secondary	89	24.3
Vocational	54	14.8
Polytechnic	34	9.3
University	54	14.8
Marital status		
Single	110	30.1
Married	193	52.7
Cohabitation	41	11.2
Dating	11	3.0

Table 1: Socio-demographic characteristics of participants

Divorced	11	3.0
Occupation		
Unemployed	92	25.1
Trader	186	50.8
Civil Servant	74	20.2
Others	14	3.8

Source: Field Data, 2024

4.2 Knowledge about Exclusive Breastfeeding (EBF)

Most (63.7%) of the participating nursing mothers had a good knowledge and awareness about exclusive breastfeeding, 93.7% of the mothers correctly defined exclusive breastfeeding as a practice of feeding infants with breast milk only for the first 6 months of life. The advantages of breast milk over infant formula milk were well known to the mothers. The majority (90.2%) of mothers agreed that breastfeeding should begin on the infant's request, whereas 6.6% said it should be provided when the baby screams, and 3.3% said breast milk should be given every two hours. The majority (47.0%) of the moms had learned about EBF via antenatal clinics. Other sources of information were radio (3.5%), friends (18.1%), family (19.0%), television (11.3%), and newspapers (1.3%).

Parameters	Frequency (n=366)	Percentages, %
Breastfeeding after the child is born		
As soon as possible	87	23.8
Within 30 minutes	146	39.9
Between 30-60 minutes	34	9.3
After 1 hour	99	27.0
Definition of EBF		
Correctly defined	343	93.7
Incorrectly defined	23	6.3
Duration of EBF		
On-demand	330	90.2
When baby cries	24	6.6
Every two hours	12	3.3
Main source (s) of information		
Friends	114	18.1
Radio	22	3.5
TV	71	11.3
Newspapers	8	1.3
Health Facility	296	47.0
Relatives	120	19.0

Table 2: Knowledge of Nursing Mothers on Exclusive Breastfeeding (multiple responses)

Source: Field Data, 2024

4.3 Assessing Factors associated with the disadvantage of feeding your baby with artificial formulae.

Table 3 below illustrates the assessed maternal factors associated with the disadvantage of feeding a baby with artificial formulae with on selected sociodemographic characteristics of the respondents at a 95% Confidence Interval.

On the age of the mothers, it was clearly noted from the analysis that the indicator has a fairly statistical significant association with the response on whether the lactating mother was aware of the "*Disadvantage of feeding a baby with artificial formulae*". The observed p-value was 0.048, which was less than the threshold of 0.05; the majority of the mothers (80/366) in the age group 28-33 years, representing 21.86%, responded in the affirmative to this question.

Similarly, the mothers' attained highest educational status was found to have a strong statistical significant association with knowing very well that using artificial formulae feeding for their babies poised danger. The observed p-value was 0.030, which was also less than the threshold of 0.05; the majority of the mothers (78/366) who answered "*Yes*" to this particular question had SHS/Secondary level of education, representing 21.31% of the total study respondents.

The two other indicators involving the reported marital status and occupation of the mothers engaged in the study vis-à-vis their association with the question under consideration clearly revealed the lack of statistical association on the subject matter. Both assessed indicators revealed p-values of 0.664 and 0.607, respectively. These p-values are more than the chosen threshold of 0.05. It should be noted, however, that Married women and Traders constitute the majority of those who answered positively to the question (**See Table 3**).

