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COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA**

**EXCLUSIVE BREASTFEEDING PRACTICES AMONG FIRST-TIME MOTHERS
IN KASSENA-NANKANA MUNICIPALITY**

BY

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DEGREE**

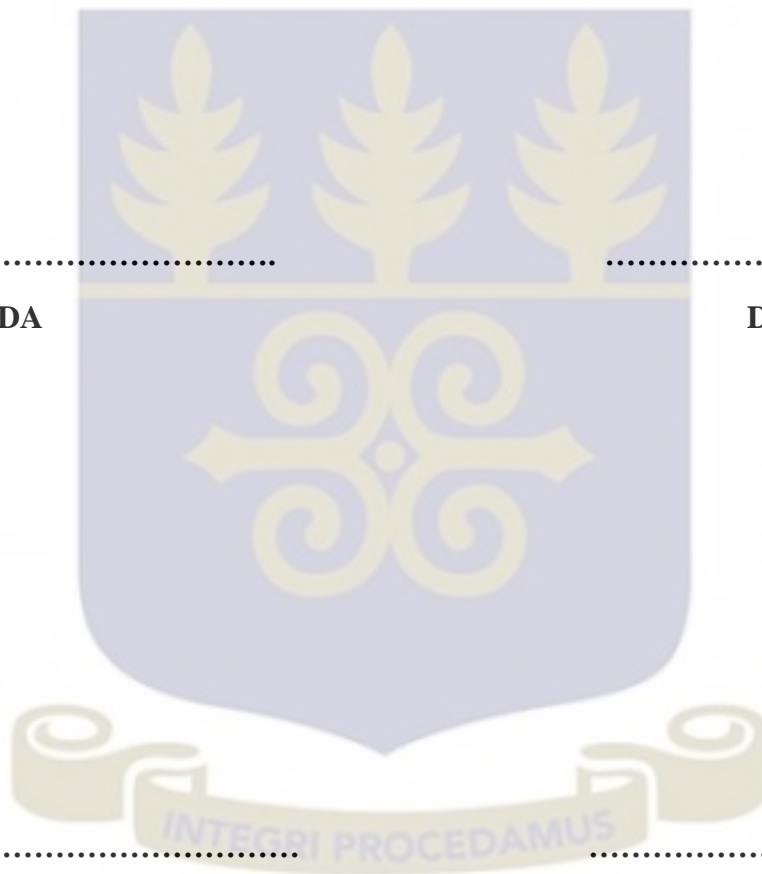
JULY, 2015

DECLARATION

I, Louisa Adda declare that except for ideas and references to other people's work which have been duly acknowledged, this dissertation is the result of my own original research done under the supervision of my academic supervisor, Dr. Phyllis Dako-Gyeke. This work has neither in part nor whole been presented for any award.

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DATE

DEDICATION

I dedicate this work to my husband Polycarp and to my children; Teiwe and Wepare and my parents for their encouragement, support and endurance.



ACKNOWLEDGEMENTS

I thank the Almighty God for his unfailing sustenance which gave me the wisdom, knowledge and strength to carry out this study.

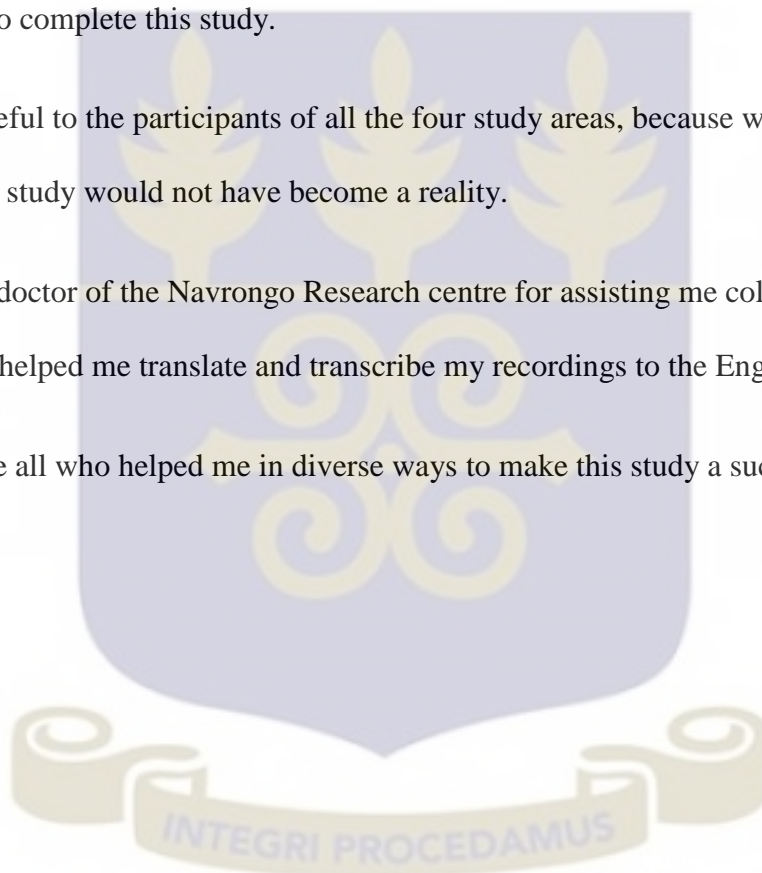
My profound gratitude goes to my academic supervisor Dr. Phyllis Dako-Gyeke for her patience, tolerance and guidance to carry out this study.

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ABSTRACT

Breastfeeding is accepted globally as the preferred method of feeding infants. According to World Health Organization exclusive breastfeeding, is defined as giving only breast milk from a mother or wet nurse or expressed without any additional food or liquid for six months. In Ghana, an estimated 84% of children younger than 2 months are being exclusively breastfed and by age 4 to 5 months only 49% continue to receive EBF and this situation appear to be deteriorating as available information shows that EBF has declined. This study assessed the perception and practices of exclusive breastfeeding, the factors that influence their practice and explored the coping strategies adopted by first-time mothers in relation with exclusive breastfeeding.

This was a qualitative study; four focus group discussions were conducted among first-time mothers and eight in-depth interviews with health workers and traditional birth attendants. The study was conducted in four communities in the Kassena-Nankana municipality. Discussions and interviews were recorded, translated and transcribed verbatim to the English language and the transcribed data was analyzed using various themes and coded with the aid of qualitative data analysis computer software “Nvivo version 10.0”.

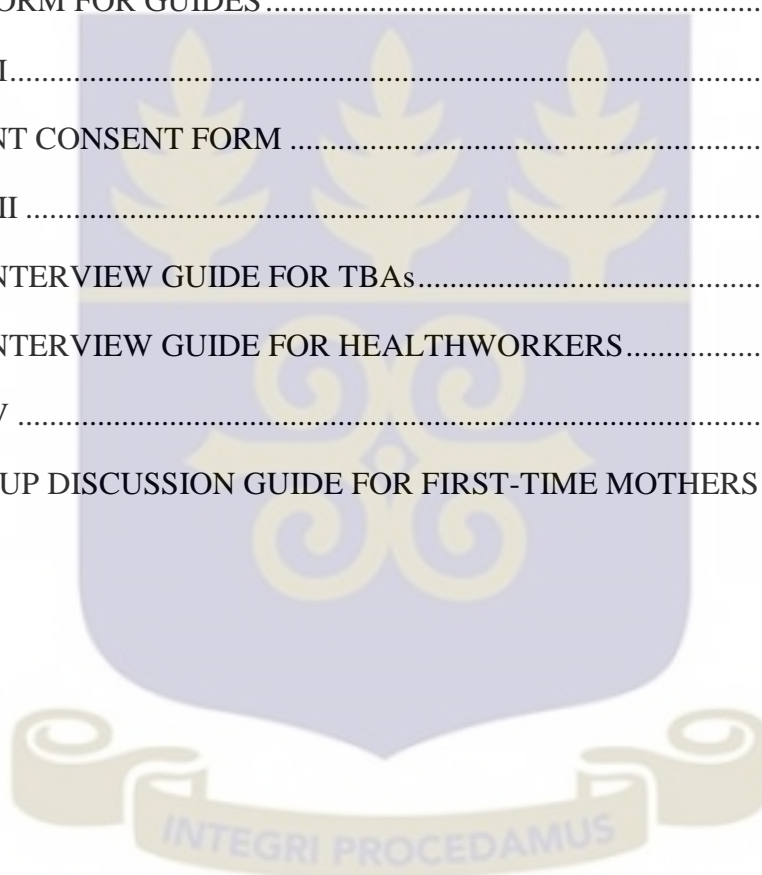
The study found out that most of the first-time mothers had practiced exclusive breastfeeding. Although they indicated being knowledgeable of the benefits and consequences related with the practice, a number of factors such as influence of relatives of the mother, cultural practices and breastfeeding challenges determined the likelihood for a mother to decide to breastfeed her baby exclusively for six months. Therefore adequate access to information on exclusive breastfeeding and support from health providers and relations can be attributed to encouraging a mother to exclusively breastfeed her baby for six months.

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LIST OF ABBREVIATIONS

BF	Breastfeeding
CHPS	Community-Based Health Planning and Services
EBF	Exclusive Breastfeeding
FGD	Focus Group Discussion
GHS	Ghana Health Service
GSS	Ghana Statistical Service
IDI	In-Depth Interview
IYCF	Infant and Young Child Feeding
TBA	Traditional Birth Attendant
UNICEF	United Nations Children’s Educational Fund
WHO	World Health Organization
WIFA	Women in Fertile Age



DEFINITION OF TERMS

First-time mother is a woman of first delivery.

Traditional birth attendant (TBA) also known as a traditional midwife, community midwife or lay midwife, is a pregnancy and childbirth care provider.

Perception is beliefs, awareness and knowledge about exclusive breastfeeding.



CHAPTER ONE

INTRODUCTION

1.1 Background

Breast milk is the natural first food for infants (Davis, Darko & Mukuria, 2003). It renders all the nutrients an infant needs for the first six months of life. Breastfeeding together with complementary feeding continues to meet a child's nutritional needs during the second half of the first year until the second year of life when a child could be weaned. It is an essential part of the reproductive process and contributes to the health and wellbeing of both mother and baby (WHO, 2011).

Breastfeeding is accepted globally as the preferred method of feeding infants. According to World Health Organization exclusive breastfeeding, is defined as giving only breast milk from a mother or wet nurse or expressed without any additional food or liquid for six months (WHO, 2002). This gives multiple benefits to the infant and mother. Exclusive breastfeeding is adequate in quality as well as quantity in terms of energy, protein, nutrients, water etc. (WHO, 2002). Research indicates that the quantity and quality of milk produced by undernourished mothers is remarkably good, with the amount of milk and energy concentration being only a little less than that of well-nourished mothers (Salwa, Soliman & Bakr, 2014). However the level of milk production could be increased by improving maternal nutrition (Allen, 1994).

