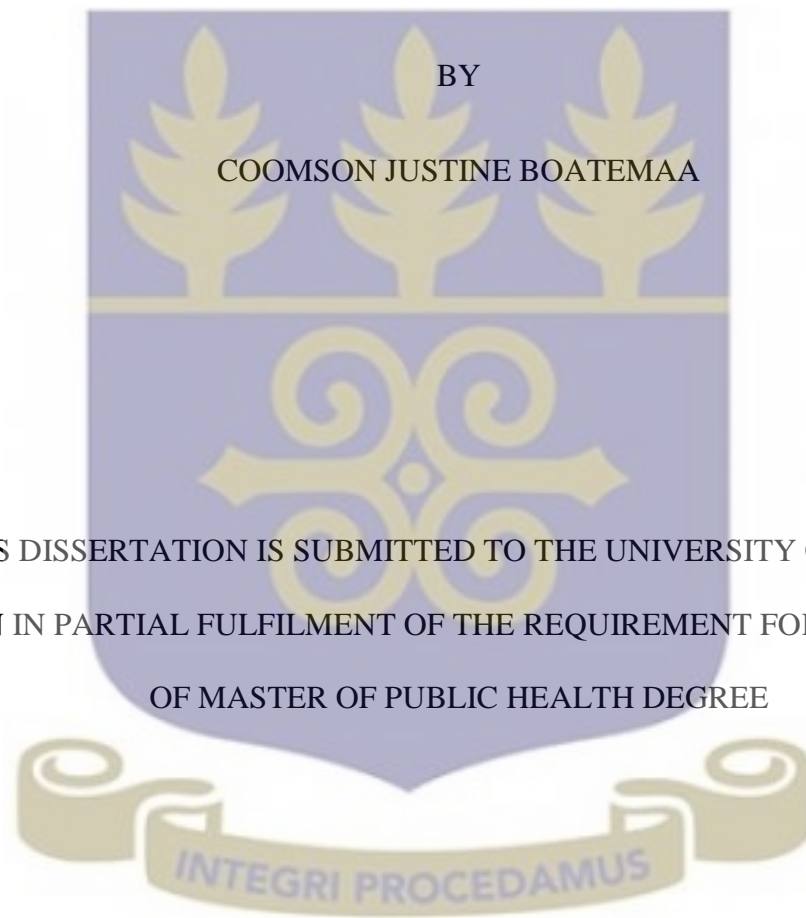


PERCEPTION AND PRACTICE OF BREASTFEEDING IN PUBLIC PLACES IN
THE AYAWASO WEST WUOGON SUB METROPOLITAN AREA, ACCRA



BY

COOMSON JUSTINE BOATEMAA

THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD
OF MASTER OF PUBLIC HEALTH DEGREE

SEPTEMBER, 2016

DECLARATION

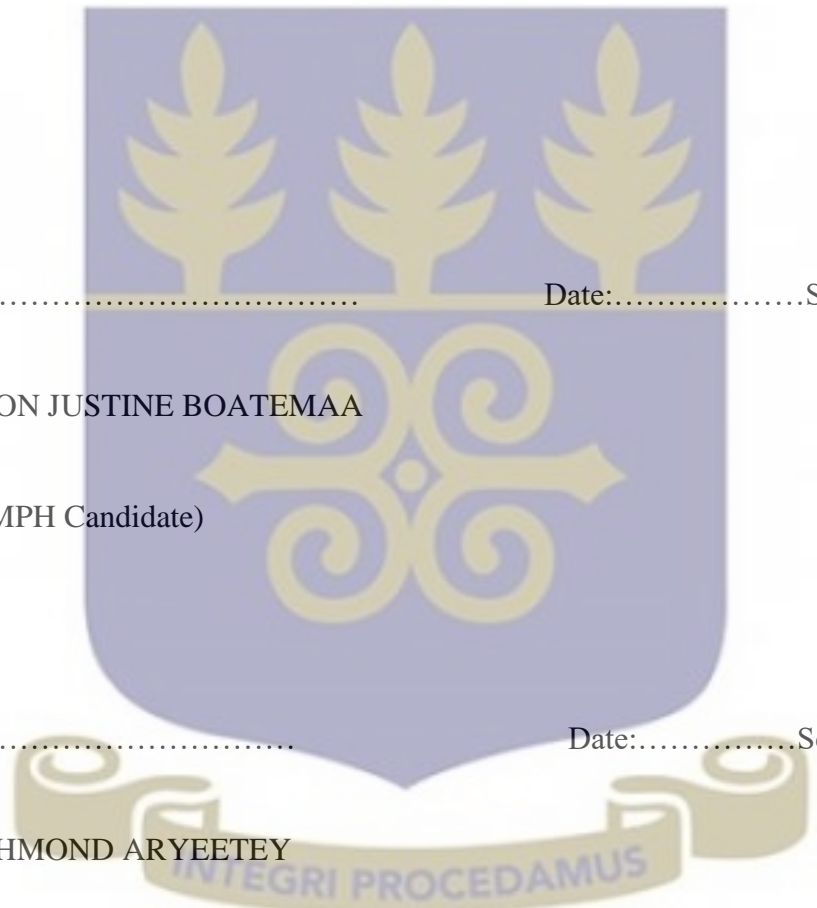
I, Coomson Justine Boatemaa, declare that this work is the result of my own original research, except for other researcher's investigations which I have duly acknowledged. This Dissertation has not been presented elsewhere either in whole or in part for another degree.

..... Date:.....September, 2016.

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..... Date:.....September, 2016.

DR. RICHMOND ARYEETAY
(Academic Supervisor)



DEDICATION

I dedicate this work to my parents, Mr. and Mrs. Robert Coomson and my siblings, Julius Duah and Loretta Nana Ama Coomson.



ACKNOWLEDGEMENT

My special thanks to my supervisor, Dr. Richmond Aryeetey, whose patience, guidance, support and encouragement enabled me to put this work together, I really appreciate your help, God bless you abundantly.

I extend a heartfelt thanks and appreciation to Prof. Augustine Ankomah, my Head of Department and Dr. Emmanuel Asampong for their encouragement throughout my graduate studies. I also want to thank my friends who assisted me with data collection and proof reading of transcribed data, Eunice Mends, Loretta Coomson, Edward Adobaw and Bernard Junior, your support is really appreciated. My sincere thanks also goes to the staff of the Child Welfare Clinic, Antenatal Clinic and Public Health Departments of the University Hospital, especially Joshua for the assistance with my data collection.

I want to specially thank my Mum, Dad, Julius, Nana Ama and Ebo for the financial and moral support, I wouldn't have gotten this far without you. Eunice, Annie, Betty, Edinam and Mercy, what wonderful people you have been to me throughout our graduate studies, I am so grateful.

I ultimately thank the sovereign God for His providence and goodness toward me, He gave me all the strength and wisdom I needed to go through my studies. I am nothing without His help and grace.

ABSTRACT

Introduction and objectives: Breastfeeding is recommended for infants from birth to two years and beyond and is expected to be offered on demand. In developed countries, women have suffered abuse (verbally or physically confronted) and made to feel embarrassed for breastfeeding in public places. It is not clear if similar situations occur in developing countries where breastfeeding is typically universal. A better understanding of societal perception of breastfeeding in public is needed to promote and support breastfeeding as a public health strategy for addressing preventable child deaths. This study assessed societal as well as individual women's perception and practice regarding breastfeeding in public in an urban setting in Southern Ghana, as well as factors associated with these outcomes.

Methods: A cross-sectional study using an explanatory sequential mixed method study design was carried out. A survey which collected data on 300 women's sociodemographic characteristics, obstetric history and their perception and practice of breastfeeding in public places was employed. Five Focus Group Discussions and five In-Depth Interviews were conducted with women and men to obtain qualitative information on women and community perceptions of breastfeeding in public places.

Findings: Mean age of respondents was 31.2 ± 0.3 years. Ninety-four percent were married or cohabiting and 54.3% had received secondary education or higher. Women's age between 30-34 years was associated with their perceptions of breastfeeding in public places. Eighty-five percent of women in the survey considered breastfeeding in public as an acceptable practice. Ninety-two percent of women reported previous practice of breastfeeding in a public place. Women who reported strong family support for (OR=3.27,

95%CI =1.31-8.18) or having a spouse who was comfortable with breastfeeding in public (OR=3.99, 95%CI=1.50-10.57) were more likely to practice it. Majority of women reported the need to cover their breast when breastfeeding in public; such women were likely to perceive the practice as unacceptable (OR=0.13, 95%CI=0.03-0.43).

Conclusions: Majority of women did not perceive breastfeeding in public as a problem. However, they are able to do so by finding a way to minimize their feelings of discomfort. Targeted public education and promotion of breastfeeding in public places will empower women to choose to breastfeed wherever they find themselves.