Variables	Disadvantage of feeding your baby with artificial formulae		Chi-square, χ^2	P- value
Ages of Mother	Yes	No		
18-22	53(52.0)	8(9.0)	0.943	0.048
23-27	57(56.3)	9(9.7)		
28-33	80(81.0)	15(14.0)		
34-38	73(71.6)	11(12.4)		
39-43	33(35.0)	8(6.0)		
44+	16(16.2)	3(2.8)		
Mother's Qualification				
No formal educ.	62(64.8)	14(11.2)	6.541	0.030
Basic/Elementary	47(50.3)	12(8.7)		
SHS/Secondary	78(75.9)	11(13.1)		
Vocational	46(46.0)	8(8.0)		
Polytechnic	28(29.0)	6(5.0)		
University	51(46.0) 3(8.0)			
Marital Status				
Single	99(91.8)	11(16.2)	2.3	0.664
Married	163(164.5)	30(28.5)		
Cohabitation	31(35.0)	10(6.0)		
Dating	10(9.4)	1(1.6)		
Divorced	9(19.4)	2(1.6)		
Mother's Occupation				
Unemployed	79(78.4)	13(13.6)	2.052	0.607
Trader	162(158.6)	24(27.4)		
Civil Servant	60(63.1)	14(10.9)		
Other	11(11.9)	3(2.1)		

Table 3: Maternal factors associated with the disadvantage of feeding your baby with artificial formulae

Source: Field Data, 2024

4.4 Challenges/Barriers to Exclusive Breastfeeding (EBF)

To ascertain the challenges faced by the mothers that could hinder their involvement in exclusively breastfeeding their babies. They were directly asked to either confirm or deny the situation. The majority, 232(63.39%), reported in the affirmative, with the result displayed in the chart below (**Fig. 3**). As to the specific details on this, it was revealed that some think they do not have enough confidence in themselves being able to practice it. Others alluded to low self-esteem, blisters on the nipple, and contraction of the uterus. Couple of the respondents also stated spending more hours at the work place was a major challenge to them.

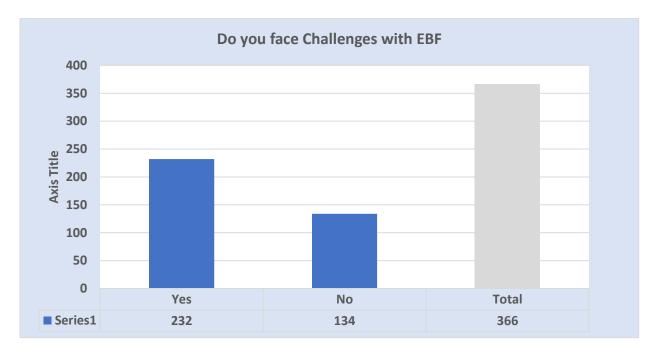


Figure 3: Challenges of EBF

4.5 Maternal Factors Associated with Challenges/Barriers to Exclusive Breastfeeding

(EBF)

A bivariate analysis to check the level of association between the admission of EBf challenges and selected factors confirmed that only the respondents' Age Group was statistically significant, with

an observed p-value of 0.022. As shown in Table 4 below, all other tested variables proved otherwise.

Variables	Do you face any challenges in EBF		Chi-square, χ^2	P- value	Inte	dence erval 99%
Ages of Mother	Yes	No			Lower	Upper
			10.00		Bound	Bound
18-22	34(38.7)	27(27.3)	10.276	0.022	0.007	0.037
23-27	33(41.8)	33(24.2)				
28-33	66(60.2)	29(34.8)				
34-38	59(53.2)	25(30.8)				
39-43	28(26.0)	13(15.0)				
44+	12(12.0)	7(7.0)				
Mother's Qualification						
No formal educ.	51(48.2)	25(27.8)	5.923	0.142	0.106	0.178
Basic/Elementary	34(37.4)	25(21.6)				
SHS/Secondary	59(56.4)	30(32.6)				
Vocational	39(34.2)	15(19.8)				
Polytechnic	20(21.6)	14(12.4)				
University	29(34.2)	25(19.8)				
Marital Status						
Single	70(69.2)	40(40.3)	2.3	0.664	0.6	0.728
Married	126(122.3)	67(70.7)				

 Table 4: Maternal Factors Associated with Challenges/Barriers to Exclusive Breastfeeding

Cohabitation	25(26.0)	16(15.0)				
Dating	5(7.0)	6(4.0)				
Divorced	6(7.0)	5(4.0)				
Mother's Occupation						
Unemployed	62(58.3)	30(33.7)	5.812	0.148	0.10	0.195
Trader	123(117.9)	63(68.1)				
Civil Servant	41(46.9)	33(27.1)				
Other	6(8.9)	8(5.1)				

Source: Field Data, 2024

CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

This study examined the knowledge and practices of nursing mothers regarding exclusive breastfeeding in the South Tongu district of Ghana. This chapter discusses the study's key findings.