Based on congregated evidence-based research by the WHO, the initial recommendation of EBF for four months was changed to 6 months. This was done after a study observed there was no deficits in growth of infants breastfed exclusively for six months and their mothers were more likely to remain amenorrheic for 6 months postpartum (WHO, 2001; WHO, 2002). WHO and UNICEF recommend that all mothers should breastfeed their

children exclusively for the first 6 months and thereafter they should continue to breastfeed for as long as the mother and child desire, and both appropriate and sufficient weaning food should be included after six months of life (Peters, Wehkamp, Felberbaum, ger DK & Linder, 2005; Foo, Quek, Ng, Lim & Deurenberg- yap, 2005; WHO, 2005).

Also Seidu and Stade (2013) stated that efforts to promote exclusive breastfeeding have either achieved limited successes or run into severe problems due in part to poor understanding of the several influences on the practice. Out of the 6.9 million under five children who were reported dead globally in 2011 an estimated 1 million lives could have been saved just by adopting these simple and accessible practices such as EBF (WHO, 2012).

In Ghana according to the Ghana demographic and health survey, an estimated 53.1% of children 2-3 months are being exclusively breastfed. By age 4 to 5 months only 36.2% continue to receive EBF and this situation appears to be deteriorating as available information shows that EBF has declined from 54% in 2006 to 52% in 2014 (GSS, GHS & ICF Macro, 2014).

Therefore, for mothers to be able to exclusively breastfeed for the proposed 6 months, it is important to understand the factors that influence EBF. Diverse factors have been found to be associated with BF initiation and duration, and EBF practices (Aidam, Pérez-Escamilla, Lartey & Aidam, 2005). These include: demographic factors, biosocial factors, cultural factors, socioeconomic status; and employment policies affecting how long an infant can be in close proximity to the mother. Although the entire benefits are greater in settings of poverty (poor nutrition and hygiene), where baseline disease rates are higher, the relative risk of these diseases is significantly decreased by breastfeeding in high-income settings as well (Ip, Chung, Raman, Chew, Magula, DeVine et al., 2007; Wright, Holberg, Martinez,

Morgan & Taussig, 1989; Aniansson, Alm, Andersson, Håkansson, Larsson, Nylén et al 1994). It is against this background that this study seeks to investigate the EBF practices of first-time mothers in Kassena-Nankana municipality in the Upper East Region which is one of the most impoverished municipalities in Ghana.

1.2 Statement of the problem

Regardless the benefits EBF exhibits, the prevalence and duration rate of EBF among Chinese, Malay and Indian mothers was found to be (21.1%) lower than the international recommendation for the first six months of an infant's life (Foo, Quek, Ng, Lim & Deurenberg- yap, 2005; Haider, Kloos, Haile & Demissie, 2006). Globally, Cai, Wardlaw, & Brown, 2012 discovered 39% of infants 0-5 months were breastfed exclusively. Also, the regions with high rates of infants exclusively breastfed for less than 6 months were Eastern/Southern Africa (52%), as well as South Asia (47%). Hence Sub-Saharan Africa recorded the lowest coverage of 37% (WHO, 2012).

In order to achieve the Millennium Development Goal of reducing child mortality and curbing of infant malnutrition, one of the major intervention areas that have been identified by the World Health Organization both globally and nationally is infant breastfeeding. Unfortunately, early cessation of breastfeeding in support of breast milk substitutes is far too common (Labbok, Wardlaw, Blanc, Clark and Terreri, 2006). These substitutes include introduction of liquids such as water and juices, needless supplementation and poorly timed introduction of solid, semi-solid and soft foods, often of poor quality, (Cai, Wardlaw, & Brown, 2012). From observation, women of first delivery often fall victim to these practices (using of breast milk substitutes). Also, this group of women are a vulnerable group and very dependent on the various supports around them. Therefore

decision making is influenced highly by the knowledge, beliefs and attitudes of people around them.

In Ghana, for example, the median BF duration is 22 months and 53.4% of women with children less than six months breastfeed exclusively (GSS & Macro, 2004; GSS, GHS & ICF Macro, 2003). Anecdotal evidence has it that in spite of high rates of breastfeeding practices among mothers in Kassena Nankana district, the practices of exclusive breastfeeding still remain low especially among first-time mothers. A study by Adokiya, (2010) in then Kassena-Nankana district, concluded that early introduction of complementary foods may be a risk factor for increased morbidity and undernutrition of children.

Undernutrition is a health issue among children in most communities located in the Kassena-Nankana municipality. A study revealed the prevalence of child undernutrition in then Kassena-Nankana district as follows: stunting was 15.6%, underweight 15.3% and wasting 8.7% (Adokiya, 2010). It is therefore important to understand the factors that influence exclusive breastfeeding. Various studies have investigated the effect of breastfeeding education or support on initiation and duration; although most show positive results, a few have not (Aidam, Pérez-E camilla, Lartey, & Aidam, 2005).

1.3 Conceptual framework

The study adapted the “Health Belief Model” which is a psychological model that attempts to explain and predict health behaviours. The main principle of the model is the way in which an individual perceives the world and how these perceptions motivate their behaviour. It was first developed in the 1950s by social psychologists Houchbaum, Rosenstock and Kegels working in the U.S Public Health services (Janz & Becker, 1984).

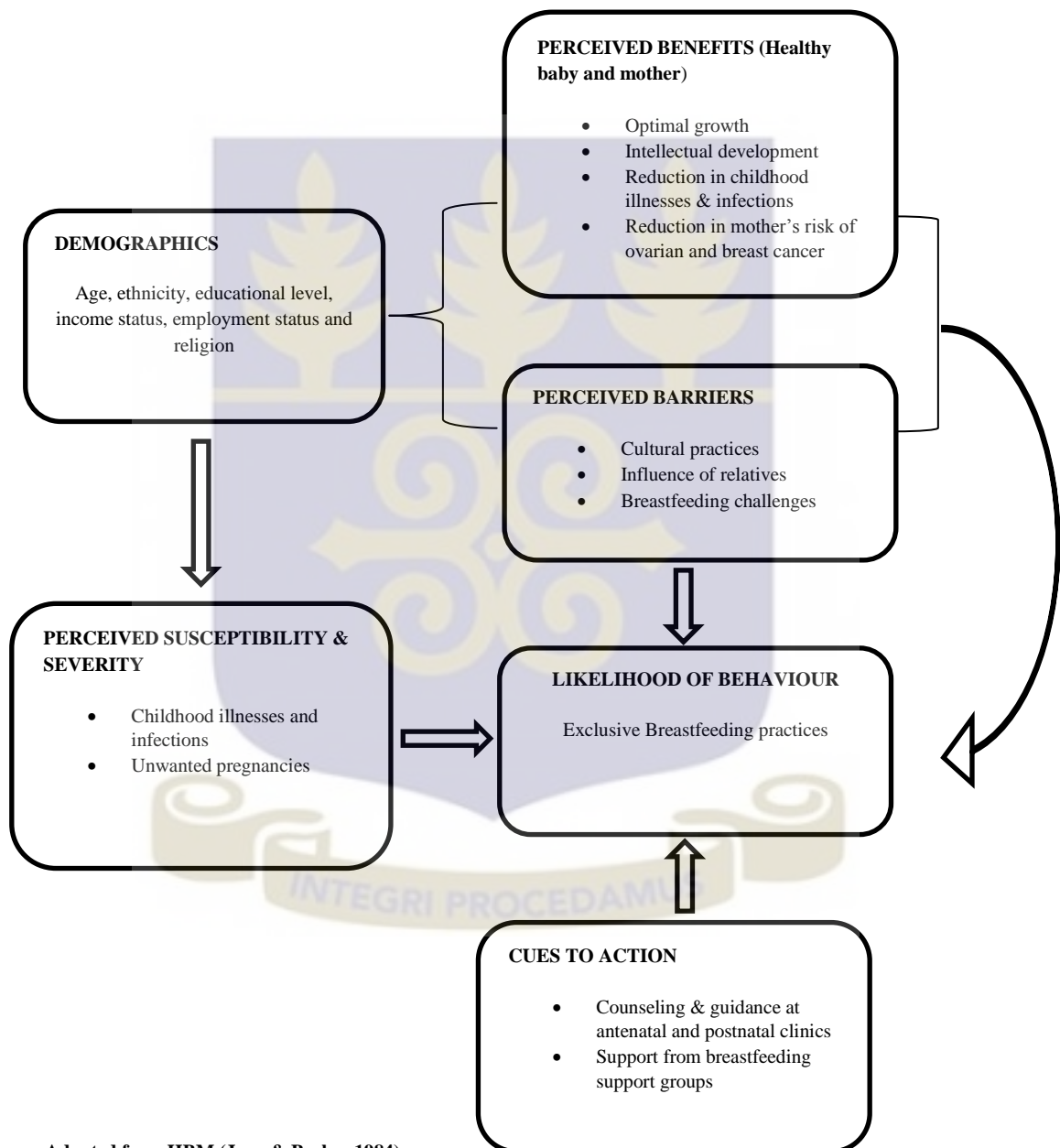
The HBM was initially spelled out in terms of four constructs representing the perceived threat and net benefits. These four constructs include Perceived Susceptibility, Perceived Severity, Perceived Benefits and Perceived Barriers. *Perceived susceptibility* reflects a person's belief about the likelihood of getting a disease/ condition. The greater a person's perceived risk, the greater the likelihood of the person engaging in behaviours to lessen the risk. *Perceive severity* also reflects a person's belief about the seriousness or consequences of a disease/condition. Also a person's belief that a certain action will reduce risk or the seriousness of an impact is termed *Perceived benefits*. Meanwhile, a person's evaluation of obstacles in his/her way that prevents him/her from adopting a new behaviour is termed *Perceived barriers*.

These concepts were proposed as accounting for people's "readiness to act." An added concept, Cues to Action, would activate that readiness and stimulate overt behaviour. A recent addition to the HBM is the concept of Self-efficacy, or one's confidence in the ability to successfully perform an action. This concept was added by Rosenstock and others in 1988 to help the HBM better fit the challenges of changing habitual unhealthy behaviours, such as being sedentary, smoking, or overeating (Glanz et al., 2002).

HBM suggest that a person's perceived susceptibility to a disease and perceived severity of harm are based to a great extent on that person's knowledge of the disease and its potential outcome. Although the combination of susceptibility to harm and severity of harm provides the force for action and the perception of high benefits and low barriers provides a course of action, it is the cues to action that starts the whole process of change (Rosenstock 1974).

But for the purpose of this study only five constructs would be adapted to describe the likelihood of a first time mother to practice exclusive breastfeeding. There are a number of factors that can influence her decision making.

Figure 1.1 The Health Belief Model Adapted for Exclusive breastfeeding practices



Source: Adapted from HBM (Janz & Becker 1984)

For example, there is a high likelihood that a mother would practice EBF if she perceives that the practice of EBF has benefits that protects her infant and herself against infections

and diseases. And also promotes good mental health and reduces the mother's risk of breast and ovarian cancer even in the mist of barriers or challenges. Other times her decision to practice EBF can be influenced, when she feels threatened after perceiving how susceptible and severe the consequences of not practicing EBF are to her infant. But in other instances it is the support and knowledge she gets from the cues to action (health workers, TBAs,) that initiates the whole process of behaviour change. The framework below shows the various ways a mother's decision to exclusively breastfeed can be influenced.