Key words: Breastfeeding in public, Perception, Women, Shy, Discomfort

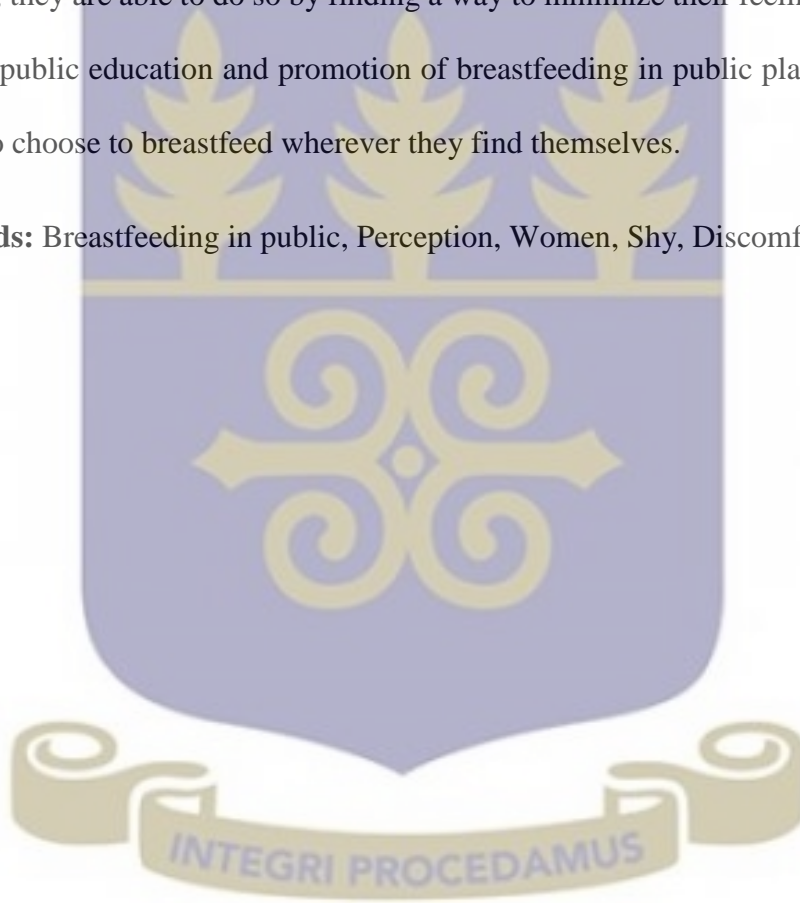


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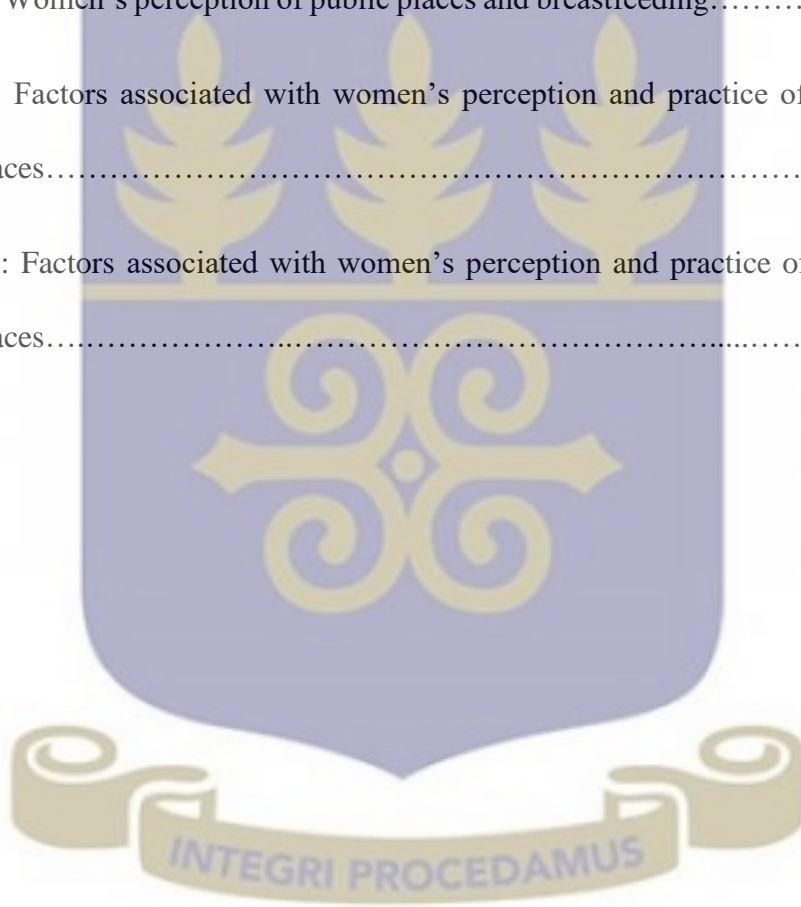
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LIST OF ABBREVIATIONS

WHO	World Health Organization
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development.
CDC	Centers for Disease Control and Prevention.
MDG	Millennium Development Goals
GDHS	Ghana Demographic and Health Survey.
EBF	Exclusive Breastfeeding
BFHI	Baby Friendly Hospital Initiative
HIV	Human Immunodeficiency Virus
FGD	Focus Group Discussion
IDI	In-Depth Interview
KII	Key Informant Interview
CWC	Child Welfare Clinic
ANC	Antenatal Clinic
USA	United States of America
ORS	Oral Rehydration Salt

The logo of the University of Ghana is a large, semi-transparent watermark centered on the page. It features a shield with a purple background and a gold emblem consisting of three stylized leaves or branches. Below the shield is a gold ribbon with the Latin motto "INTEGRI PROCEDAMUS" written in purple capital letters.

CHAPTER ONE

INTRODUCTION

1.1 Background Information

Breastfeeding contributes immensely to healthy growth and development of infants. It provides nutrients needed by newborns for growth and survival (World Health Organization, 2015; UNICEF, 1999). The World Health Organization recommends that all newborns are breastfed exclusively for the first six months of life and to continue breastfeeding, together with appropriate complementary feeds up to 2 years of life and beyond (World Health Organization, 2015). Optimal breastfeeding is associated with positive effects on mother and child health by enhancing the infant's immune system and offers a reduced susceptibility to infections, e.g. diarrhoea, pneumonia and urinary tract infections (World Health Organization, 2009). Optimal breastfeeding is also linked with reduced societal cost of health care by reducing risk of adult-onset non-communicable diseases. Exclusively breastfed infants have a lower risk of hypertension, dyslipidemia, overweight or obesity and type-2 diabetes in adolescence and adulthood as compared to formula-fed infants. In addition, mothers who breastfeed exclusively have delayed fertility and a reduction in postpartum hemorrhage; (Hanif, 2011; Okafor, Olatona, and Olufemi, 2014; World Health Organization, 2015)

Despite the fact that there is enough evidence to support the importance of breastfeeding to maternal and child health, there is low practice of appropriate breastfeeding globally (Cunningham, Jackson, and Oickle, 2006). Globally, the WHO reports that only 36% of infants are exclusively breastfed up to 5 months of life (World Health Organization, 2015). There are multiple factors linked with low prevalence of appropriate breastfeeding

including social, environmental, physical and maternal factors (Kirk, Rosenblum, Johnson, and Muzik, 2014).

The focus of this study to assess the perception of breastfeeding in public and the factors that influence breastfeeding behavior (Mulready-Ward and Hackett, 2014). Public in this context refers to any areas outside the home of the caregiver and also accessible to visual contact by other community members. In this study, public places refer to restaurants, work place, shopping centers and public transport. Negative feelings about breastfeeding in public can limit motivation not only to initiate breastfeeding but also to sustain it. Negative feelings and attitudes often occur in an environment where there is rapidly changing social and living systems, such as the increasing participation of women in the formal and informal workplace and the need for women to return to work shortly after delivery.

If women have challenges with breastfeeding in public, it could lead to a reduction in the prevalence of breastfeeding and worsen the malnutrition burden among children under five years.



1.2 Statement of the problem

In Ghana, despite the high prevalence of breastfeeding (98%), there is sub-optimal rate and duration of exclusive breastfeeding (often < 3 months), and a little above half (52%) are exclusively breastfed as recommended (Ghana Demographic and Health Survey, 2014). In developed country settings, women have reported feeling embarrassed, afraid, and isolated, among other barriers, when they breastfed in public. Also, negative perceptions of breastfeeding in public by women and the attitudes by society which elicit these perceptions, pose as a barrier to breastfeeding and limit optimal breastfeeding practice (Mulready-Ward and Hackett, 2014; Hauck, 2004).

There is the need to understand the changing social systems and the role of women such as the increasing participation of women in formal work, and the short duration of maternity leave on breastfeeding. In Ghana there is no known evidence of the perceptions and behaviors surrounding breastfeeding in public. This study therefore provides the needed evidence, by assessing societal as well as women's perception and practice of breastfeeding in public. The study also explored factors associated with perception and practice of breastfeeding in public.



1.3 Justification of the study

This study describes perceptions and practice of breastfeeding in public, as well as explores factors associated with the practice in Ghana. The findings provide contextual evidence on breastfeeding practices which can inform development of breastfeeding communication messages, particularly for women, their spouses and other community members who express negative perceptions about breastfeeding. Data from this study will inform policy makers and stakeholders of infant and young child nutrition such as the WHO, UNICEF and other local and international organizations who support and promote breastfeeding, on the need to develop interventions and policies that safeguard breastfeeding everywhere in a country.



1.4 Main objective

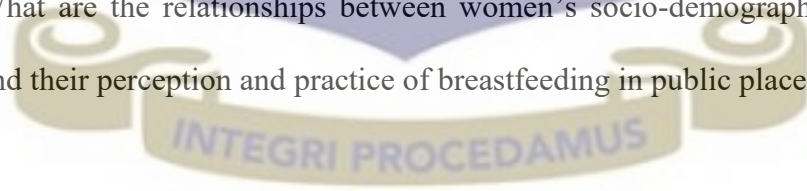
To determine the perception and practice of breastfeeding in public places among women in their reproductive age who have had a child within the last 5 years.

1.5 Specific objectives

1. To determine community perception and attitudes to breastfeeding in public places among residents of Ayawaso-West Wuogon, sub-metropolitan area, Accra.
2. To determine practice of breastfeeding in public places among residents of Ayawaso-West Wuogon sub metropolitan area, Accra.
3. To identify the socio-demographic factors associated with women's perception and practice of breastfeeding in public.

1.6 Research questions

1. What is the proportion of women resident in Ayawaso-West Wuogon sub-metropolitan area who have practiced breastfeeding in public places?
2. What is the perception and attitudes of communities towards breastfeeding in public places?
3. What are the relationships between women's socio-demographic characteristics and their perception and practice of breastfeeding in public places?