5.2 Sociodemographic Characteristics

The average age of mothers in this research stood at 31 years, with a standard deviation of 1.41, and the median age also stood at 30.5 years. Most women were between the ages of 28 and 33, representing 26% of the sample. This corroborates with the study by Alrasheedi (2023), who sought to identify the factors associated with early breastfeeding initiation in central Saudi Arabia. Just over 5% of the women were over 44. This corresponds with a study conducted in Kaduna, Nigeria, on a similar topic. Of the 230 respondents, only three (3) of them were 40 years and above.

The majority of the women had secondary level education in the current study, representing 24.3%, a figure slightly above those with tertiary level education at 24%. The study conducted by Faleke et al., 2021 had about the same finding on the educational status of the women in Kaduna. In our study, a significant percentage (20.3%) had no formal education. The study in Kaduna, however, had a low number of participants who did not have any formal education. As expected, most of the women were married (52.7%), although a significant number were single (30.1%). A similar study conducted in Ghana by Tampah-Naah and Kumi-Kyereme, 2013 also found that many breastfeeding mothers recruited for the study were married.

Concerning occupation, 50.8% of the respondents run their own trading business. This includes cosmetic shops, grocery shops, and hardware shops in the district. Only 20.2% were civil servants working across various offices like the local government, district education, and health offices, while 25.1% were unemployed, an indication of the economic climate within the district.

5.3 Knowledge of nursing mothers on exclusive breastfeeding

The findings from this study show that 93.7% of the mothers correctly defined exclusive breastfeeding. In contrast to this finding, a systematic review by Still *et al.*, (2017) found that 70.9% of mothers correctly define exclusive breastfeeding, but misconceptions about water intake during breastfeeding require a standardized tool for accurate data collection. This shows that women in South Tongu have far heard about the education on exclusive breastfeeding. The difference in this could be attributed to regional variation and the fact that the systematic review presented a pooled prevalence.

Almost 64% of mothers were familiar with exclusive breastfeeding and could correctly define it as the practice of feeding babies exclusively breast milk for the first six months of life. They also understood the necessity of nursing. In contrast, Dukuzumuremyi et al. (2020) found that in East Africa, 84.4% were aware of breastfeeding. East Africa has a better awareness of breastfeeding than South Tongu. In examining nursing moms' knowledge of exclusive breastfeeding, Mohammed et al., (2022) discovered that more than half (67.20%) had a solid understanding of it and could properly characterize it. They probed deeper into the nursing moms' understanding of the necessity of EBF, concentrating on its nutritional benefits. The difference might be in how health services are administered and the degree of emphasis placed on exclusive breastfeeding. When asked about their sources of information on exclusive breastfeeding, antenatal clinics were the major source of information. This is consistent with the Kaduna research, in which prenatal clinics were found to be the primary source of information, as opposed to the present study, which investigated awareness of the optimum periods for breastfeeding. Unlike in this study, friends and relatives provided more than 30% of the information on exclusive breastfeeding. In contrast, Yakubu and colleagues found that just 5 respondents identified friends and family as sources of knowledge. Unlike Yakubu and colleagues, who claimed that 2.6% of women had never heard of exclusive breastfeeding, all respondents had heard of it.