1.4 Justification of the study

Exclusive breastfeeding is essential for optimal growth and intellectual development, and reduces the incidence of infant morbidity and mortality. Infants who are exclusively breastfed have a lower risk of acquiring childhood illnesses and infections. Poor feeding practices such as sub-optimal breastfeeding is still widespread and often leads to malnutrition which is a major cause of more than half of all child deaths (Sokol, Aguayo, and Clark, 2007). Therefore by studying and bringing to light the perceptions, influences and challenges of these first time mothers would add to knowledge and also help to better understand how best to promote a behaviour change when designing an intervention. It is also to explore whether the previously reported associations elsewhere exist in the study area.

1.5 Research questions

Answers to the following questions will help attain the objectives of the research.

They are as follows;

- How do perceptions of first-time mothers on exclusive breastfeeding affect the breastfeeding practices they adopt?

- What factors influence the practice of exclusive breastfeeding among first-time mothers?
- What coping strategies do first-time mothers adopt in relation to exclusive breastfeeding?

1.6 Objectives

1.6.1 General objective

This study seeks to investigate the exclusive breastfeeding practices among first-time mothers in Kassena-Nankana district.

1.6.2 Specific objectives

- To assess the perception and practices of first-time mothers about exclusive breastfeeding.
- To examine the factors that influences the practice of exclusive breastfeeding among first-time mothers.
- To explore the coping strategies adopted by first-time mothers in relation to exclusive breastfeeding.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews topical areas found in current literature to help determine the gaps created on this public health issue. These topical areas include; trends, perceptions and practices of exclusive breastfeeding, factors that influence its practice, as well as challenges and coping strategies adopted with regards to exclusive breastfeeding practices.

2.1 Background of Exclusive breastfeeding

The World Health Organization (WHO) and United Nations International Children Fund (UNICEF) recommend optimal Infant and Young Child Feeding (IYCF) practice for normal growth and development of infants and young children (WHO & UNICEF, 2003). Strategies to improve Infant and Young Child Feeding (IYCF) are a key component of the child survival and development programs of many nations (WHO & UNICEF, 2003). These important breastfeeding key components include; breastfeeding initiation within one hour of birth; breastfeeding on demand that is as often as child wants (day and night); breastfeeding exclusively for the first six months of life and; addition of timely, appropriate, and adequate family foods for complementary feeding after six months along with continued breastfeeding (WHO & UNICEF, 2003).

Exclusive breastfeeding up to six months of age was a part of two feeding practices that came up first during the ranking of the top 15 preventative child survival interventions for the effectiveness in preventing under-five mortality (Jones, Steketee, Black, Bhutta, & Morris, 2003). Research has found out that EBF also reduces HIV transmission from mother to child when compared to mixed feeding (Coutsoudis, Pillay, Kuhn, Spooner, Tsai & Coovadia, 2001; Coovadia, Rollins, Bland, Little, Coutsoodis, Bennish et al., 2007;

Coutsoudis, Pillay, Spooner, Kuhn & Coovadia, 1999; Iliff, Piwoz, Tavengwa, Zunguza, Marinda, Nathoo et al., 2005). La Leche League provides signs that suggest that an exclusively breastfed baby is receiving enough milk. These signs include the baby average feeding per day being 8-12 times, feeds 10-20 minutes or longer per breast, swallowing sounds being audible, gains at least 0.113kg - 0.198kg per week after the fourth day, appears healthy, has good color, firm skin and growing in length and head circumference (<http://www.lalecheleague.org/faq/enough.html>).

2.2 Trends in Exclusive breastfeeding

Although progress has been made since the 1990s, prior reviews highlight modest improvements in the prevalence of exclusive breastfeeding (Labbok, Wardlaw, Blanc & Clark, 2006). A global comparative analysis across some countries reported a modest increase in the developing world of the prevalence of exclusive breastfeeding (Cai, Wardlaw & Brown, 2010). This was within a range of 12% and 39% from 1995 to 2012 among infants aged six months and below (Senarath, Dibley, & Agho, 2007; Cai, Wardlaw & Brown, 2010; UNICEF, 2012). Therefore the rate of EBF decreased with age increase which implied that a few infants continued to exclusively breastfeed by age 6 months (Lancet, 2011; Doracaj, Hallkaj & Grabocka, 2014; Chudasama, Amin, & Parikh, 2009)

Meanwhile, in other studies involving member States of the United Nations, Heymann, Rauba & Earle, (2013), reported that countries with guaranteed breastfeeding breaks at work, had 71% of its working mothers practicing exclusive breastfeeding but only 4% of working mothers practiced EBF in 7 countries with unpaid guaranteed breaks. And for some other 45 countries with no policy guaranteed breaks registered 25% of mothers exclusively breastfeeding (Heymann, Rauba & Earle, 2013). However, mothers who were likely to breastfeed exclusively were those working part-time as compared to those

working full-time (Fein and Roe, 2001). Hence the risk of a mother not exclusively breastfeeding was 25.4 times more for women who had to return to work than those who did not (Dearden et al., 2014).

Additionally breastfeeding is known to be a common practice in Sub-Saharan Africa whereas EBF is not (Latham & Preble, 2000). However the practice varies from one country to another and between rural and urban settlements as well as among the poor and rich (Walker & Adam, 2000). This can be seen in a poster publication from the US Population Reference Bureau (1999) where some studies were conducted that indicated that the percentage of those exclusively breastfeeding up to six months was low in Nigeria (1%) and Burkina Faso(5%) but high in Ghana(31%) and Uganda(51%).% and 5%. Also in a baseline cross-sectional study in Southern Africa, rural areas such as Lesotho revealed over 50% of mothers had supplemented by age 3 months (Engebretsen et al., 2008), . According to some previous studies, although over a 90% of infants were being breastfed, only less than 50% of infants were exclusively breastfed for the first six months of their life (Perez-Escamilla, 1993). Usually, by age three months most mothers have introduced supplementary foods to the infant, although a higher proportion of mothers still continue to breastfeed alongside the complementary feed until 12 months when the infants are weaned from breast milk (Population Reference Bureau, 1999; Walker & Adam, 2000). The 2008 demographic and health survey held in Nigeria indicated that less than 50 % of infants (13%) are also being exclusively breastfed.

In Ghana, breastfeeding is almost generally practiced and extends for an average period of 20 months. Over a 98% of children have been breastfed at some time in their life and this has been stable for a number of years (GSS, GHS & ICF Macro, 2008). There has been a remarkable improvement in the rate of exclusive breastfeeding from 5% in 1989 to 63% in 2008 (GSS, GHS & ICF Macro, 1988). But on the other hand, exclusive breastfeeding,

which is most important within the first six months of an infant's life, rather has a short duration. Infants are exclusively breastfed up to an average age of 4 months (GSS, GHS & ICF Macro, 2008) and by the age of about 2 years, over 50% of infants may have been weaned.

Although research indicates that in Ghana and the United States of America, most mothers are provided breastfeeding guidance at antenatal and postnatal clinics and they show signs of being well informed about EBF practices, adherence is minimal. Some studies conducted between 2005 and 2014 indicate that, there has been a steady increment in exclusive breastfeeding from 51% to 84%. This was among infants under-six months of age in Ghana as well as Greensboro in the United States of America. (Aidam, Pe, & Lartey, 2005; Iddrisu, 2013; Mathews, Leerkes, Lovelady, & Labban, 2014). Also, Aborigo et al., (2012) recorded high levels of breastfeeding practices among the Kassena's and Nankana's whereas EBF still remained low especially among young mothers.

2.3 How Exclusive breastfeeding is practiced

In a study, involving 140 countries, showed that, despite the well-acknowledged importance of EBF worldwide and efforts made by UNICEF and health policy makers to support and enhance its practice. The situation is not improving worldwide especially in the developing countries. It was observed that though majority of women were aware of the advantages and disadvantages of breastfeeding and bottle-feeding there were differences in their perception and practices and breastfeeding was seen to cause weakness in mothers (Ali, Ali, Imam, Ayub, & Billoo, 1992). It was also realized a greater number of mothers practiced EBF in countries with guaranteed paid work breaks with the low-income level earners recording the highest rate of EBF practices (Heymann et al, 2013; Cai, Wardlaw, & Brown, 2012). Even in the United Kingdom, there persist substantial

differences in breastfeeding practices. White women seldom breastfeed. For these women ethnicity and their partner has a role to play in their decision to initiate breastfeeding and continue to breastfeed (Griffiths, Tate, & Dezateux, 2005).

Meanwhile other studies in Mozambique and the United States of America revealed that, most mothers had the perception that any woman who wanted to breastfeed could breastfeed. And that 90% of the mothers were in agreement that bottle feeding is more expensive than BF (Mccann, Baydar, & Williams, 2007). But a mother's decision to breastfeed does not only depend on the mother's knowledge, or perception on EBF but also on the influence of other decision makers of the family. These may include mother in-laws, grandmothers and other relations who have questioned the practicability of EBF and introduced water, traditional medicines, and porridges to infants before 6 months of age (Aborigo et al., 2012; Arts et al., 2011). They may possibly support EBF if they were well informed by health workers. Therefore if health workers (nurses) are knowledgeable and share information on EBF practices verbally without the needed counselling skills, it might not aid in influencing the practice (Arts et al., 2011).

Hence, the practice of EBF can sometimes be influenced by the mother's beliefs, intentions and fears. In Ghana we have a number of varying cultures which have different effects on a person's decision making or opinion. For instance in the Ghanaian setting, non-milk-based fluids rather than the milk-based are being used during nonexclusive breastfeeding practices (Aidam et al., 2005). Also mothers request to breastfeed exclusively is determined by the beliefs and practices of the secondary caregivers which according to the cultural settings of rural families in Tamale the mother has no control over. These beliefs and practices which involve "pakopilla" ritual is the feeding of infants with herbal concoctions or teas for a number of days. It is perceived culturally to protect the infant against diseases and any harm which could be caused by the "pakopilla" (white

widow). These practices has a negative influence on EBF practices (Iddrisu, 2013) since the breast milk is being supplemented with other liquids.

2.4 Factors influencing the practices of exclusive breastfeeding

A number of factors have been found to influence BF duration and EBF practices worldwide (Aidam et al, 2005). According to Santo, de Oliveira, & Giugliani, (2007) and Senarath, Dibley, & Agho, (2007), the age of the mother, educational level, place of birth, age of infant, employment status as well as initiation of the use of pacifiers within the first month of delivery which can lead to poor latching on the breast by the infant. Also, not assessing ideal prenatal care are factors that contributed to the low practice of EBF among mothers in East Timor and Porto Alegre (Brazil). Whereas for a group of Turkish women, practices in the hospital were better determinants of the duration of EBF (Ali et al., 1992). Some of the above mentioned factors as well as initiation of formula supplements in the hospital were major determinants of EBF among first time mothers (Semenic, Loiselle, & Gottlieb, 2008).