1.7 A conceptual framework

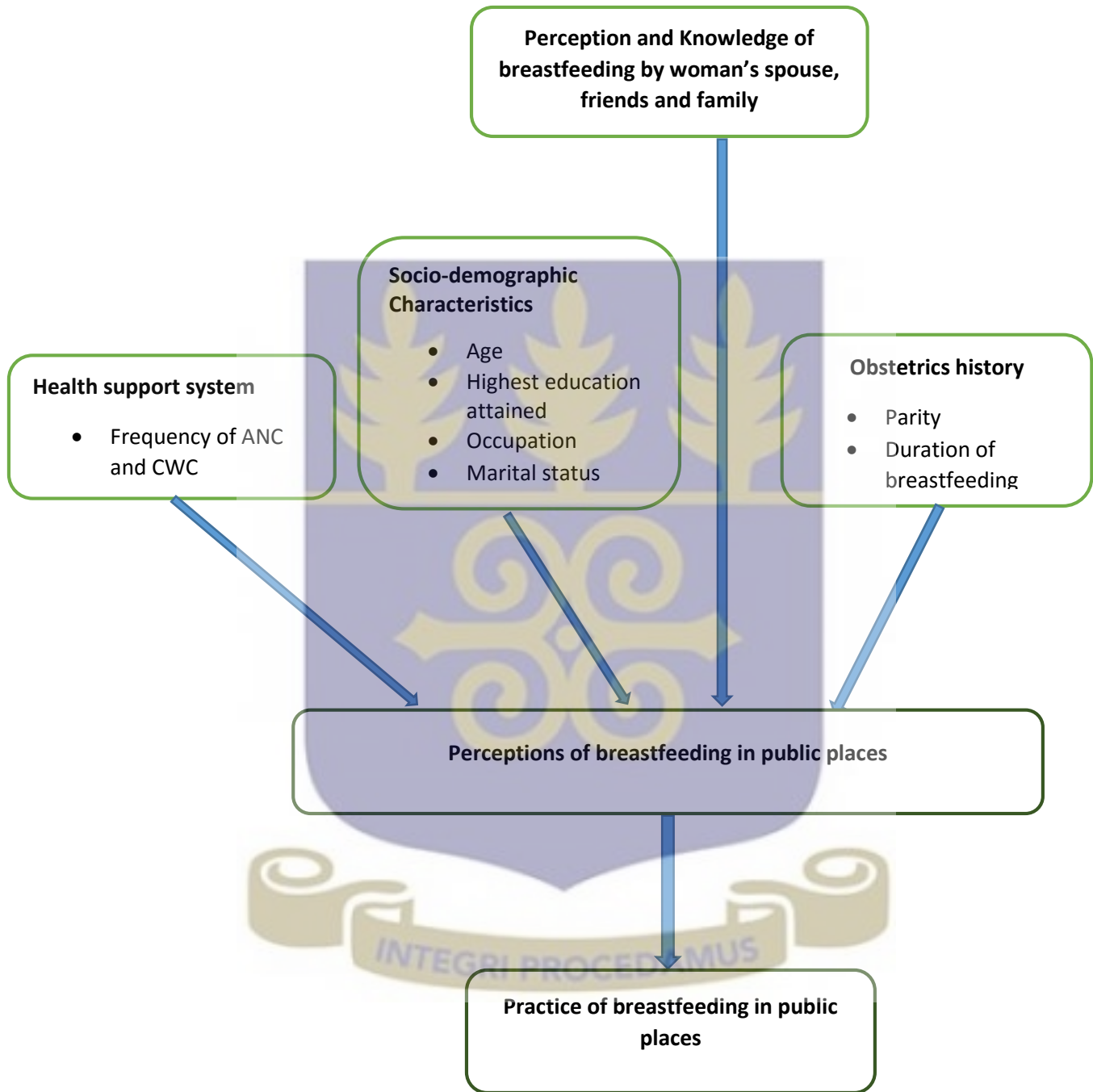


Figure 1. Conceptual framework of factors that determine women's perception and practice of breastfeeding.

The above conceptual framework is based on factors identified in previous studies to be associated with women's perception and practice of breastfeeding in general (Mulready-Ward and Hackett, 2014). In the context of this study, it is expected that such factors may influence a woman's perception of breastfeeding in public places and consequently affect their practice.

A woman's socio-demographic and personal characteristics such as her age, level of education attained, marital status and previous exposure to breastfeeding can directly influence her perception of breastfeeding in public as unacceptable and embarrassing or otherwise.

A woman's obstetric history, mainly her parity, will determine her past experience of breastfeeding, knowledge of breastfeeding recommendations and benefits, and will influence her decision to breastfeed in public despite societal disapproval or negative perceptions. Also, a woman's frequency of exposure to the healthcare system and breastfeeding support from health care providers during antenatal care visits and child welfare clinic attendance will determine the level of knowledge acquired about breastfeeding and this exposure can shape her perception of breastfeeding in public positively.

Knowledge and perception of breastfeeding by a woman's family, spouse and friends will directly affect her choice to breastfeed in public and determine her perception of breastfeeding in public too. Negative or positive perception about breastfeeding in public by a woman will negatively or positively affect her eventual practice of breastfeeding in public.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Benefits of Breastfeeding

Breastfeeding refers to feeding a child with milk from a mother's breast. Human milk is a good source of nutrients for infants (Ballard and Morrow, 2013). Breastfeeding provides both long and short term benefits to infant health. It provides health, psychological, economic and environmental benefits to infants, mothers and society, (Anatolitou, 2012). It is therefore recommended for all infants. Breastfed children have reduced risk of developing cardiovascular disease, infectious diseases in childhood, reduced risk of type-2 diabetes in adulthood and provides better physical and mental health of the mother (Horta and Victora, 2013).

Also, because breastmilk does not require preparation and is always at the right temperature, its constituent antibodies remain active and protect infants from gastrointestinal and respiratory tract infections. Breastfed infants have a reduced risk of mortality because breastmilk with its anti-infective constituents stimulates the child's immunity and response to vaccines, making them less susceptible to pneumonia, asthma, allergies, and childhood diabetes. In addition, breastfed infants have a lower risk of developing acute otitis media, nutrient deficiencies, cancers and obesity (Ladomenou, Moschandreas, Kafatos, Tselentis, and Galanakis, 2010). Mothers who breastfed appropriately had decreased risk of breast and ovarian cancer, cardiovascular diseases, type 2 diabetes and postpartum depression (Ip, Chung, Raman, and Al., 2007).

The fatty acids in breastmilk plays a key role in the cognitive and visual development of infants (Nyaradi, Li, Hickling, Foster, and Oddy, 2013). A study shows that Breastfed

children had higher scores on cognitive and IQ tests at school as well as better vision compared to formula fed children (Jedrychowski et al., 2012). Mothers who breastfed their infants experience a greater sense of bonding or closeness with the newborn compared to those who formula fed their infants (Bai, Middlestadt, Pengà, and Fly, 2009). It is acknowledged that breastfeeding reduces women's risk of postpartum depression, which affects about 13% of women (Dennis and McQueen, 2009).

Economically, families who practiced exclusive breastfeeding in the first six months of their child's life benefited financially compared to families of infants who were mixed or formula fed (Ladomenou et al, 2010). This is because breastmilk is readily available and families do not have to spend money in buying feeds as families who practiced formula feeding. Such families also saved time and did not need to prepare feeds for feeding (Bartick, 2011).

In addition, because breastfeeding promotes better infant health, it means there will be less health system costs, less absenteeism from work for mothers who are employees leading to higher productivity and saved resources for employers and the nation (United States Breastfeeding Committee, 2002). This means that as breastfeeding rates increase, it could lead to a reduction in the prevalence of various illnesses and health conditions, which in turn results in lower health care costs.

A study by Bartick and Reinhold, (2010) found that if 90% of families in the US exclusively breastfed for six months as recommended, the country would save \$13 billion annually from reduced direct medical and indirect costs and the cost of premature death associated with infant infections and diseases such as sudden infant death syndrome,

hospitalization for lower respiratory tract infection in infancy, atopic dermatitis, childhood leukemia, childhood obesity, childhood asthma, and type-1 diabetes mellitus.

Also breastfeeding provides environmental benefits because it is natural human breastmilk readily available from the woman's breast, there is therefore no need for packaging as is needed for infant formulas and other substitutes for human milk that require packaging which may be disposed in the environment. (Salmon, 2015; U.S. Department of Health and Human Services.,2011). One hundred and fifty million containers of formula are consumed for every one million formula-fed babies and most of these containers will end up in the environment without being recycled, thereby polluting the environment (United States Department of Health and Human Services., 2011)

For these reasons, the World Health Organization recommended that all infants should be exclusively breastfed for the first six months and together with other foods till the child is 24 months and beyond (World Health Organization, 2002)

2.2 Barriers to Breastfeeding

The benefits of exclusive and continuous breastfeeding for infants are well known globally. However, the global breastfeeding rates are low (UNICEF, 2006). Practice and continuation of breastfeeding according to the World Health Organization (2002), has been found to be affected by a woman's socio-demographic and socioeconomic factors were age, educational level, marital status , income and occupation, other factors such as knowledge of appropriate feeding practices and a supportive environment (Cunningham, Jackson, and Oickle, 2006; Thet et al., 2015). A woman's age (above 25 years) was found

to be associated with the practice of exclusive breastfeeding compared to younger women (Neji, Nkemdilim, and Ferdinand, 2015).

Married women in a study by Tampah-Naah and Kumi-Kyereme (2013), were found to practice exclusive breastfeeding more often than unmarried women. Essien and Samson-Akpan, (2013) found educated women in urban areas to practice more exclusive breastfeeding but for shorter periods than recommended. Women with formal education were also found to visit baby friendly facilities and had better knowledge of breastfeeding and appropriate feeding practices. They also exhibited more interest in breastfeeding than women with informal education (Neji et al., 2015). In a study by Ndiokwelu, Maduforo, and Amadi, (2014), they found a positive relationship between mothers education and frequency of breastfeeding. Also, Uchendu, Ikefuna, and Emodi, (2009) found that educated women who came from small families were more likely to breastfeed than their counterparts from larger families. In a United States study, women with friends and families who practiced breastfeeding were more likely to practice breastfeeding too and non-supportive family and friends attitudes affected a woman's choice to breastfeed and the duration of practice (United States Department of Health and Human Services, 2011). Neji et al., (2015) found that women who earned lower income practiced exclusive breastfeeding much longer than higher income earners.