When asked about the time-lapse for the first breastfeeding of newborns, 146 of the nursing mothers iterated this should be done within the first 30 minutes after birth. A significant number (99) indicated that breastfeeding should be done one hour after birth. In the Nkwanta area where Mohammed *et al.(2019)* conducted their study, they found that 94.5% ascertained breastfeeding should be done on demand by the child. This can be elaborated to state that initial breastfeeding depends on the baby. If the baby has no need for it immediately after birth, then there probably may be no need for it.

Participants' socio-demographic traits are typical of women in the South Tongu District, where medium socioeconomic positions and high levels of education are highly valued. The majority of the participants were married, educated, businesswomen. Nearly 79.2% of the participants in this survey have a formal education. The study revealed that mothers had a high degree of awareness and understanding regarding EBF practice. This may be because most of the mothers had access to the media, more than 92% of them gave birth in a hospital, and throughout the prenatal and postnatal clinics, they learned a great deal about the health advantages of EBF. The results of this study, which indicated that 47% of the participants learned about EBF from prenatal clinics, make this extremely clear. Attending prenatal appointments allowed mothers to receive pertinent

information about EBF and increased their likelihood of using it. Additionally, the majority of participants agreed that exclusive breastfeeding has health benefits and protects against infections.

Additionally, the majority of mothers correctly agreed that the duration of exclusive breastfeeding (EBF) should be on demand, given when the baby cries, or given every two hours. In contrast, the majority of mothers agreed that EBF should be given up to six months, as recommended by the World Health Organization. Improved maternal knowledge, comprehension, and awareness of the advantages of exclusive breastfeeding can be credited to the study's findings of early breastfeeding initiation and reduced pre-lacteal feeding. Their awareness may explain that formal job schedules would not constrain them and may freely nurse their children whenever they like.

5.4 Level of Association with Maternal factor

Among the maternal factors associated with exclusive breastfeeding and whether mothers faced any challenges implementing it, mother's age count is statistically significant (p=0.022). However, educational qualification (p>0.005) and occupation (p>0.005) of nursing mothers were found not to be statistically significant in influencing the challenges that may be facing in exclusive breastfeeding. However, this conclusion contrasts that of a comparable done by Afrose et al. (2012) in Dakar City, where respondents with a secondary level of education are strongly related (p<0.001) compared to other groups (illiterate, primary, and upper secondary).

5.5 Challenges of exclusive breastfeeding

The majority, 63.39% reported they face challenges in exclusive breastfeeding The top three breastfeeding challenges faced by mothers in Ghana are a belief that breast milk alone is not sufficient, a short maternity leave period, and socio-cultural pressure to introduce water and artificial feeds (Diji *et.al.*, 2017). Even though the study by, Diji *et.al.*, (2017) did not express in

percentage, there were notably many challenges. Similarly, a study in Kenya by Tuthill *et.al.*, (2020) Women living with HIV are more likely to maintain exclusive breastfeeding for six months, while food insecurity, hunger, depressive symptoms, and HIV infection are challenges faced by women in western Kenya.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This unit shows the conclusions inferred from the study and recommendations made to enable form policy to strengthen the management of the knowledge and practice of exclusive breastfeeding amongst nursing mothers in the South Tongu District in the Volta Region of Ghana.

6.2 Conclusions

The study's conclusions demonstrated that the majority of the participants were knowledgeable but not fully engaged in exclusive breastfeeding. The age, occupation, and level of education of mothers in South Tongu District all had an impact on their decision to exclusively breastfeed.

The study's findings highlighted a few obstacles to the application of EBF. The most prevalent ones are inadequate milk supply, cultural beliefs, fear of changing one's breast shape or size, work-related stress, and the time-consuming aspect of the EBF practice. A pleasant and favorable atmosphere is necessary for the best practice of exclusive breastfeeding, and this can be achieved with the help of family, healthcare professionals, and the implementation of breastfeeding-friendly work-related legislation. Thus, the Ghanaian government's approval of a three-month maternity vacation for women employed in the public sector is very praiseworthy.