Furthermore a mother's decision to breastfeed is usually done before delivery. And mostly the perceived benefit of breastfeeding the infant, the naturalness and emotional bonding with infants are some of the factors that contribute to this decision making (Arora, McJunkin, Wehrer, & Kuhn, 2000). But for a mother to do otherwise, factors such as mother's perception of father's attitude toward the practice of EBF, uncertainty by the mother regarding the quantity of breast milk produced or ability to breastfeed and having to return to work determines the likelihood for a mother to exclusively breastfeed (Cox, Giglia, Zhao, & Binns, 2014).

Additionally, a woman is most likely to breastfeed exclusively if her husband is the only bread winner of the house and the only prevailing reason for her to do otherwise is due to

fear that her breast milk is not adequate for the nourishment of her infant (Chatman et al., 2004). Even among low-income women enrolled in a peer counselling breastfeeding support program, breastfeeding challenges, mother's preference and low milk supply were factors that influenced EBP practices, although the reasons differed by age of the infant weaning (Rozga, Kerver, & Olson, 2014). In the promotion and support of breastfeeding the health care system has a role to play (Lu, Lange, Slusser, Hamilton & Halfon, 2001). For breastfeeding to be successful, support from friends, family and healthcare professionals is needed (Ryan, Wenjun, & Acosta, 2002). Also various demographic factors such as family size, age at marriage, type of family, occupation, type of delivery, number of children, monthly income and religion have been found to be major determinants of exclusive breastfeeding practices among women in Tamil Nadu (Radhakrishnan & Balamuruga, 2012). Another current factor impeding EBF promotion in many developing countries is the use of prelacteal feed which is proven by the ongoing feeding practices other than breast milk within the first few days after delivery (Alemayehu, Haidar, & Habte, 2009; Ssenyonga, Muwonge & Nankya, 2004; WHO, 2002).

Meanwhile in some Sub Saharan Africa countries, there is little information concerning determinants of exclusive breastfeeding practices (B A Aidam et al., 2005). In Nigeria there exist a good breastfeeding culture among the various ethnic groups (Gartner, Morton, Lawrence, Naylor, O'Hare, Schanler et al., 2005) but exclusive breastfeeding practice is poor (Agunbiade & Ogunleye, 2012). According to a study by Aidam et al., (2005) a higher level of education and higher socioeconomic status which is expressed by ownership of a house were factors that determined a mothers likelihood to exclusively breastfeed but this study opposes the findings of the study by Pérez-Escamilla et al (1995) where low socioeconomic status was a determinant of EBF.

While in Accra, Ghana, a study conducted to assess factors associated with EBF highlighted that EBF practices are influenced by the level of education of the mother, place of delivery and positive attitude of the mother towards EBF practices before delivery as well as owning a house. All these are factors that would determine whether the mother is likely to breast feed exclusively (Aidam et al., 2005). Also, EBF can be very effective among people with a strong breastfeeding culture and good counselling on lactation. (Aidam et al., 2005). But although there is effective counselling on breastfeeding and its guidelines among the Kassena and Nankani people, their cultural beliefs and practices prevents them from exclusively breastfeeding especially first-time mothers who have to go through some cultural rituals before they are deemed able to breastfeed (Aborigo et al., 2012).

2.5 Challenges and Coping strategies associated with Exclusive breastfeeding practices

There are many challenges with the practice of exclusive breastfeeding and this contributes to the low rates of EBF practices (Februhartanty, Bardosono, & Septiari, 2006). According to Giugliani (2004), the frequently experienced challenges with EBF practices are sore nipples, breast engorgement, plugged milk duct, breast infection and poor milk production. Some of these challenges are influenced by conditions that prevent the mother from adequately emptying her breast and therefore predisposing her to lactation problems (Giugliani, 2004; Pisacane, Continisio, Aldinucci, D'Amora, & Continisio, 2005).

In diverse settings studies report other reasons by mothers for not practicing EBF. These reasons include; mothers perception that babies continued to be hungry after breastfeeding, belief that infant is thirsty, the fear of babies becoming addicted to breast milk, maternal health issues, pressure from family members and friends, the perception of milk

insufficiency, breast pains, having to return to work and the belief that clean water can be given to infants if desired (IRD & Macro Inc, 1989; Fjeld, Siziya, Katepa-Bwalya, Kankasa, Moland & Tylleskar, 2008; Agunbiade & Ogunleye, 2012; Otoo, Lartey, & Pérez-Escamilla, 2009). Whereas in DKI Jarkarta Province, the feeling of tiredness and fatigue, feeling emotionally upset, sore nipples and the perception of milk insufficiency were the four major lactation challenges experienced by majority of the mothers. Although plugged milk ducts and breast inflammation were also challenges (Februhartanty et al., 2006). Also the report of low levels of EBF in then Kassena-Nankana district was as a result of anxiety which is common among mothers whose baby's did not breastfeed well. These mothers were also reluctant to breastfeed since they did not want their breast to sag, or had sore, or engorged breast which is painful when breastfeeding. Therefore not motivated to breastfeed or exclusively breastfeed and sort to the use of supplemental feeds such as water (Aborigo et al., 2012).

Coping strategies has to do with specific efforts, both behavioural and psychological, that people employ to master, tolerate, reduce or minimize stressful events (www.macses.ucsf.edu/research/psychosocial/coping.php). Research indicates that some mothers to help them continue with breastfeeding suggested some strategies (O'Brien, Buikstra, Fallon, & Hegney, 2009). These strategies included challenging of unhelpful beliefs, problem solving, staying relaxed and looking after oneself, increasing breastfeeding knowledge, using positive self-talk, goal setting and practice of mindfulness. Adopting these simple behavioural and psychological strategies may help nursing mothers cope with the pressures that come with breastfeeding therefore increasing breastfeeding duration (O'Brien et al., 2009). Additionally, Wilaiporn, (2004) in a study to describe the experiences of some women who returned to work after delivery reported that, for breastfeeding to be successful, there is a need to maintain; a positive attitude, develop

strategic plans and psychological distress, and support for environmental or spatial issues in order to achieve breastfeeding goals.

Moreover, in improving exclusive breastfeeding practices, efforts should be concentrated at the micro, meso and macro level of the society. This is in order to reverse the current brain drain of health workers and empower them to provide improved healthcare services (UNICEF, 2012). Similarly the significant others who play an important role in influencing a mothers decision to breastfeed exclusively and should be included in policy making in order to scale up EBF (Agunbiade & Ogunleye, 2012; Salami, 2008). Furthermore, health workers need to find ways in which relationships could be established and sustained to render the chain of support needed by these young mothers to help them continue breastfeeding. These key chain of support identified includes; the mother of the young mother, the partner and the midwife engaged in a teenage pregnancy coordinator role (Dykes, Moran, Burt, & Edwards, 2003). To improve on breastfeeding practices much focus on public strategies should be veered towards young mothers at first motherhood. The support from the partners and the community in which these women live should be properly handled (Griffiths et al., 2005). Evidence suggest that combining both one-on-one and group counselling may improve breastfeeding practices and this can be used to enhance effective EBF practices than only one-on-one and group (Haroon, Das, Salam, Imdad, & Bhutta, 2013). Thus, health professionals should take into consideration the cultural norms and pressure when giving advice to mothers to launch the best possible way for them to feed their new-borns (Kronborg, Harder, & Hall, 2014).

However, more attempts need to be taken by programs promoting EBF to make EBF practices more likeable to the less educated and low income women. Also breastfeeding promotion should be extended to private clinics, homes, TBA's or with maternity homes

since delivery in these birth settings may pose a risk for not exclusively breastfeeding for the first six months (Aidam et al., 2005 ; Dearden et al 2002).



CHAPTER THREE

METHODOLOGY

3.1 Type of study

This was a qualitative study. This study conducted in-depth interviews and focus group discussion techniques in gathering information on the exclusive breastfeeding practices of first time mothers in Kassena-Nankana district. This qualitative study design helped to explore, understand and interpret or describe the influences and experiences of the mother's perspective in relation to exclusive breastfeeding.

3.2 Study area

The study was conducted in the Kassena-Nankana Municipality which is one of the thirteen (13) Municipalities and districts in the Upper East Region. It lies within the Guinea savannah woodlands and covers a total land of about 1,674 sq. km and stretches about 55km north-south and 53km east-west. It is made up of 28 towns with Navrongo as its administrative capital. It has the wet and dry seasons as the two climatic conditions.

The Kassena-Nankana Municipal consists of two main ethnic groups; the Kassena and Nankana and who speaks kasem and nankani respectively. Agriculture is the major economic activity. The Municipality has 33 health facilities including 1 government hospital namely War Memorial hospital, a private clinic (St. Jude Clinic), a health post, 25 CHPS compounds, a health research centre (Navrongo Health Research Centre) and 2 nutrition centres. Malnutrition is known in this municipality to be second to environmental originated diseases.

The target population for women in fertile age (WIFA) in the Municipality is 23.2%. It is made up of 18,620 women out of a total of 235,547 in the Upper East Region (GHS, 2009

& GSS, 2000). The total fertility rate in the Upper East Region reduced from 4.7 in 2003 to 4.1 in 2008.

3.3 Themes in the study

- Socio-demographic characteristics of participants; age, ethnicity, level of education, marital status, religion, occupation, period of practice, job activities and source of information
- Knowledge and perception of exclusive breastfeeding; sources of information, details of information, awareness of duration and benefits, understanding of practice, preference and reasons for preferences etc.
- Factors that influence breastfeeding practices; reasons for practicing or not practicing (cultural and family influences).
- Challenges and coping strategies in relation to exclusive breastfeeding (the issues and experiences with the practice; types, sources and period of given support and strategies adopted).

3.4 Study population

This consisted of women of first delivery who were currently breastfeeding children seven (7) to twelve (12) months, since the research was interested in mothers of children who have been exclusively breastfed for the six months feeding recommendation as well as to prevent recall bias among these mothers. Also the head of any team of health workers who dealt with either postnatal or antenatal issues at health centres or CHPS compounds that served the study site and any TBA who was currently practicing.

3.5 Sampling method

Purposive sampling was used to select four communities for this study. These included Pungu community, Kajelo community, Doba community and Gaani community. The

Pungu and Kajelo communities are of kasem speaking while Doba and Gaani communities are of nankani speaking respectively. Purposive sampling is a form of non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the research issue, or capacity and willingness to participate in the research (Paul Oliver, 2006).