Kimani-murage et al., (2011) found that factors such as maternity health care for mothers and their exposure to the media, their child's birth weight and order etc. to be associated with suboptimal breastfeeding but the direction of effect was unknown. Formula feeding of infants in the hospital was found to be negatively associated with breastfeeding outcomes and anxiety or depression among mothers (Forster, Mclachlan, and Lumley,

2006). Agunbiade and Ogunleye, (2012), found in a Nigerian study that only 45% of respondents initiated breastfeeding within the first two hours after delivery. The practice of breastfeeding by these women was affected by their cultural norms, leading to sub optimal breastfeeding practices such as giving herbal concoctions to infants less than six months of age. This practice negatively affects the exclusivity of breastfeeding. A 68 year old grandmother and participant in a focus group discussion by Agunbiade and Ogunleye, (2012) mentioned that

“Babies cannot feed on breast milk alone. Newborn infants will require additional supplements such as herbal concoction to guard against infections”

The United States Surgeon General's Call to Action to Support Breastfeeding reported that, women who had friends and close family with a successful breastfeeding experience were more likely to breastfeed. Similarly, negative attitudes of family and friends can pose a barrier to breastfeeding. It also stated that some mothers avoided asking for help with breastfeeding from their family or friends because of the contradictory information they receive from them. When education on breastfeeding was directed to men of African American families , there was a 20% increase in the breastfeeding rates (United States Department of Health and Human Services, 2011). This means that a woman’s spouse, close family and friends may influence a woman’s decision to breastfeed.

Women’s knowledge of the benefits of breastfeeding influences their practice of breastfeeding. Otoo, Lartey, and Perez-Escamilla, (2009) found that women only perceived exclusive breastfeeding as being easy to practice if breastmilk begins to flow soon after delivery, therefore women with delayed onset of lactation after childbirth are more likely to avoid exclusive breastfeeding. Other barriers to breastfeeding as found by Agunbiade

and Ogunleye, (2012) and Otoo et al., (2009) include maternal employment, breast and nipple problems, perceived milk insufficiency and family pressure to stop breastfeeding.

In the U.S. Surgeon Generals call to action to support breastfeeding by United States Department of Health and Human Services, (2011) it was acknowledged that the lack of knowledge of the specific benefits of breastfeeding and the risks associated with not breastfeeding is a major barrier to breastfeeding. A study by McCann, Baydar, and Williams, (2007) also found that only 36% of respondents thought that breastfeeding protects babies against diarrhea. Li, Rock, and Grummer-Strawn, (2007) in their study also found that 25% of respondents agreed to the fact that giving formula feeds could be associated with poor health outcomes for the infant.

Social norms, family support, women's feeling of embarrassment and lactation problems like sore nipples, engorged breast, mastitis can make women discontinue breastfeeding as well as resolve not to breastfeed subsequent children based on the experiences of problems with earlier breastfeeding (Anstey, 2014; Tarmy, 2007).

The health system and service providers also pose as barriers to breastfeeding for mothers, especially when there is inadequate education of women about the practice of breastfeeding and the support for nursing mothers to properly position and initiate breastfeeding (Renfrew et al., 2006). The United States Department of Health and Human Services., (2011) reported that women's health providers rarely provided information about breastfeeding and infant formula to them during their prenatal visits. Many people, including health professionals, were found in a study by Li et al., (2007) to believe that commercially prepared formula is enhanced and is therefore equivalent to human

breastmilk. Some facilities also provide pre-lacteal feeds to infants during hospital stay in the post-partum period (Centers for Disease Control and Prevention, 2008).

2.3 Current breastfeeding practices

Breastfeeding, as estimated by the World Health Organization, has the potential for providing great influence on child health and survival all over the world and studies show that about 1.4 million deaths that occur in children under five years can be prevented each year in developing countries (Black et al, 2008). Yet the earlier identified barriers to breastfeeding has led to poor breastfeeding practices and rates worldwide.

Globally only 38% of infants 0-6 months are exclusively breastfed, and lesser children are breastfed in developed countries (Black et al., 2013). Breastfeeding prevalence has been reported to have increased in developing countries and in sub-Saharan Africa with about 39% of infants 0-5 months being exclusively breastfed (Cai, Wardlaw, and Brown, 2012). Also about 60% of these infants were found still breastfeeding and receiving complementary foods between 6-12 months (WHO/UNICEF 2012). Findings by the WHO, in 2011 indicate that sub-optimal breastfeeding practices, such as late initiation of breastfeeding, throwing away of colostrum and non-exclusive breastfeeding still persist in developing countries and this contributes to over 800,000 under five deaths each year which represents 11.6% of all under-five mortality (WHO/UNICEF, 2012).

The Ghana Demographic and Health Survey, (2014) reported that 98% of all children born in the two years prior to the health survey were breastfed at some point in time. Also 56% of all these children initiated breastfeeding within the first hour of birth with about 87% being breastfed within the first day of birth. It also found that more than 52% of children under 6 months of age were exclusively breastfed. Conversely, only 36% continued to

exclusively breastfed at 4-5 months. Sub-optimal feeding practices such as introduction of pre-lacteal feeds was seen in 15% of children especially in urban areas and children born to wealthy families. Also 12% of infants aged 2-3 months and 34% of children 4-5 months received complementary foods, which does not meet the WHO recommendations for infant feeding in the first six-months (Ghana Demographic and Health Survey,2015). There is a need to identify the reasons for the low breastfeeding practice and trends and put in measures that directly improve these rates.

2.4 Breastfeeding Recommendations

The World Health Organization recommends that all infants should be put to the breast within one hour of birth to start breastfeeding, they should be exclusively breastfed for 6 months and continue to breastfeed together with appropriate complementary foods from 6 to 24 months and beyond (American Academy of Pediatrics, 2012; Cai et al., 2012; World Health Organization, 2002). This recommendation is based on evidence that breastfeeding is the most efficient and unequalled source of nutrients for healthy growth and development of infants (World Health Organization, 2001).

Exclusive breastfeeding is defined by the WHO as feeding only breastmilk, including expressed breastmilk and from a wet nurse, to a child for the first six months of life and allowing the infant to receive only Oral Rehydration Salts, drops and syrups of vitamins, minerals and medicines (World Health Organization, 2002). The recommended duration of exclusive breastfeeding by the WHO has been found through systematic review of literature by the expert consultation on optimal duration of breastfeeding to be very appropriate. Breastfeeding exclusively for six months confers several health benefits on

mother and child such as protection against morbidity and mortality associated with infectious diseases especially diarrheal diseases than exclusive breastfeeding for four months. Also though studies found iron deficiency in some children exclusively breastfed for six months, the benefits derived from breastfeeding exclusively for six months outweighed the risk of iron deficiency (Butte, Lopez-Alarcon, and Garza, 2002).

For women in the United States of America (USA), however, the American Academy of Pediatrics (AAP) recommends that infants should be fed with breastmilk exclusively for the first 6 months of life and then fed with solid foods as well as breastmilk until the infant is one-year old. Breastfeeding after one year can be continued if the mother so desires (American Academy of Pediatrics, 2012).

Additionally, to enable mothers to successfully start and sustain exclusive breastfeeding for six months, WHO and UNICEF recommends that all women should be helped to initiate breastfeeding within the first hour of after birth and be counselled to breastfeed on demand as well as avoid the use of bottles, teats or pacifiers. Quinn et al., (2003) also recommends good attachment and positioning of infant during breastfeeding and early treatment of breast conditions such as engorgement, sore nipples and mastitis. They recommend frequent breastfeeding during the day and at night and even continuing to breastfeed when mother or newborn is sick. This they said is a means for achieving successful and sustainable breastfeeding of infants.

The WHO / UNICEF instituted the baby friendly initiative standards as guidelines for the promotion and support of breastfeeding policies. The Baby Friendly Hospital Initiative (BFHI) recommends that all health facilities that take care of women and infants will have

policies to support breastfeeding, by educating staffs who will in turn encourage as well as educate pregnant women and nursing mothers to recognize the importance of breastfeeding and to enable them continue to breastfeed as long as they wish. It will also help mother to make informed decisions regarding the introduction of other foods when appropriate. It also seeks to help ensure that the promotion of breastmilk substitutes, bottles, teats etc. are discouraged in the facility (UNICEF, 2012).

The WHO/UNICEF infant feeding guidelines recommends that non-Human Immunodeficiency Virus positive mothers should be supported to breastfeed exclusively for six months and HIV positive mothers should be educated on the risks and benefits of the various feeding options and should be supported on their choice. For HIV positive mothers it is recommended that when replacement feeding is accessible, feasible, affordable, sustainable and safe, HIV positive mothers should avoid breastfeeding (UNICEF home page).

The Ghana Child Health Policy recommends breastfeeding exclusively for six months in line with the National Breastfeeding Policy 17. The nation recognizes the international code for marketing breastmilk substitutes and was enacted by parliament in 2000. (ghanahealthservice.org/prog.scad.php,ghspid)

2.5 Breastfeeding support services

Breastfeeding is an appropriate means of providing the infant with the needed nutrients to grow, and studies have shown that universal breastfeeding coverage will help to prevent over 13% of under five deaths in developing countries yet only 50% of infants less than one month old and 38% under 5 months are exclusively breastfed in developing countries (Black et al., 2013).

The United States Surgeon's Generals report indicated that support from family and friends, communities and health care team has been found to be associated with the initiation and continuation of breastfeeding (United States Department of Health and Human Services, 2011). Non-evidence based maternity practices such as giving supplemental feeding during post-partum stay in hospitals has been found to interrupt with a mothers choice to exclusively breastfeed (WHO, 2009).