With regards to babies who mothers adhered to exclusive breastfeeding are likely to get all associated benefits with exclusive breastfeeding as compared to babies who were given mixed feeding and artificial formulae. For mothers who adhere to exclusive breastfeeding they are likely to derived benefits to themselves as compared to mothers don't practice exclusive breastfeeding.

The predictors factors associated with exclusive breastfeeding practice among mothers are mother's age, marital status, Mothers educational qualification, occupation, all benefits of exclusive breastfeeding to the baby and all the benefits of exclusive breastfeeding to the mother.

6.3 Recommendations

Based on the findings of this study, the following recommendations are made:

The District Health Directorate should offer more education to lactating mothers to acknowledge the full benefits of exclusive breastfeeding to encourage practice. Lactating mothers should be taught by health personnel how to manage breastfeeding challenges such as cracked and painful nipples, breast engorgement, and infections. Public Health Nurses in their routine home visits, should supervise breastfeeding practices to correct any difficulty encountered by lactating mothers. We advocate for expanded workplace breastfeeding rules and EBF intervention programs, as well as extending maternity leave to six months. Additionally, governments and non-governmental organizations must step up their campaigns for practical education and enlightenment that address issues related to exclusive breastfeeding. Ghana Health Service should institute Pregnancy schools for Mothers at all facilities to enable mothers learn basic pregnancy related issue during and after delivery.

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APPENDICES

APPENDIX I

This questionnaire is meant to collect data on the knowledge and practices of exclusive breastfeeding among lactating mothers in South Tongu District Hospital, Sogakope. It is purely an academic exercise and any information gathered will be treated with utmost confidentiality. No name is required. You are to tick or fill in the space provided where applicable. Your voluntary participation is very much welcome. Thank you.

RESEARCH TITLE - KNOWLEDGE AND PRACTICES OF NURSING MOTHERS ON EXCLUSIVE BREASTFEEDING IN THE SOUTH TONGU DISTRICT IN VOLTA REGION OF GHANA

SECTION A: DEMOGRAPHICS

- 1. Age: 18 22 [] 23 27 [] 28 33 [] 34 38 [] 39 -43 [] 44 or more [].
- Educational background: No formal educ. [] Basic/Elementary []
 SHS/Secondary [] Vocational [] Polytechnic [] University []
- 3. Marital status: Single [] Married [] Cohabitation [] Dating
 [] Divorced []
- 4. Occupation: Unemployed [] Trader [] Civil Servant [] Other

5. Emergency contact information: Name.....

Phone number..... Email

Relationship.....

SECTION B: KNOWLEDGE OF NURSING MOTHERS ON EXCLUSIVE BREASTFEEDING

6. When are mothers supposed to start breastfeeding after the child is born?

As soon as possible [] Within 30 minutes [] Between 30 to 60 minutes [] After 1 hour []

7. What do you understand by exclusive breastfeeding?

I.	Feeding the baby with only breast milk		[]
II.	Breastfeeding the baby without adding anything for six months		[]
III.	Feeding the baby with only breastmilk and water		[]
IV.	Feeding the baby with breastmilk, water and vitamins []		

8. How often should a lactating mother breastfeed her baby

On demand	[]
When the baby cries	[]
Every two hours	[]
Every four hours	[]

9. Where did you get the above knowledge from? (Select as many as applied) Friends []
Radio [] Television [] Health facility [] Newspapers []
Relatives []

SECTION C: PERCEPTION OF BENEFITS OF EXCLUSIVE BREASTFEEDING

10. What are some of the benefits of exclusive breastfeeding to the baby?

It is readily available	[]
It is not expensive	[]
It is the best food for the baby	[]
It is easily digestible for the infant	[]
It enhances bonding between mother and child	[]
The child does not fall ill	[]
The baby maintains adequate body weight	[]
The baby becomes smart	[]