In the intervening time, there existed few numbers of mothers within the inclusion criteria range, therefore making it difficult to find the desired mothers within the population. For that reason, Snow ball sampling and convenience sampling technique was used to identify and select the desired first-time mothers and TBAs, as identifying one person lead us to another until the needed number was reached. Snowball sampling technique is also a form of non-probability sampling in which the researcher begins by identifying an individual perceived to be an appropriate respondent. This participant is then asked to identify another potential participant. The process is repeated until the researcher has collected sufficient data (Paul Oliver, 2006). It aids in the ability to recruit hidden populations. By default heads of health workers handling postnatal or antenatal issues in CHPS compounds or health centres that served the study site was used for the study. This was to find out some of the reasons, challenges or complaints as well as some of the coping strategies adopted by these mothers in association with EBF practices.

3.6 Data collection

A total of eight (8) IDI's were conducted; four for TBAs and four for health workers. In each community two IDI's each were conducted, one for each category of key informant. By default head of health workers who attend to postnatal and antenatal issues in each CHPS compound or health centre that served the community were interviewed. The

interview was held at each health facility at the participant's time of convenience after explaining the purpose of the study and signing of consent form.

For the first-time mothers a total of four (4) FGDs, one in Pungu community, Kajelo community, Doba community and Gaani community respectively. Each focus group was supposed to be made up of eight (8) participants in order to have a manageable but effective discussion however due to the inclusion criteria; there was difficulty in getting the required number of participants as only few mothers were within the range. Therefore only Gaani, Doba and Pungu had the required number of participants; Kajelo had five (5) participants. In every community, each focus group for first-time mothers was homogenous and consisted of mothers below 20 years (teenage mothers) and mothers 20 years and above (young adult and above). A key informant in each community was contacted to help identify one eligible person who then linked us to another eligible participant until we got the required number. The purpose of the study was explained to participants. A venue and time of convenience was agreed on with participants for the meeting and verbal consent was sought for voluntary participation.

At the meeting before each FGD started, the purpose of the study was explained again to all the participants and allowed to sign a consent form. The seating was arranged in a semi-circle with the moderator at the end of the circle. The note taker and the digital recorder were positioned at an advantage point.

However the focus group discussions and in-depth interviews were conducted until thematic saturation was reached. All interviews were audio recorded and notes on verbal and non-verbal communication and pictures were taken but permission was sought from participants before. Data collection started on the 19th of May 2015 and a period of one week was used to organize participants and conduct all the interviews.

3.6.1 Data collection tools

Both Focus Group Discussion guides and In-Depth Interview guides were used in collecting data. FGD guide was used to obtain data from first time mothers. Data from Health workers and TBA's employed IDI guide. The help of an assistant was engaged, to help with conducting the interviews in Gaani community and Doba community. He also helped in translation of the data collection tools into the two local languages involved for data collection. Data collection also included hand recording of non-verbal actions and facial expressions, etc. which were of interest to the discussion. A voice recorder was used to enhance in accurate collection of data.

3.7 Quality control

The focus group and in-depth interview guides were reviewed by the academic supervisor. One field assistant was recruited and trained to assist with the focus group discussions in the Nankani areas while the principal investigator took notes. Meanwhile all IDI's and FGD's in the Kassena areas were facilitated by the principal investigator and assisted by the field assistant. The recordings were transcribed and compared with the written notes soon after the discussions to ensure nothing was lost to memory. Also the data collection tools were translated from English into the local languages and retranslated back into English language to ensure that there was no loss of meaning.

3.8 Data analysis

Demographic data of the participants of the FGD is presented in a tabular form. Recorded interviews were translated and transcribed verbatim to the English language and read by two people before being typed. Using qualitative data analysis computer software "Nvivo" version 10, the typed transcribed data was imported onto it. The data was organized into

various themes and coded. The coding involved making written notes on hard copies of the transcriptions as well as creating of a preliminary coding structure and codebook.

3.9 Ethical considerations

Consent was sought from the Ghana Health Service Ethical Review Board through the School of Public Health, University of Ghana to ensure that rights and privacy of individuals are protected.

Introductory letters was sent to the Municipal health directorate, community heads or chiefs and health Centre's.



CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents details of the findings which is structured in relation to the research objectives and presented under the following sub-headings; Socio-demographic characteristics of participants, Knowledge and perception of exclusive breastfeeding, Exclusive breastfeeding practices among first-time mothers and Challenges and coping strategies in relation to exclusive breastfeeding.

4.1 Socio-demographic characteristics of participants

A total of 37 participants were involved in this study as shown in table 4.1. This consisted of 29 first-time mothers, 4 Traditional Birth Attendants and 4 health workers' respectively. Majority of the participants for the FGD belonged to Nankana ethnic group. Most of the participants in the FGD were above twenty years (20) of age and the remaining were twenty years and below. The Kassena respondents were within the age range of 19 to 24 years and Nankana, 17 to 26 years.

Almost all participants for the FGD were Christians and had some level of education, except for two participants who were traditionalist and had no formal education. Most of the infants had just turned seven months old and only two participants who had infants who had just turned 13 months old that week were included in the study. This was because there was difficulty identifying the required respondents. Meanwhile the main occupation of most of the participants was farming.

Others were artisans, traders and about seven participants were unemployed. In addition, eight IDI's were conducted (4 Kassena and 4 Nankana).

Table 4.1 Socio-demographic characteristics of participants

Characteristics of FGD Participants	Number of participants	Percentage
Ethnic Background		
Kassena	13	44.8
Nankana	14	48.3
Others	2	6.9
Age		
20 years and below	14	48.3
Above 21-26years	15	51.7
Religion		
Christian	27	93.1
Traditionalist	2	6.9
Level of education		
No formal education	2	6.9
Primary	7	24.1
JHS	14	48.3
SHS	6	20.7
Occupation		
Artisan	3	10.3
Farmer	15	51.7
Trader	4	14.0
Unemployed	7	24.0
Age of child in months		
7-9 months	19	66.0
10-13 months	10	34.0
Marital status		
Single	1	3.4
Married	28	96.6

Source: Fieldwork, 2015

The health workers interviewed were females, three community health nurses and one midwife with only the midwife being married. Their years of working experience ranged between two to six years. Furthermore, the TBA's interviewed were females, married with farming as their main occupation. Only two TBA's from Doba and Pungu had some level of education to middle school and primary level, and also had knowledge of their age as 42 years and 58 years, respectively.

4.2 Knowledge and perception of exclusive breastfeeding practices

The main themes that emerged under knowledge and perceptions of exclusive breastfeeding practices among participants included source and content of information on EBF practices, practice of EBF, knowledge of benefits of EBF and perception of EBF practices. The discussion revealed that majority of first-time mothers received information on EBF practices from a health centre either close or within the community (Gia, Paga, Gaani, Nayagnia, Doba and Kajelo). They termed the facilities as "clinic". Only a few received information from the main hospital in Navrongo (War memorial). This was usually immediately after delivery and also from family members who had practiced it before. However, the TBA's and health workers got their knowledge during their training although two health workers claimed they had heard of it before they started their training in school.

"I heard it from my house women who had delivered before I got pregnant and delivered." (**Mother, FGD Pungu**)

"It was when I delivered, they told me in Navrongo, the big hospital." (**Mother, FGD Doba**)

The study found out that, there is consistency in participants' description of the content of information they received on EBF. They also gave reasons to support their understanding

of EBF and all were capable to state the number of times an exclusively breastfed baby should be fed in a day. Some said a baby must suckle an uncountable number of times in a day while others said more than 10 times in a day.

“They told us that when a woman delivers she is supposed to be feeding the baby only with breast milk. Even the ordinary water that we all drink she is not supposed to give him because that water can cause a lot of illness to the baby. So, all they women have agreed to that policy. Now they only breast feed until six month time.”
(TBA, IDI Kajelo)

“It means when a woman deliver, she should not give the baby food nor water until he attains six months. She should be giving the baby only breast milk.” **(Mother, FGD Pungu)**

“Exclusive breastfeeding means, when a woman deliver, she should only breastfeed the baby for six months, before introducing food and water to the baby.” **(Mother, FGD Pungu)**

Participants were also able to state the benefits of EBF practices to both mother and baby. This suggests that the first-time mothers, health workers and TBA's had fair knowledge about EBF practices, as seen in the narratives below.

“If you give your baby only breast milk for six months, he does not fall sick frequently and he will be strong.” **(Mother, FGD Gaani)**

“The child is strong, it is always available in the right temperature, it serves as a natural family planning for the woman if she practices it very well and its serves as the first immunity for the child to fight against diseases. Those are the advantages of exclusive breast feeding to the child and the mother. Also if the woman doesn't

practice exclusive breastfeeding, she'll need to use back up methods like condoms during sex because if she doesn't, she might get pregnant since she doesn't breastfeed exclusively". (Health worker, IDI Kajelo)

"It helps the uterus to go back to its original position faster than normal. And to the child too it helps in especially the brain development of the child and it also helps to prevent diseases especially diarrhoea in children because if it is EBF it's only the breast milk, they don't give water. So the child, being falling sick, especially diarrhoea is mostly common and they don't even get it." (Health worker, IDI Doba)

Irrespective of the quality of education received by these first-time mothers before and after delivery and their commended knowledge on exclusive breastfeeding practices; some mothers still misinterpreted the practice and also saw it as a disadvantage to both mother and baby as seen in the narratives below. During the discussion all the mothers confirmed they were practicing EBF, but when asked how long they breastfed before introducing foods to their babies, a few admitted starting before six months which contradicted their first response.

"To be only breastfeeding the baby for six months with breast milk brings a lot of disadvantages to the mother. For instance, because you don't give the baby water and food to wet the throat, it is always dry and he sacks the breasts vigorously which creates pains for the mother. But if you give the water, it will soften the throat and he will sack the breasts slowly." (Mother, FGD Pungu)

"You know we have two types of milk, powdered milk and liquid milk. So in my opinion you should buy the liquid milk and keep so that when you are not around, they can feed the baby with that one." (Mother, FGD Kajelo)

Furthermore, the study revealed that, some mothers and TBA's, did not have a positive perception initially towards EBF practices but it changed through other experiences. They admitted knowledge of both cultural practices associated with BF and EBF practices but preferred to exclusively breastfeed and commended it to be the best practice. Although they expressed adverse perceptions about EBF practices, most of them due to personal experience and encounters with other mothers commended that practicing of EBF is economical, available, and nutritious and promotes good health to both mother and child, and entire family. Participants believed this changing perception was due to the access to education on EBF. These views reflect in the narratives expressed by participants as seen below.

“When I delivered and breastfed my baby with only breast milk, he was healthy and fine looking. Even at the A&C the Nurses said he was looking fine. So other women should also practice the exclusive breastfeeding for it is good for the children.” (Mother, FGD Pungu)

“I have seen babies whose mothers give them water and are running diarrhoea, they are always sick and their mothers are always running to the hospital. Babies whose mothers give them only breast milk do not fall sick frequently. They are healthy and fall sick occasionally.” (Mother, FGD Doba)

“Because it saves money, it saves time and then to you the mother, it serves as family planning.” (Health worker, IDI Kandega)

However, some of the mothers had a negative perception about the practice of exclusive breastfeeding and saw it as a threat to the baby's life. The narratives suggest that they believe a baby could die as a result of thirst if exclusively breastfed. And that it is not only breast milk that enhances healthy growth of babies.