Friends and families of a woman who were knowledgeable about breastfeeding influenced a woman's choice and duration of breastfeeding positively (United States Department of Health and Human Services, 2011) and maternity care services also influenced a woman's breastfeeding initiation, continued practice and other child feeding behaviors later (MacDorman , and Menacker , 2010).

It was found that early attachment of infants to the breast and rooming-in make the infants breastfeed longer (Anderson, Moore, Hepworth, and Bergman, 2003; DiGirolamo et al., 2008) and giving of supplementary feeds affect breastfeeding outcome and infants overall health later (Ip et al., 2007).

The Baby Friendly Hospital Initiative (BFHI) improves breastfeeding outcomes in those facilities. DiGirolamo et al., (2008) found that children born in hospitals which did not implement any of the principles of the BFHI were 8 times more likely to stop breastfeeding early compared to children born in hospitals that implemented most of the principles. The Centers for Disease Control and Prevention, (2013), Guide to Strategies to Support Breastfeeding Mothers and Babies states that, women's practice of breastfeeding could be positively enhanced if all delivery facilities have a written breastfeeding policy and educate its staff on appropriate breastfeeding initiation and the avoidance of sub optimal feeding

practices. Other antenatal care services such as epidural anesthesia administration in the intrapartum period and during caesarian sections for mothers which leads to delayed skin to skin contact between mother and child has been associated with low breastfeeding practice (Baumgarder, Muehl, Fischer, and Pribbenow, 2003) and practices such as giving free breastmilk substitute samples to women during hospital stay and other practices that violates the code of marketing breastmilk substitutes has been found to affect total breastfeeding duration (Centers for Disease Control, 2013). To ensure effective breastfeeding, Shealy, Li, Benton-Davis, and Grummer-Strawn, (2005), recommends adequate training of primary maternity care workforce to support mothers in the ante-natal and post-natal periods for initiation and continued breastfeeding practices.

Women could also be linked to peer support programs which will help them to learn how to sustain breastfeeding of their infants. Rossman, (2007) found that the use of women who serve as peer counsellors can help new mothers overcome their barriers to breastfeeding and to manage the challenges they face. A study at Women, Infants and Children (WIC) clinics among low income women reported that women who received peer support, breastfeed longer than their counterparts who did not (Olson, Haider, Vangjel, Bolton, and Gold, 2010).

Duration of maternity leave, paid parental leave and early return to work are factors that affect women's practice of breastfeeding. Employer and payer support from women's employment is recommended to improve practice of optimum breastfeeding recommendations (Ogbuanu, Glover, Probst, Liu, and Hussey, 2011).

In a survey among new mothers, most of them said their decisions for feeding their infants was affected by their employment plans which included early return to work (Declercq,

Sakala, Corry, Applebaum, Herrlich, 2013). Guendelman, Lang Kosa, Pearl, Graham, and Goodman, (2009) found that women who returned to work six weeks after delivery were three times more likely to stop breastfeeding compared to women who had to return to work beyond six weeks after delivery. And women with increased duration of paid maternity leave were found in a Canadian study to breastfeed at least a month longer on the average and were more likely to reach the 6 months exclusive breastfeeding duration as is recommended than women with shorter duration of paid maternity leave (Baker and Milligan, 2008). A mother's employment site (United States Department of Health and Human Services, 2011) may also serve as a source of support for breastfeeding. An unfavorable working environments may affect continued breastfeeding. Countries and employers can therefore support breastfeeding mothers to meet recommendations by improving conditions of maternity entitlements and benefits.

2.6 Breastfeeding in public places.

Studies assessing factors that affect a woman's choice to breastfeed or continue breastfeeding if already initiated, identified that, feelings of fear or embarrassment associated with breastfeeding in public could hinder a woman's decision to breastfeed. Sheeshka et al., (2001) found that some women feel vulnerable when they have to breastfeed in public. Factors such as a woman's confidence with breastfeeding, her body image and past experience with breastfeeding in public determines her choice to breastfeed when in a public place (Hauck, 2004). McIntyre, Turnbull, and Hiller, (1999) in a study assessing perceptions of breastfeeding in public places found that 52% restaurant and shopping center managers reported they would either discourage or ask women to find more discrete places to breastfeed if they found a woman breastfeeding openly in their

work premises. In December, 2014, at the Mayfair hotel a staff ordered a 35-year-old breastfeeding mother to cover herself and her 12-week old baby with a napkin to avoid causing offence to other guests, this made the mother feel humiliated and burst into tears, she reported feeling embarrassed by the incident. <http://www.dailymail.co.uk/news/article-2857391>.

Due to people's reactions towards women who breastfeed in public, about 55% of women chose to bottle feed in public to avoid embarrassment thereby affecting the exclusivity of breastfeeding.

In a systematic review of literature by Mackean and Spragins, (2012) it was evident that women who practiced breastfeeding consistently even in public places felt isolated from their circle of friends and society because of the disapproval expressed by others towards breastfeeding in public and so such women stop breastfeeding much earlier than they intended to. At the community level, Mackean and Spragins, (2012) reported that women were faced with disapproval and discomfort when breastfeeding in public. This explains why some women did not begin breastfeeding or stopped early before returning to paid employment (Komodiki et al., 2014).

Women also found breastfeeding and breastmilk expression in public difficult and uncomfortable because of the non-availability of decent places to do so, some women mentioned public toilet stalls, their cars and closets as some of such places (Forster and McLachlan, 2010). A news article from the CBS Los Angeles reported of an incident where a woman was asked to breastfeed her six weeks old infant in the stores bathroom because she was found breastfeeding her child at the back of the store

<http://losangeles.cbslocal.com/2014/08/20/breastfeeding-moms-stage-nurse-in-at-anthropologie-in-beverly-hills/>.

Stewart-Knox, Gardiner, and Wright, (2003) stated from their study that a person's culture may influence his/her perception and knowledge of health related issues and as women take up new roles in society due to westernization, infant feeding practices may be affected. In Amir, (2014), it was found that the increasing marketing and advertisement of nursing covers to hide the breast during breastfeeding indicates a growing concern of women towards breastfeeding in less discreet environments and a changing perception of breastfeeding in public. More women from this study were choosing to breastfeed for shorter periods, before returning to work, while others decide not to initiate breastfeeding because it cannot be continued when they return to work.

Male partners of pregnant women and new mothers from low income settings, acknowledged in a qualitative study by (Mitchell-Box and Braun, 2012) that they were uncomfortable with breastfeeding in public. Suggesting a need for partner oriented interventions that increases their knowledge of the benefits of continued breastfeeding and as such promote their support and ensure their acceptance of breastfeeding in public.

Forster and McLachlan, (2010), found in their study among primiparous women that, breastfeeding in public was a predominant theme emerging from women's reported experiences of breastfeeding; 85% of the women made negative comments about breastfeeding in public.

Also in a qualitative study of the perceptions of African-American and Caucasian expectant parents on breastfeeding and formula feeding, Avery and Magnus, (2011) found

that both groups disapproved of breastfeeding in public. Thirty one out of 47 respondents in a qualitative study in Canada by Spurles and Babineau, (2011) expressed restrictive attitudes towards public exposure of the breast for feeding infants as well as breastfeeding in a restaurant.

It was also noted by United States Department of Health and Human Services, (2011) that women who previously breastfed in public were faced with displeasure from people and were asked to find more discreet environments to breastfeed. These women were embarrassed and did not want to continue breastfeeding. Also the perception that the breast is a sex object (Amir, 2014, United States Department of Health and Human Services, 2011) also makes women feel uncomfortable breastfeeding their children in public.

Mulready-Ward and Hackett, (2014) found in their study assessing perceptions and attitudes towards breastfeeding in public in New York City that about 50.4% of respondents did not support breastfeeding in public. This negative opinion of people towards women breastfeeding in public affects their choice to continue.

With the increasing numbers of women in the formal work sector, mothers may have to breastfeed during work breaks in order to continue breastfeeding as recommended. With the emerging negative feelings of fear, discomfort and embarrassment to breastfeeding in public, there is the likelihood that these feelings will lead to low prevalence of breastfeeding and shorter duration as well as poor practice of exclusive breastfeeding if women have to find alternatives to breastfeeding when they return to work or school (Galson, 2008).