11. What are some of the benefits of exclusive breastfeeding for the mother?

She does not bleed a lot during breastfeeding	[]
There is bonding between mother and child	[]
Mother does not fall ill	[]
Mother maintains adequate weight	[]

12. Are there some disadvantages of feeding your baby with artificial formulae?

Yes [] No []

If yes, which of the under listed could happen? (Please tick as many as apply)

i.	It is expensive	[]
ii.	Infection	[]
 111.	Diarrhoea	[]
iv.	Poor growth rate	[]
v.	Weight loss	[]
vi.	Anaemia	[]

SECTION D: CHALLENGES /BARRIERS TO EXCLUSIVE BREASTFEEDING

13. Do you face any challenge(s) in breastfeeding your baby exclusively?

Yes [] No []

14. What factors make it difficult for you to breastfeed your baby exclusively? (Please tick as many as apply)

i.	Lack of confidence in breastfeeding	[]	
ii.	When you are anxious	[]	
iii.	Low self-esteem	[]	
iv.	Painful nipples	[]	

v.	Cracked nipples	[]
vi.	Breast engorgement	[]
vii.	Blisters on the breast	[]
viii.	Contractions of the uterus	[]
ix.	Inability of position the baby well	[]
x.	When there is no breast milk in the breast	[]
xi.	Spending more hours at the work place	[]

APPENDIX II

CONSENT FORM (PARTICIPANTS)

TITLE OF STUDY: KNOWLEDGE AND PRACTICES OF NURSING MOTHERS ON EXCLUSIVE BREASTFEEDING IN THE SOUTH TONGU DISTRICT OF GHANA.

General Information about Research

This study seeks to find out about your knowledge and practices on exclusive breastfeeding and how you manage it especially over the past few months. This study will help us to understand the challenges that you face in breastfeeding to help us develop possible solutions to address these challenges for breastfeeding mothers in the district. This study will take about 20 minutes. You will be asked a number of questions and your role is to respond according to your current knowledge and practices on exclusive breastfeeding. There are no right or wrong answers and therefore, please feel free to as for clarifications.

Benefits/Risks of the study

There are no foreseeable direct risks associated with your participation in this study except for your time (20mins) to be spent answering the questions.

There are no direct benefits to you but the findings will help in informing health promotion interventions to address challenges associated with knowledge and practices of exclusive breastfeeding.

Confidentiality

• No data you provided will be disclosed to anybody except my supervisor. The data will not associate any individual with specific responses. Thus by signing a written consent form, you or your representative is authorizing such access.

• You have the right to access information about you collected as part of the study.

Compensation

There are no compensation packages except verbal appreciation. However, health education will be given to each participant at the end of the study.

Withdrawal from Study

- Your participation in this study is voluntary and you may withdraw at any time without penalty.
- You will not be adversely affected if you decline to participate or later stop participating.
- You or your legal representative will be informed in a timely manner if information becomes available that may be relevant to your willingness to continue participation or withdraw.

Potential risk

There are no foreseeable risks in this study.

Benefits

Health education will be given to participants to show appreciation for answering the questionnaire.

Confidentiality

Information shared will not be disclosed to anyone outside the research team. No names will be written on the questionnaire. All information from this research will be kept private.

APPENDIX III

PLAGIARISM REPORT

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ORIGINALITY REPORT

	7% 14% 7% 10% STUDENT FOURCES PUBLICATIONS 10%	ERS
PRIMAR	Y SOURCES	
1	ugspace.ug.edu.gh Internet Source	2%
2	www.ajol.info Internet Source	2%
3	Submitted to University of the Sunshine Coast Student Paper	1,
4	internationalbreastfeedingjournal.biomedcentral.	.com
5	archpublichealth.biomedcentral.com	1,
6	erepository.uonbi.ac.ke	1,
7	Submitted to University of Ghana Student Paper	1 %
8	listens.online Internet Source	1,