“If you leave your baby behind and go to fetch water and it cries, the throat will dry and it may die.” (Mother, FGD Gaani)

“In my opinion, it is not only breast milk that makes children grow well. We did that giving them water, they get well and now adults. So they Nurses should be doing home visits and educate those old ladies who still think that way because if we usually try to explain to them they don’t believe us and that is a source of worrying to us in that regard.” (Mother, FGD Pungu)

“We used to feed our babies anyhow. You “people” (referring to the government) have changed the way we used to breast feed. You people said, when the baby is three, four to six months’ time before we give him porridge to drink. We didn’t know how to drink porridge.” (TBA, IDI Kajelo)

4.3 Factors that influence breastfeeding practices

Two major themes emerged under factors that influence breastfeeding practices among participants. These included influence of relatives on mothers and influence of cultural practices. Although, the mothers who took part in the FGD went through some form of EBF counselling and education, not all the mothers were able to strictly adhere, though they desired to as confirmed by both the mothers and key informants. This was due to certain influencing factors such as the influence of relatives on the first-time mother in determining EBF practices, especially the in-laws. Other factors also include certain cultural formalities performed for first-time mothers and their babies upon reaching home after delivery. Participants invariably described a situation where mother-in-laws and elderly women believed that new-born’s must also be given herbs and therefore supplement feeding with herbs. This involves where culture demands that you do not go against the teachings of your in-laws, especially mother-in-law and also the elderly women

in the household. It is therefore difficult as seen in some of the narratives below to continue breastfeeding exclusively when asked to do otherwise but with the other mothers too they had all the support.

“They old ladies always say that if you don’t allow them to give the baby the herbal concoctions and water to drink and the baby is crying in the night, they won’t come to your aid, they will leave you and your baby alone to take care and that it is the herbal concoctions and water that put the baby to sleep without worrying the mother.” (Mother, FGD Kajelo)

“Nothing!, my husband’s sister is a nurse at Gia, there was a day she come to the house and my mother in-law wanted to give water to my baby and she explained to her why she must not give water to the baby and she stopped.” (Mother, FGD Kajelo)

They old ladies don’t agree at all because they bath the baby and do everything so when you want to complain; they will tell you that once the child is delivered, he is no more your baby so you cannot control them. Is what they want, that they will do.” (Mother, FGD Pungu)

The contribution of the key informants also confirmed that influence of relatives of the mother especially the mother-in-law really play an important role in the decision making concerning the infants welfare. Therefore for a mother to decide to exclusively breastfeed her baby for six months depends on the approval of some family members.

“It’s not easy at all, most of them, their families, their partners, they are always complaining because they think that the child is not only supposed to take breast milk. Because they think the breast milk is not enough for the child and they think

the child should be taking water in addition. How the weather is hot and when the child is crying they think is because the child is thirsty that is why they have to give water. It's not always easy for them.” (Health worker, IDI Kandega)

“They do not accept it at all; unless the young woman tells them she must follow what the nurses have told her to do. But her mother-in-law will grumble saying they do not have any good food to eat, how can the baby feed only on breast milk? If she goes out and leaves her baby behind, they will give it water to drink.” (TBA, IDI Gaani)

“Usually, for them to agree or not depends on the husband's parents (father and mother) they are more powerful than any other person and takes such decisions.” (TBA, IDI Pungu)

In addition, participants spoke about other influencing factors such as the cultural practices performed for first-time mothers known as “Kacheeri” in *Kasem* and “pog-saare” in *nankani* and their babies in the various communities. These practices involve the expressing of the breast milk of the “kacheeri” or “pog-saare” into a calabash after birth by the elderly women in the house or mother-in-law. This is to determine whether the breast milk is good for consumption by the baby. Live Ants are then put into the calabash of breast milk, if the ants survive and are able to crawl out then the milk is graded as good for the baby. Otherwise, help from the herbalist is sought and the baby is fed on other foods such as cow milk, millet flour water and other herbal concoctions while awaiting the mother's breast milk to be purified. During the purifying period the mother's breast milk is expressed and discarded. This purification process can take days depending on the herbalist judgement.

“Others too would express the woman’s’ breast milk into a container and put ants into it to drink the breast milk. If they don’t survive it means that woman breast milk is not good for the baby to suckle. So they would look for some herbs and treat the disease “yele – cheeri” (that is a woman who has sores dotted around her nipples and her breast milk is perceived not good for the baby) before they can allow the baby to suckle again.” (Mother, FGD Pungu)

“First-time mothers are bathed with hot water and are also given warm water to drink; it is believed that the warm water washes all the dirt and blood clots out of her body. They are however allowed to breastfeed the baby on the first day but they still introduce the concoctions/herbs.” (Heath worker, IDI Pungu)

The other cultural practice is performed for the baby upon reaching home after delivery. It starts with the baby’s first bath where it is forced to drink boiled herbal concoctions “nyiibu” for four days if it’s a baby girl and three days if it is a baby boy. This is believed to keep the baby strong and healthy and also to prevent certain deformities of that can affect the baby’s head (*fontanel*s).

“Yes they are there. They said when you deliver a baby it is not only by giving him breast milk that will make him grow strong. So they will collect some herbal roots and boil. So when they are bathing the baby they will give that herbal water to the baby to drink.” (Mother, FGD Kajelo)

“Yes! The moment you deliver and you are discharged from the hospital and get home; they old ladies quickly want to start giving the baby their herbal concoctions to drink. They did that to their children to grow and became adults now. So my illiterate mother wouldn’t know that is not good and would agree.” (Mother, FGD Pungu)

“Another cultural practice; what I heard is that not too long ago when a baby was delivered, if they did not give the baby boiled water with herbs, it would not walk. So they used “Kemolga” (red millet), added some water to it in a small calabash and any time the baby cried they gave some to it to drink. When a woman delivered they would not allow the baby to breast feed, saying that the first breast milk was dirty. They would rather look around for a woman who had delivered some days before to come and breast feed the new born baby.” (Mother, FGD Doba)

“I think it’s their belief; especially they are concerned with their fontanels, that if u don’t give medicine to the child his/her head would divide.” (Healthworker, IDI Gaani).

4.4 Challenges and coping strategies associated with Exclusive breastfeeding practices

Also in this section, challenges associated with EBF practices and coping strategies adopted were the main themes that emerged. It was realised that despite the education on EBF given to the mothers and the desire of the mothers to breastfeed, certain challenges were encountered by some of the mothers who either tried practicing or really did practice EBF. Respondents revealed that, these challenges such as lack of self-confidence to breast feed, baby crying a lot, engorged breast, sore nipples, biting of the nipples during suckling and baby suckling a lot were inevitable and had an influence on the mother’s decision to practice EBF. The narratives below suggest that the practice of EBF is seen as time consuming, since some of the mothers could not actively engage in any activity, therefore affecting their source of income and for those learning a trade had to stop to keep to the practice.

“I don’t get enough sleep especially at night. But if you give the water, he will not go hungry again let alone to suck.” (Mother, FGD Kajelo)

“I for instance, it was difficult for me to breast feed the baby because all the time, he needs to breast feed. So you need to also be cooking and eating regularly. So going through all these at times I feel like I should not have delivered in my life.” (Mother, FGD Pungu)

“Any time my child is crying I know he wanted to suck my breast milk and I am not always happy and my heart always beat and feeling that he wants to kill me.” (Mother, FGD Pungu)

“Once you don’t give him water to drink, he often cries and wants to suck breast milk and you also have to allow him suck. So you don’t get enough time to rest, wash your clothes and do other work. Also, because we don’t allow our house people to give water to the baby. When you want to leave the baby for them and do other work. They don’t agree at all. They will say if you had allowed them give the baby water to drink, he would have been sleeping by now and you can work.” (Mother, FGD Pungu)

“Yes, they always say the baby cries a lot, the babies have bloated abdomen and that the baby is not always satisfied.” (Health worker, IDI Gaani)

Some of these mothers were able to acquire certain strategies to survive these encounters. These strategies included moving from their matrimonial homes to their father’s homes after delivery, standing up to their in-laws, seeking for external advice from the health centres, development of personal skills as stated in the narratives below and also inviting

health workers to come speak to their relations. Meanwhile the others did nothing to cope with the challenges they were facing with EBF practices.

“I used my breast to block his nose and when he suffocates he stops biting my breast.” (Mother, FGD Kajelo)

“Nothing! I just allow him to do what he wants till his is okay.” (Mother, FGD Kajelo)

“I would tell her how healthy a baby will be when its mother feeds it on only breast milk; Show her mothers whose children are, “bugulugu” (healthy) due to exclusive breast feeding. Discuss the good about it with her.” (Mother, FGD Doba)

“...Most of them when they give birth they don't stay at their husband's homes. They have to go back to their own families so that they can practice EBF but because they can't when they think when they are in their husbands homes they can't disobey their mother-in-laws so they have to go back to their own parents so that they can practice it.” (Health worker, IDI Kandega)



CHAPTER FIVE

DISCUSSION

5.0 Introduction

The key findings of this study would be discussed in details according to the objectives which include the perception and practices of first-time mothers on exclusive breastfeeding practices, factors that influence their practice of EBF and also the coping strategies adopted by these mothers in relation to exclusive breastfeeding.

5.1 How exclusive breastfeeding is perceived and practiced

Breastfeeding is a common practice among natives of the Kassena-Nankana municipality. The findings of this study revealed that most of the mothers who participated in the study acknowledged breastfeeding their infants exclusively for six months. All through the discussion; almost all the mothers indicated they were knowledgeable about the practices of EBF. They were able to provide detail explanation of EBF, state its duration, benefits and disadvantages. This level of knowledge of the mothers could be attributed to their educational status. Since the demographic characteristics of the mothers showed that most of them had some level of education. Hence educational status could be linked to the mothers' level of exposure and access to information on EBF practices. These findings are similar to previous research findings that showed that limited education was a major factor for lack of knowledge about breastfeeding compared with other factors such as marital status, family income, and age (Afrose, Banu, Ahmed, & Khanom, 2012). Therefore, the level of knowledge of mothers on EBF could influence their perception to consider the benefits of EBF over the challenges they experience and therefore influencing their decision to exclusively breastfeed their Babies. In contrast, another study done in Dhaka city by Afrose et al (2012) showed that most of the participants had poor knowledge of the

advantages of exclusive breastfeeding but had good knowledge regarding duration of exclusive breastfeeding and breastfeeding.

However, it was discovered that, due to personal experiences of most of the first-time mothers and their encounters with other breastfeeding mothers, presumed EBF practices to be economical, available, and nutritious and prevents unwanted pregnancies which promotes good health to both mother and child, and entire family. Moreover, irrespective of the quality of education received by these first-time mothers and their commended knowledge on exclusive breastfeeding practices, three (3) out of the twenty-nine (29) mothers who participated in the FGD did not practice exclusive breastfeeding for six months. A few mothers still misinterpreted the practice and also saw it as a disadvantage to both mother and baby. This was confirmed by interviews with some health workers and TBA's who are usually in direct interaction with these mothers.