2.7 Bottle feeding of infants as an alternative to breastfeeding

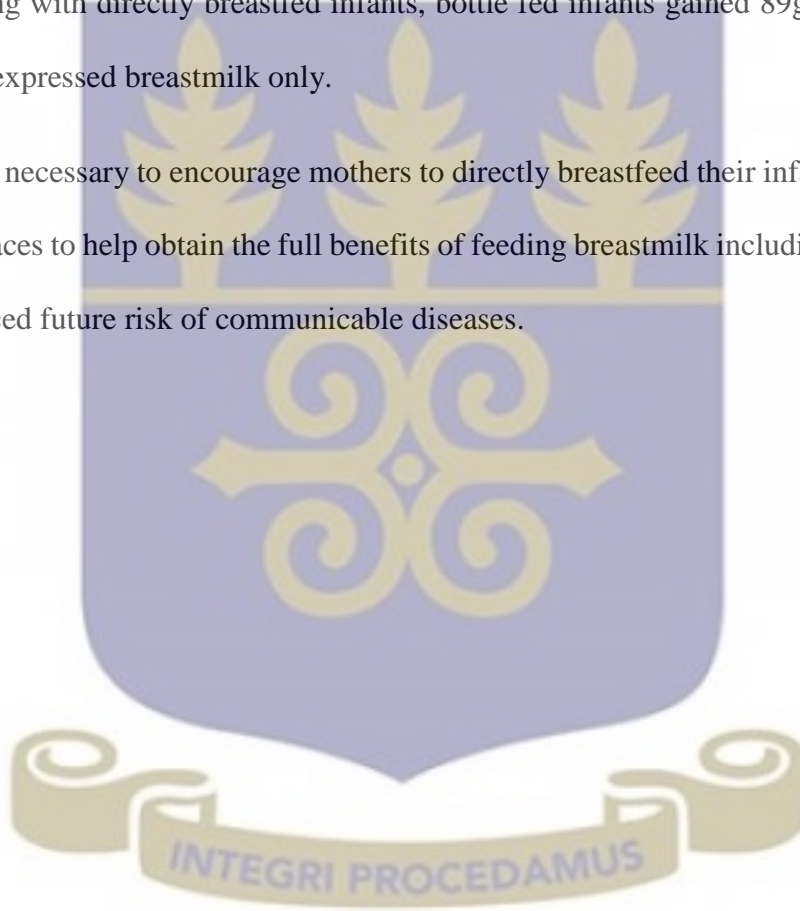
Sociodemographic characteristics were found to be more associated with women's choice of a feeding method for their infants (Earle, 2000). Most parents decision to either breast or bottle feed were found to be made early in pregnancy (Arora, Mcjunkin, Wehrer, and Kuhn, 2000). Women who chose to bottle feed were aware of the benefits of breastfeeding and yet were not influenced in their decision to bottle-feed, a desire to involve fathers in child feeding was reported to be a reason why bottle feeding was chosen as a child feeding method (Earle, 2000). Breastfeeding has been cited by women as being a source of disruption to women's sleep, causing painful nipples and saggy breast but no potential difficulties were identified with reference to bottle feeding (Henderson, Kitzinger, and Green, 2000), They also found that most women in their study practiced bottle feeding more often than breastfeeding. Also, bottle feeding was reported as being less problematic for women and it enhanced male partner involvement in infant care. Breastfeeding was also viewed as being embarrassing and associated with sexuality of the breast (Henderson et al., 2000). For these reasons, most people avoid breastfeeding though they have knowledge of the benefits of breastfeeding to both infant and maternal health.

Bottle feeding has however been associated with some health concerns for infants and later in life. Bottle fed children were more likely to develop dental caries among children compared to breastfed children, (Al-Dashti, Williams, and Curzon, 1995). Li, Fein, and Grummer-Strawn, (2010) found that bottle-fed children either with expressed breastmilk or infant formula were more likely to empty their cup or bottle of milk offered to them as they mature and were less likely to self-regulate their intake compared to breastfed babies. A dose response association was seen frequently with bottle feeding and is associated with

much less ability of the infant to self-regulate their intakes. This reduction in self-regulation ability was said to explain why bottle fed individuals were more at an increased risk of obesity.

Regardless of the type of milk, it was also found by Li, Magadia, Fein, and Grummer-Strawn, (2012) that the mode of delivery of milk to infants affected their weight gain. Comparing with directly breastfed infants, bottle fed infants gained 89g per month when fed with expressed breastmilk only.

It may be necessary to encourage mothers to directly breastfeed their infants even when in public places to help obtain the full benefits of feeding breastmilk including weight control and reduced future risk of communicable diseases.



CHAPTER THREE

3.0 METHODOLOGY

3.1 Study sites

This study was carried out in four suburbs of the Ayawaso-West Wuogon Sub-metropolitan area namely, Shiashie, Mempeasem, Bawaleshie and University Hospital, all in the capital city of the Greater Accra Region, Ghana. The sub-metropolitan area has a population of 70,667 with females numbering 33,602 and 24,917 being eighteen (18) years and older. It is an urban settlement consisting of individuals with low, middle and high income statuses. The area has adequate access to public and private health services. There are community based child welfare clinics in these four suburbs where women access services one day in a week and daily at the University of Ghana Hospital.

3.2 Study design

This study used a descriptive cross-sectional study design. It employed quantitative and qualitative methods. It used focus group discussions (FGD), in-depth interviews (IDI), key informant interviews (KII) and a Survey to explore the perceptions of women and men 18 years and older on breastfeeding in public places.

3.3 Sample size determination

Using the formula by Daniel, 1999, the sample size for the quantitative aspect of this study is calculated as follows

$$N = \frac{z^2 * p * (1-p)}{d^2}$$

Where N = sample size

Z = the critical probability value for 95% confidence interval (1.96),

P = prevalence of exclusive breastfeeding in Ghana which is 52% (Ghana Demographic and Health Survey, 2014).

d = margin of error, (0.05).

This gives a sample size of three hundred and fifty-six (383) women for the survey.

3.4 Sampling

Quantitative data collection

Suburbs in the study area were identified using the Ayawaso-west Wuogon Sub Metropolitan Area map and four suburbs were randomly selected for this study. community based child welfare clinic sites in the selected suburbs, which records an average client attendance of thirty women and their children weekly, were visited on clinic days. Women within their reproductive age (18-49 years) who had a live birth in the last five years and practiced breastfeeding for at least three (3) months, were invited to participate in the study. Due to a strike action by Community Health Nurses in Ghana at the time of data collection, the target sample size of 383 women was not reached within the stipulated data collection period. women in the selected communities who did not attend CWC were therefore recruited in their homes to make up the sample size. A total of 300 women participated in the study.

Qualitative data collection

Focal persons in the CWC helped to identify eligible women in the communities for the focus group discussions. A list of 50 women, who were aged between 18-49 years, had at least one live birth in the past five years and also breastfed for a minimum of three months

was provided by the focal persons to the research team. The women were contacted and the study explained to them.

3.5 Data Collection

Data was collected over a three-week period (June 6th to 25th, 2016) and was done in two parts. First a survey was conducted using a validated questionnaire. Interviews were conducted to assess the socio-demographic characteristics, perception and practice of breastfeeding in public places among women, 18-49 years with a history of child birth and breastfeeding. Five focus group discussions were also held among women groups. Fifty women were identified to be eligible for the focus group discussions. After introducing the study to them, 49 consented to participate. Five groups were randomly created for the 49 women with an average of 10 women in each discussion group. FGDs were scheduled on different days after recruitment. The discussions took place at the CWC site in the community after the clinic had closed. Five in-depth interviews and four key informant interviews were scheduled and conducted for male respondents and health professionals respectively. Qualitative data were collected through hand written notes and tape recordings of discussions and interviews.

3.6 Data collection instrument

Respondents for the survey completed a semi-structured questionnaire designed for the study. The questionnaire collected information on the respondents' socio-demographic characteristics, (age, occupation, income, highest education attained) and biological information such as their marital status and parity. Questions on perceptions and behaviors towards breastfeeding in public were adapted from the Centers for Disease Controls Breastfeeding Health Styles Survey, 2010.

Five in depth interviews (IDI) were conducted for married and unmarried male adults due to low response from the male population for focus group discussions. Four key informant interviews were conducted with nurses and midwives in the child welfare and children's ward departments of the University hospital to obtain information regarding their perceptions of breastfeeding in public and any emerging concerns.

Focus group discussions were facilitated by a trained interviewer and assisted by a note taker. The facilitator led the groups to discuss breastfeeding in public places, their perceptions and experiences of breastfeeding in public and its relation to infant feeding and quality breastfeeding practices. Each focus group discussion lasted one hour. In-depth interviews (IDI) and Key informant interviews were conducted for male respondents to assess their perceptions and experiences of women breastfeeding in public. Each lasted an average of 40 minutes. All the FGDs and interviews were conducted using an interview guide designed for the study. All interviews were audio recorded and hand written notes were taken during the interviews.

3.7 Quality control

Research assistants were trained on how to administer the questionnaire. Each questionnaire was assigned a unique identification code for easy identification and was checked for accuracy and completeness immediately after it was administered.

3.8 Inclusion criteria for the survey and focus groups.

1. Women within their reproductive years 18-49 years who had at least one live birth in the last 5 years and have a breastfeeding history of a minimum of three months were included in the survey and focus groups.
2. Respondents for the survey were not included in the focus groups.

3. Males selected for the IDIs were all above 25 years and may or may not be married with children.

3.9 Ethical considerations

Ethical approval to conduct this study was sought from the Ghana Health Service Ethical Review Committee. Ethical clearance ID is GHS-ERC 38/12/15. Data collection began after full approval had been given by the Ethical Review Committee. Introductory letters were sent to the facilities at the study sites to obtain approval for data collection in their premises.

Individuals who were eligible for the study were enrolled only after the study had been explained to them and they had willingly accepted to participate and had endorsed a written informed consent form, either by signing or thumb printing.

3.10 Data analysis

Quantitative data were entered into excel and imported into STATA 13 for statistical analysis. This included 300 respondents with complete data. Descriptive statistics such as means, standard deviation, frequencies and percentages were used to summarize and present demographic data of the respondents. Simple logistic regression was used to assess the relationship between women's sociodemographic characteristics and their perceptions and practice of breastfeeding in public places. Multiple logistic regression analysis was done to control for the effect of other variables on the observed association between women's sociodemographic and obstetric characteristics and their perceptions or practice of breastfeeding in public

Data obtained from all the FGDs and interviews were translated and transcribed verbatim and analyzed manually. The transcribed data and the hand written notes were read severally, coded, cross referenced and compared across the different interviews and FGDs.

Numbering and codes were used to collate transcripts of similar themes and quotes and to differentiate opposing ones. The frequency of a given text was considered an indication for thematic significance and codes were checked for consistency with each other to help identify emerging themes. Perceptions and experiences of the respondents emerging from the coded data were pulled together as the perceptions of women and men regarding breastfeeding in public.

Women's responses to Likert scale questions on their perceptions in the survey were scored and a composite score was obtained from a sum of all perception questions. Women's perception was categorized as positive or negative. A woman's perception is considered to be positive if her composite score on perception was greater than 50% of the total score and negative if her score was less than 50% of the total score.