This study also revealed that the main source of information on EBF for all the first-time mothers was from a health post either within or near the community, or at the main hospital during antenatal or postnatal visits. This is similar to findings in Uyo, Southern Nigeria where most of the women under the study obtained their information about EBF from antenatal health talks (Abasiattai, Etukumana, Nyong, & Eyo, 2014). Furthermore conferring to descriptions given by all the mothers, it appears the content of the message they received during their education on EBF practices was similar. This suggests that the quality of information on EBF was the same among all the mothers, therefore all first-time mothers who participated should have the same level of knowledge on EBF.

The discussion with the mothers also indicated that there is a changing perception on EBF, which could be linked to the level of awareness of the mother. Since some mothers exhibited knowledge about the cultural beliefs and practices relating to breastfeeding and

its implications but still desired to exclusively breastfeed their babies. Similarly findings of Aborigo et al. (2012), pointed out there was a perception that most traditional ways of feeding infants are giving way to current recommendations.

5.2 Influences of Exclusive Breastfeeding Practices

Three main factors were revealed by these first-time mothers that influenced their practice of EBF for six months, despite their level of knowledge of the benefits and detriments of EBF. This suggests that a mother's decision to breastfeed exclusively does not solely depend on the mother's educational status, place of delivery or having the intention to breastfeed prior to delivery. Other factors such as influence of relatives of the mother and cultural practices performed for both mother and baby upon reaching home after delivery was disclose by the mothers to have an impact on their decision to exclusively breastfeed. Also a study in Pennsylvania USA revealed that factors such as mother's perception of father's attitude toward the practice of EBF, uncertainty of the quantity of breast milk produced or ability to breastfeed as well as need to return to work determines the likelihood of a mother to exclusively breastfeed (Arora, McJunkin, Wehrer, & Kuhn, 2000). Meanwhile research by Aidam, Pérez-Escamilla, Lartey, & Aidam, (2005) suggest EBF is associated with delivery at hospital/polyclinic, having secondary school education, intention to EBF prior to delivery, owning a home and having a positive attitude to EBF. Likewise a study in Western Australia which suggest that health service-related factors such as receiving consistent feeding advice, being encouraged by maternity staff to breastfeed at birth, delivery method, rooming-in, demand feeding while in hospital, and early breast contact (< 30 minutes after birth) were significantly associated with exclusive breastfeeding after hospital discharge (Cox et al., 2014).

5.3 Challenges and Coping Strategies of Exclusive Breastfeeding Practices

A number of challenges were encountered by some of the mothers who practiced or tried practicing EBF for six months. This was regardless of their level of knowledge on EBF and their desire to breastfeed exclusively for six months. Challenges such as lack of self-confidence to breast feed, baby crying a lot, engorged breast, sore nipples, biting of the nipples during suckling, as well as baby suckling a lot were inevitable and had an influence on the mother's decision to exclusively breastfeed. Also, because the practice of EBF is supposed to be continuous for six months and its time consuming; most of the mothers had challenges coping with the practiced EBF since they were working mothers. Hence those who were learning a vocation or employed had to stop working or learning in order to be able to exclusively breastfeed their babies. These findings concurred with a study involving member States of the United Nations, were Heymann, Rauba & Earle, (2013) reported that countries with guaranteed breastfeeding breaks at work had 71% of its working mothers practicing exclusive breastfeeding while only 4% of working mothers practiced EBF in countries with unpaid guaranteed breaks. Additionally, a study by Fein and Roe (2001) revealed that mothers who were likely to breastfeed exclusively were those working part-time as compared to those working full-time. Similarly, another study showed that significantly lower number of employed mothers continued EBF as compared to unemployed mothers (Ali, Ali, Imam & Ayub, 1992).

There are many challenges with the practice of exclusive breastfeeding and this contributes to the low rates of EBF practices (Februhartanty et al., 2006). Likewise Giugliani's (2004) study revealed that, frequently experienced challenges with EBF practices are sore nipples, breast engorgement, plugged milk duct, breast infection and poor milk production. However, according to some of the mothers anytime they were faced with these challenges

they developed certain strategies to cope with the situation or sought advice from the nearest health center to deal with the challenge in order to continue with EBF.

The health workers and TBA's also confirmed that they conduct follow-ups on mothers who come with such complains and give them the necessary support they need to encourage them exclusively breastfeed for six months. Some of these mothers had to stop their work since the baby suckled on demand, making it impossible to get any work done. Others with nipple biting issues used the breast to block the baby's nose so the baby would withdraw from the breast. Additionally, Tengku, Wan, Zaharah, Rohana, and Nik Normanieza, (2012) found out that many women accepted breastfeeding practice but found it challenging to practice EBF especially when confronted with low milk production, perceived low nutritional quality of breast milk, and work commitments.

Five constructs from the health belief model were adopted for the purpose of this study. These constructs apply to the findings of this study where there was a behaviour change of most of the mothers to exclusively breastfeed their babies for six months. This was motivated by their perception of the benefits of EBF for six months to their babies and themselves. Although some mothers encountered barriers such as the influence of relatives of the mother, challenges with breastfeeding and cultural practices performed for both baby and mother upon reaching home after delivery. Other mothers threatened by their awareness of the consequences of not practicing EBF for six months motivated their decision to exclusively breastfeed for six months. Also the discussion indicated that, information, counselling and continues support received by these mothers from health workers and TBA's during antenatal and postnatal clinics motivated their decision to practice EBF for six months. Likewise the findings on the socio-demographic characteristics of the mother which indicated that educational or employment status could

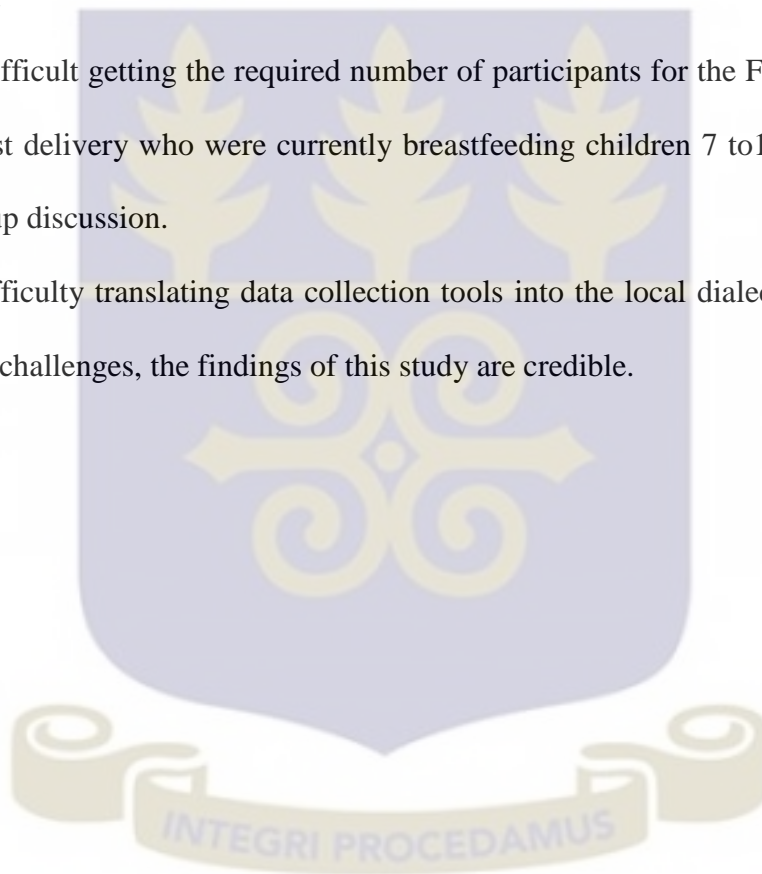
be attributed to the likelihood for a first-time mother to exclusively breastfeed for six months.

5.4 Limitations of the study

The study encountered some problems that delayed the whole process of data collection. One of these problems was the nankani language which was a barrier for communication. Therefore the research relied on only data from the research assistant and the transcriptions.

It was also difficult getting the required number of participants for the FGD. That is eight women of first delivery who were currently breastfeeding children 7 to 12 months old for the focus group discussion.

There was difficulty translating data collection tools into the local dialect and vice versa. Despite these challenges, the findings of this study are credible.



CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

Exclusive breastfeeding for six months was practiced by most of the first-time mothers who took part in the study conducted in Kassena-Nankana municipality. Consequently, this can be attributed to the fact that the mothers had adequate access to information on EBF that encouraged them to have a positive perception towards the practice. Although certain factors such as influence of relations, cultural practices and challenges with breastfeeding threatened their decision to exclusively breastfeed their babies, support from health workers, traditional birth attendants and development of personal skills helped these mothers overcome those factors. However, further research could be done to assess cultural rites associated with breastfeeding within the first year of an infant's life or cultural rites performed within the first year of an infant life.

6.2 Recommendations

1. The study recommends that strategies, by the Ghana Health Service to promote compliance with exclusive breastfeeding practices in Kassena-Nankana municipality should be targeted not only towards mothers but to their relations as well, since they play a key role in the mother's decision to exclusively breastfeed her baby.
2. Health workers need to help community members form breastfeeding support groups to motivate mothers whom are faced with breastfeeding challenges to develop strategies to continue breastfeeding exclusively for six months. Furthermore, much emphasis should be placed on uneducated mothers during antenatal and postnatal classes to prevent misconception of the policies.

3. The district health directorate should take into consideration the cultural beliefs and practices of the various communities when devising strategies to improve EBF.



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APPENDICES

APPENDIX I

CONSENT FORM FOR GUIDES

Title of Research: Exclusive breastfeeding practices among First-time mothers in Kassena-Nankana Municipality.

Principal investigator: Louisa Adda

Telephone Number: 0506287225

Email: louisaadda@yahoo.com

Institution: School Of Public Health, College Of Health Sciences, University Of Ghana-Legon.

Introduction:

I want to thank you for taking time to meet with me today to participate in this discussion. My name is Louisa Adda and assisting me is I am from the University of Ghana, Legon in Accra.

This discussion would be on the exclusive breastfeeding practices of first time mothers in this community. The result of the discussion is for academic purposes, as it is a partial requirement for me to be awarded a master's degree. You were selected because you are a key informant in the community with regards to breastfeeding. Please keep in mind that we are just as interested in the negative comments as positive comments and so feel free to express your views.

I know you have all noticed the tape recorders. We're recording the session because we cannot write fast enough to capture all the helpful things you might say. You are assured of complete confidentiality that is why we would be on the first name basis, and there would be no use of names in my reports. I would appreciate it if we could all turn off our phones or put them on silence within this period of discussion.

Anonymity/ Confidentiality: Your participation in this study is voluntary. You can choose not to answer any individual question or all the questions. You are however encouraged to fully participate since your opinions are important in assessing the practices of exclusive breastfeeding.