Family, spouse or close friends support for breastfeeding was determined based on women's responses to questions assessing their family or friend support for breastfeeding in public places. A composite score was generated through a sum of women's score on each Likert question. Family support was categorized as high or low. Women scoring higher than 50% of the total score for family support were considered as having high family support, and women who scored less than 50% of the total score were considered as having low family support.

CHAPTER FOUR

4.0 RESULTS

4.1 Characteristics of survey participants.

The 300 respondents for the survey were aged between 19 to 49 years with an average age of $31.2 \pm .3$ years and 84% of the participants were aged between 25 and 37 years. Also 94.0% of the participants were in a relationship (married or cohabiting) and majority (64.3%) had completed secondary education or higher. Eighty- three percent of the women were currently employed with 50.3% being self-employed. (Table 4.1)

4.2 Obstetric history of participants

Of the women participating in this study, 36.3% were first time mothers and 50.3% had two or three children at the time of the study, all women breastfed their children for at least three months. Each woman had breastfed their current child for an average of 12.6 ± 0.3 months. A majority (98.3%) of the mothers attended the minimum recommendation of four antenatal visits prior to delivery. Regarding the participant's last or current child, 10.7% of the participants felt they were unprepared to breastfeed at the time of delivery though majority (94.7%) reported to have been well informed or educated about breastfeeding at the ANC. About a third (29.7%) said they had been counselled about breastfeeding in public places. (Table 4.1)

Table 4.1 Socio-demographic and obstetric characteristics of study participants

Characteristics of women	Mean \pm sd / percentages (n)
Age (years)	31.2 \pm 0.3
Education	
<i>No education</i>	5.0 (15)
<i>Elementary</i>	40.7 (122)
<i>Secondary+</i>	54.3 (163)
Occupation	
<i>No occupation</i>	14.0 (42)
<i>Skilled manual</i>	26.3 (79)
<i>Professional/technical/managerial</i>	23.0 (69)
<i>Clerical/sales and services</i>	33.0 (99)
<i>Unskilled manual</i>	3.7 (11)
Employment	
<i>No employment</i>	17.0 (51)
<i>Self employed</i>	50.3 (151)
<i>Employed by other</i>	32.7 (98)
Marital status	
<i>No relationship</i>	6.0 (18)
<i>In relationship</i>	94.0 (282)
Parity	
<i>1 child</i>	36.33 (109)
<i>2-3 livebirths</i>	50.33 (151)
<i>More than 3</i>	13.33(40)
Antenatal clinic attendance	
<i>< 4 visits</i>	1.7 (5)
<i>\geq 4 visits</i>	98.3 (295)
Duration of breastfeeding	12.6 \pm .3

4.3 Women's perception of breastfeeding in public places.

Public places were described in the interviews to be anywhere a person finds himself which is physically outside a woman's home and it could also include the home with other people around.

*Public can be your sitting room where you have visitors who are not usual members of your home that can be public. It can also be outside your home, such as your workplace, in public transport, church etc. **IDI 2 married adult male, University Hospital, Legon.***

Majority of the women in the survey (72%) felt they should be able to breastfeed anywhere their child needed it. Yet less than half (46.7%) reported they feel comfortable when they breastfeed in public places (Table 4.2).

The FGDSs and interviews also revealed a general perception among women that there was nothing wrong with breastfeeding in public places; it was reported that breastfeeding in public should be encouraged for women to do when their children needed to feed. Nevertheless, some women in the FGDSs indicated it was acceptable to breastfeed in public if the woman knows how to discreetly breastfeed without making others uncomfortable. Some of the women, in the KII1 and FGD5 felt it was difficult and unacceptable to breastfeed in public.

*I feel it is acceptable for me to breastfeed in public because I know how to be discreet about it. You won't even see the breast. **FGD1 middle age woman, University Hospital, Legon.***

*It is something that is uncomfortable to do, it's the same feeling everywhere because it's not so easy exposing your breast in public for all others to see especially, people you do not know. **KII 1, Midwife, University hospital, Legon.***

It is not good, it is bad, because of evil eyes. With me it's not because I feel embarrassed, but a lot of evil things are happening now so if you don't take care

your baby will be destroyed by evil people. It is the evil spirit in the world. FGD5

Middle aged woman, Mempeasem

Women who found it difficult to breastfeed in public reported feeling embarrassed or uncomfortable with exposing their breast in public places.

So the breast itself is a private part so shyness is the main issue with breastfeeding in public, because you feel shy to expose your private parts in public but women just need to cover the breast when breastfeeding in public. FGD3 Adult female CWC, University Hospital, Legon.

Others mentioned that problems with the breast such as the size or appearance of the breast made it difficult for women to breastfeed in public place

With me, my breast does not look nice. It is not nice so I don't like to bring my breast out anyhow. I know that my breast is not nice that is why I will not breastfeed in public. FGD1 middle aged woman, Mempeasem.

Also, 12.7% of the women said it was not acceptable to breastfeed in public and 31.3% said they felt uncomfortable when they watched other women breastfeeding in public. Yet, majority of the women (90%) had no uncomfortable feeling when other women breastfeed near them in public (Table 4.2). This finding was similar to what respondents in the IDI reported when they were asked how they felt when women breastfeed in public. One male respondent in the IDI said,

Actually with me, I will excuse myself for her to do her thing so she can feel comfortable. I will be uncomfortable there because I might think she is not

*comfortable with my presence; I wouldn't be interested in looking at her. **IDI**
I Young male adult, Shiashie, East Legon.*

Women respondents in the focus group felt there was not going to be any negative feeling when a woman breastfed near them in public.

*Before I learnt about the benefit of breastfeeding I would feel uncomfortable so then I will try to make her feel uncomfortable by looking away but now knowing all the benefits, it is normal I won't feel anything. **FGD 3 Young female adult, CWC University Hospital, Legon.***

*Once I have breastfed before, I won't feel anything, it's just like she's sitting there doing nothing, you don't even notice any difference. You won't be looking. It doesn't come to mind to even look at her differently. **FGD 2 Middle aged woman CWC Shiashie, East Legon***

Regarding breastfeeding in all public places, 26% of the women in the survey felt breastfeeding should not be allowed in all public places, 81.3% and 70.3% strongly agreed that women should cover up their breast and look for more private places to breastfeed respectively when in public (Table 4.2).

This was not the same with the respondents in the interviews, breastfeeding in public places was a normal practice and women were expected to breastfeed anywhere the child cries for it. Priority was to be given to the child's needs.

To me I don't see anything wrong with breastfeeding in public. It is acceptable and very normal. We have a policy that tells the mothers to initiate and continue breastfeeding and we encourage breastfeeding on demand, wherever the baby is

*demanding for the breastmilk you have to give it. So based on that, there shouldn't be anything wrong with breastfeeding your baby at that place. **KII 4 Male Nurse, University Hospital, Legon.***

*I think it's alright to breastfeed in public because the baby comes first. So far as the baby is hungry it can only cry for you to know so you have to attend to it. So feeding in public personally I don't have a problem with it. **FGD2 Young Adult Female CWC Shiashie, East Legon***

It was a general perception of women in the survey and in the interviews that the breast should be covered when breastfeeding in public. Twenty-seven percent of women in the survey felt it was embarrassing for women to breastfeed in front of others. Also 32.3% felt it was embarrassing for others when women breastfeed in public. Similarly, the respondents in the FGDs and interviews reported that feeling embarrassed was the most common reason why women found it difficult breastfeeding in public places.

This is what respondents had to say when they were asked of their perceptions regarding a woman described in a vignette at the beginning of the discussion to have avoided breastfeeding her crying baby while shopping in a supermarket,

*I think maybe she was shy or something. You know we have some women like that, in public it is really hard for them to breastfeed their kids and I think it is really bad. **IDI3 Young adult nurse, University Hospital, Legon.***

*I think she felt shy to breastfeed. Now women who have come up don't like to breastfeed in public. **FGD4 Middle aged woman CWC Shiashie, East Legon***

4.4 Breastfeeding in public and the law

Only a minority (7%) of women in the survey thought breastfeeding in public should be against the law. In the interviews and discussions, respondents did not link breastfeeding in public to any law and they felt a woman exposing her breast in public should not be regarded as indecent public exposure of body. A few respondents said that breastfeeding in public will not violate the law on indecent exposure when it is discreetly done.

Wow. I don't think there is any law that relates to it. I haven't heard of indecent body exposure, but hearing it now no, I don't think people will also see it as related to breastfeeding in public. Because you are giving the child what the child needs. It is the right thing to do. KII 2 Young female nurse, University Hospital, Legon.

Personally I don't even know of any law in Ghana that talks about breastfeeding in public, I know about the law on indecent exposure, but I don't know how it relates to breastfeeding your child in public. FGD3 Young adult female, CWC University Hospital, Legon.