You are assured that whatever information you provide will be taken with strict confidentiality and will be purely for research purpose. Your responses would not be shared with anybody who is not part of the team. Data analysis would be done on aggregated level to ensure anonymity .Data collected and all the materials related to the study will be stored in a personal locked cabinet. The person responsible for data storage would be Louisa Adda, a student of School Of Public Health, College Of Health Sciences, University Of Ghana- Legon. Telephone number; 0506287225.

Contacts for additional information.

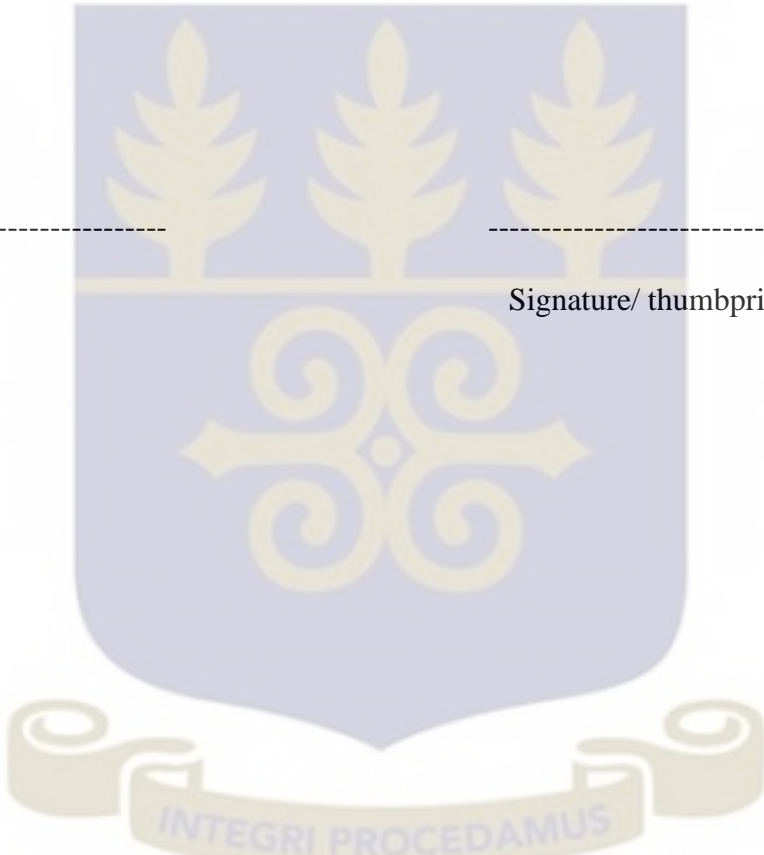
If you have any questions about your rights as a research participant, please contact Louisa Adda at the School of Public Health on 0506287225 or Administrator, Ghana Health Service Ethical Review Committee, Miss Nana Abena Kwaa Addai-Donkor: 0244712919.



APPENDIX II

PARTICIPANT CONSENT FORM

The above document describing the benefits, risks and procedures for the research title: Exclusive breastfeeding practices among First-time mothers in Kassena-Nankana Municipality, has been read and fully explained to me in kasem/nankani. I have been given the opportunity to ask any questions about the research and I have been answered to my satisfaction. I agree to participate.



Date Signature/ thumbprint of volunteer

INTEGRI PROCEDAMUS

APPENDIX III

IN-DEPTH INTERVIEW GUIDE FOR TBAs

TOPIC: EXCLUSIVE BREASTFEEDING PRACTICES AMONG FIRST-TIME MOTHERS IN KASSENA-NANKAN MUNICIPALITY

KEY INFORMANT

Name of Community.....

Background information

1. Sex:.....
2. Age:.....
3. Marital status:.....
4. Educational level:.....
5. Occupation:.....
6. What is your source of training? Have you received any other extra training with regards to being a TBA? Where?.....
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7. How long have you been a TBA or practicing?.....
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8. What are the activities you do as a TBA?.....
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Knowledge and Perception of Exclusive breastfeeding

9. Do you counsel mothers on breastfeeding? Probe for why or why not?
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10. Have you ever heard about exclusive breastfeeding? When did you first hear of exclusive breastfeeding (before or after you started practicing)? Probe for where they got the information (**sources**; community health worker, antenatal clinics, colleagues, family members etc.) and what information did they receive? Can you explain exactly what EBF means?.....
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11. What do you know about exclusive breastfeeding? Probe for benefits, consequences..

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12. How long do you think a mother should breastfeed her baby on only breast milk before introducing other foods? Why?.....

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13. How often is a baby supposed to be breastfed in a day? Probe for feeding at 0-6 months.....

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Exclusive breastfeeding practices

14. What is your understanding of exclusive breastfeeding? Who do you recommend it for; first-time mothers, multi-gravida etc? Probe for why? (Reasons).....

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15. In your opinion do you think a first-time mother should exclusively breastfeed? Why or why not? Probe for types of food (water, kooko, and other liquids).....

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16. When do first time mothers in this community usually introduce food to their baby? Why or why not? Probe for types of food (water, kooko, and other liquids).....

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17. Are there any cultural practices about exclusive breastfeeding and first-time mothers? What are they? Probe further for influence of cultural practices on exclusive breastfeeding practices?.....

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18. What do relations of first-time mothers think about exclusive breastfeeding? Probe for partners, in-laws and other family members.....

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19. What do you think can be done to promote exclusive breastfeeding among first time mothers?.....

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Challenges and coping strategies in relation to Exclusive breastfeeding

20. What are the challenges faced by first-time mothers with regards to exclusive breastfeeding in this community? Probe for baby, mother, partners and other family members. What are the complaints that you get from first-time mothers regarding exclusive breastfeeding? What advice do you give them? Do you give any specific support?.....

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21. What do they do when they are faced with these challenges? And what do you recommend that they do. Probe for why?.....

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APPENDIX IV

IN-DEPTH INTERVIEW GUIDE FOR HEALTHWORKERS

TOPIC: EXCLUSIVE BREASTFEEDING PRACTICES AMONG FIRST-TIME MOTHERS IN KASSENA-NANKANA DISTRICT

KEY INFORMANT

Name of community.....

Background information

1. Sex:
2. Occupation(professional background):.....
3. Marital status:.....
4. Educational level:.....
5. How long have you been practicing?.....
6. What activity does your occupation entails?.....

Knowledge and Perception of Exclusive breastfeeding

7. Do you counsel mothers on breastfeeding? Probe for why or why not?.....
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8. Have you ever heard about exclusive breastfeeding? When did you first hear of exclusive breastfeeding (before or after you started practicing)? Probe for where they got the information (**sources**; community health worker, antenatal clinics,

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11. How often is a baby supposed to be breastfed in a day? Probe for feeding at 0-6 months.....

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Exclusive breastfeeding practices

12. What is your understanding of exclusive breastfeeding? Who do you recommend it for; first-time mothers, multi-gravida women etc? Probe for why? (Reasons).....

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13. In your opinion do you think a first-time mother should exclusively breastfeed? Why or why not?.....

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14.

15. When do first time mothers in this community usually introduce food to their baby? Why or why not? Probe for types of food (water, kooko, and other liquids).....

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16. Are there any cultural practices about exclusive breastfeeding and first-time mothers? What are they? Probe further for influence of cultural practices on exclusive breastfeeding practices?

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17. What do relations of first-time mothers think about exclusive breastfeeding? Probe for partners, in-laws and other family members.....

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18. What do you think can be done to promote exclusive breastfeeding among first time mothers?.....

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Challenges and coping strategies in relation to Exclusive breastfeeding

19. What are the challenges faced by first-time mothers with regards to exclusive breastfeeding in this community? Probe for baby, mother, partners and other family members. What are the complaints that you get from first-time mothers regarding exclusive breastfeeding? What advice do you give them? Do you give any specific support?.....

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20. What do they do when they are faced with these challenges? And what do you recommend that they do. Probe for why?.....

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APPENDIX V

**FOCUS GROUP DISCUSSION GUIDE FOR FIRST-TIME MOTHERS IN
KASSENA-NANKANA MUNICIPALITY**

**TOPIC: EXCLUSIVE BREASTFEEDING PRACTICES AMONG FIRST-TIME
MOTHERS IN KASSENA-NANKANA DISTRICT**

SCREENER FOR FIRST-TIME MOTHERS

Background information of focus group discussion members

Name of Community.....

1. Age at last birthday
2. Ethnicity
 - a) Kassena
 - b) Nankana
 - c) Others
3. Religion
 - a) Christian
 - b) Muslim
 - c) Others
4. Occupation
 - a) Civil servant
 - b) Unemployed (artisans).....
 - c) Public servant
 - d) Trader
5. Level of education
 - a) No formal education
 - a) Primary
 - b) JSS
 - c) SHS
 - d) Tertiary
6. Marital status
 - a) Single
 - b) Married
 - c) Unmarried
 - d) Widowed
 - e) Divorced
 - f) Cohabiting
7. Age of child in months.....

SECTION B: Knowledge and perception of Exclusive breastfeeding

1. Have you ever heard about exclusive breastfeeding? When did you first hear of exclusive breastfeeding (before or after pregnancy)? Probe for where they got the information (**sources**; community health worker, antenatal clinics, colleagues, family members etc.) and what information did they receive? Can you explain exactly what EBF means?.....

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2. Did you practice exclusive breastfeeding? Probe. Why or why not?.....

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3. How long did you breastfeed your child before introducing foods. Why or why not? (Probe on what kind of foods were given or not given).....

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4. How long do you think a mother should breastfeed her baby on only breast milk before introducing other foods? Why is it so??? Probe for reasons, benefits, advantages and disadvantages.....

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SECTION C: Exclusive breastfeeding practices

5. What should a baby 0-6 months be fed on? Probe for reasons for methods of feeding and how often is an exclusively breastfeed baby supposed to be breastfed in a day?

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6. How often did you breastfeed your baby in a day? Why or why not? (Probe for morning, afternoon and evening).....

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7. When did you introduce food to your baby? Probe for why or why not and what did you feed your baby on? Probe for types of food (water, kooko, and other liquids). In your own opinion would you say your baby is growing well? Can you explain further why you are

saying he/she is growing well (probe for age he/she started sitting, crawling, walking etc).

Why are you saying he/she is not growing well?

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8. Are there any cultural practices on breastfeeding in this community that you are aware of? What are they? Probe further for influence of cultural practices on exclusive breastfeeding practices?.....

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9. What do your relations think about exclusive breastfeeding? Why? Probe for partner, in-laws, friends and other family members.....

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10. What do you think can be done to promote exclusive breastfeeding?.....

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SECTION D: Challenges and coping strategies in relation to Exclusive breastfeeding

11. For those of you currently practicing EBF, can you please share your experiences with me? How is it like? What are your likes or dislikes about it?.....

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12. What are the challenges you faced with exclusive breastfeeding? Probe for challenges with self, baby, husband, friends and other family members.....

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13. What did you do when you were faced with these challenges? Probe for how they managed (Probe for who supported them during the challenge and when was support given).

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