Table 4.2 Women's perceptions of breastfeeding in public places

Women's perception of breastfeeding in public places	% (n)
Breastfeeding should be allowed in all public places	
<i>Strongly Disagree</i>	14.7 (44)
<i>Disagree</i>	11.3 (34)
<i>Neutral</i>	1.3 (4)
<i>Agree</i>	5.7 (17)
<i>Strongly Agree</i>	67 (201)
I should be able to breastfeed anywhere I want	
<i>Strongly Disagree</i>	13.7 (41)
<i>Disagree</i>	7.7 (23)
<i>Neutral</i>	1.7 (5)
<i>Agree</i>	5 (15)
<i>Strongly Agree</i>	72 (216)
It is acceptable to breastfeed in public	
<i>Strongly Disagree</i>	7 (21)
<i>Disagree</i>	5.7 (17)
<i>Neutral</i>	6 (18)
<i>Agree</i>	7 (21)
<i>Strongly Agree</i>	74.3 (223)
I feel the need to cover my breast when breastfeeding in public	
<i>No</i>	19 (57)
<i>Yes</i>	81 (243)
Women should cover their breasts when breastfeeding in public place	
<i>Strongly Disagree</i>	8.3(25)
<i>Disagree</i>	2.7(8)
<i>Neutral</i>	7.7(23)
<i>Agree</i>	5.7(17)
<i>Strongly Agree</i>	75.7(227)
It is a need to find private places when breastfeeding in public	
<i>Strongly Disagree</i>	11.7 (35)
<i>Disagree</i>	8.3 (25)
<i>Neutral</i>	9.7 (29)
<i>Agree</i>	5.3 (16)
<i>Strongly Agree</i>	65 (195)
It is embarrassing for women to breastfeed in public	
<i>Strongly Disagree</i>	65.7 (197)
<i>Disagree</i>	4.7 (14)
<i>Neutral</i>	2.7 (8)
<i>Agree</i>	10 (30)
<i>Strongly Agree</i>	17 (51)

I will breastfeed wherever my child cries for it	
<i>Strongly Disagree</i>	18 (54)
<i>Disagree</i>	12.3 (37)
<i>Neutral</i>	1 (3)
<i>Agree</i>	6.7 (20)
<i>Strongly Agree</i>	62 (186)
I do not feel comfortable breastfeeding in a public place	
<i>Strongly Disagree</i>	46.7 (131)
<i>Disagree</i>	3 (9)
<i>Neutral</i>	1 (3)
<i>Agree</i>	10 (30)
<i>Strongly Agree</i>	42.3 (127)
I am comfortable when other women breastfeed their babies near me in public	
<i>Strongly Disagree</i>	6 (18)
<i>Disagree</i>	2.7 (8)
<i>Neutral</i>	1.3 (4)
<i>Agree</i>	7.3 (22)
<i>Strongly Agree</i>	82.7 (248)
Breastfeeding in public should be against the law	
<i>Strongly Disagree</i>	88.3(265)
<i>Disagree</i>	2 (6)
<i>Neutral</i>	2.7 (8)
<i>Agree</i>	2.7 (8)
<i>Strongly Agree</i>	4.3 (13)

4.5 Family and close friends support of exclusive breastfeeding and breastfeeding in public.

Majority (70%) of the women in this study had family or close friends who were also breastfeeding at the same time as they were breastfeeding. Also 57.7% of women reported that their family and close friends supported exclusive breastfeeding for 6 months. Regarding breastfeeding in public places, 74% of women indicated that their family and close friends will considered the practice as normal whilst 17% reported that their family will strongly disapprove of breastfeeding in public places. About a quarter of women (27.7%) reported that their partners were uncomfortable with breastfeeding in public

(Table 4.3). In the FGDs, women narrated incidents with their families, regarding breastfeeding in public.

I delivered at the university hospital, my mother in-law was around me and she wanted me to breastfeed the baby. It was my first time and there were so many people around me so I was feeling shy so I hesitated. She held my breast herself and pulled it out for the baby. I felt bad. Yes. It was my first time and my breast were very full but she wanted the best for the baby. FGD 3 Young female, CWC University Hospital, Legon.

Families and friends of participants in the FGDSs and KII were also supportive of breastfeeding in public.

I don't have a personal experience but I just have one friend, she breastfeeds in public, everywhere she is so okay with it, she doesn't even cover her breast. This encourages me. I look forward to breastfeeding my child in public when I deliver, I don't see anything wrong with it. KII 3 Young midwife, University Hospital, Legon.



Table 4.3 Women's perception of family support for breastfeeding in public places

Family/friends perception of breastfeeding in public	% (n)
Family/friends consider breastfeeding in public as normal	
<i>Strongly Disagree</i>	7.3 (22)
<i>Disagree</i>	5.7 (17)
<i>Neutral</i>	6 (18)
<i>Agree</i>	7 (21)
<i>Strongly Agree</i>	74 (222)
Family/friends encourage me to breastfeed in public	
<i>Strongly Disagree</i>	7.7 (23)
<i>Disagree</i>	6.3 (19)
<i>Neutral</i>	8 (24)
<i>Agree</i>	8.7 (26)
<i>Strongly Agree</i>	69.3 (208)
Family/friends do not approve of breastfeeding in public	
<i>Strongly Disagree</i>	64 (192)
<i>Disagree</i>	6.3 (19)
<i>Neutral</i>	6.7 (20)
<i>Agree</i>	6 (18)
<i>Strongly Agree</i>	17 (51)
Partner/husband uncomfortable when I breastfeed in public.	
<i>Strongly Disagree</i>	64.3 (193)
<i>Disagree</i>	4.3 (13)
<i>Neutral</i>	3.7 (11)
<i>Agree</i>	5 (15)
<i>Strongly Agree</i>	22.7 (68)

4.6 Practice of breastfeeding in public places.

Ninety-three percent of the study participants reported ever breastfeeding in a public place. Most of the women in the study (81.0%) felt the need to cover up their breasts when they had to breastfeed in a public place. Similarly, women in the FGDs reported the need to cover the breast if the woman felt embarrassed.

You can use a handkerchief or something to cover the breast if you are feeling shy, so that no one sees your breast but then the nipples will be in the baby's mouth, but if you are not shy there's no need to cover it. FGD 2 Middle aged woman, Shiashie East Legon.

Most women breastfeed in public whenever the child needed it and to stop the child from crying and to provide the needed nutrition for the child.

I don't like my child to cry in public for people to look at me, so if I see the child acting up, I immediately put the breast in its mouth. I don't want it to cry, so I breastfeed. FGD 1 Middle aged woman, Mempeasem

I'm encouraged to breastfeed in public and I find it acceptable because I know breast milk is very good for babies, it protects them, I know all the benefits so even if I am in public I breastfeed. FGD 4 Young mother, Shiashie East Legon.

Fifteen percent of the women in this study have observed uncomfortable reactions from people when they breastfed in a public place. Regarding appropriateness of breastfeeding in public places, 26.3% of women felt it was inappropriate to breastfeed in a restaurant, 34.3% in the market and 23.3% in a café. Fifteen percent of women also reported feeling most uncomfortable when they breastfed in a market and 3.0% in the workplace, 47.3% felt comfortable breastfeeding everywhere in public (Table 4.4). The interviews and discussions also revealed some uncomfortable reactions of people towards breastfeeding mothers in public places such as in church and the workplace.

It was a Sunday, I was in church and my child was crying. It wasn't a loud cry, he just started and I decided to breastfeed though I had expressed breastmilk in the

*bottle. It's was a place that is designated for breastfeeding mothers but the other nursing mothers, the look on their faces, it was a bad one I felt very bad. After that experience, I will not do it again, I will just give the bottle. **KIII Midwife, University Hospital, Legon.***

*There hasn't been a clause to stop breastfeeding in my workplace but one woman brought her baby to the office, she was even on maternity leave and she passed by for an annual leave. When the director saw her breastfeeding in the office it was a problem, he was very upset and he stopped her. If I find myself around my boss, because of his earlier reactions I will not breastfeed my child. **FGD 3 young woman CWC University Hospital, Legon.***

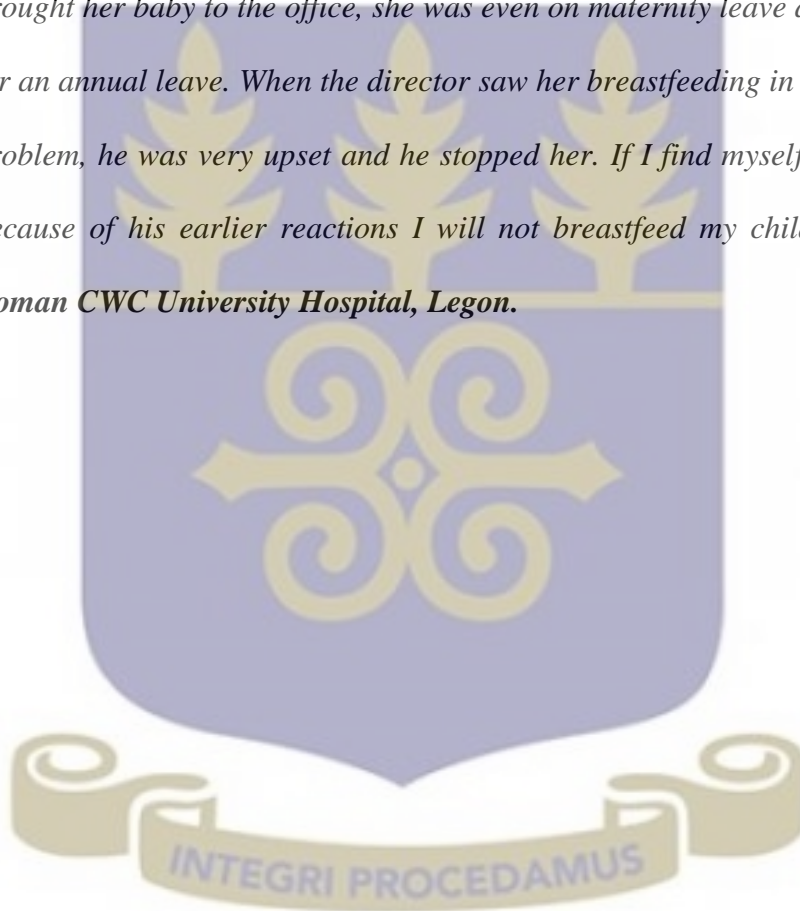


Table 4.4 Women's perception of public places and breastfeeding.

Public places most inappropriate to breastfeed	% (n)
Restaurant	
<i>Yes</i>	26.3 (79)
<i>No</i>	73.7 (221)
Café	
<i>Yes</i>	23.3 (70)
<i>No</i>	76.7 (230)
Church	
<i>Yes</i>	17.7 (53)
<i>No</i>	82.3 (247)
Market	
<i>Yes</i>	34.3 (103)
<i>No</i>	65.7 (197)
Clothes Shop	
<i>Yes</i>	1.7 (5)
<i>No</i>	98.3 (295)
Public places where women felt most uncomfortable to breastfeed.	
<i>None</i>	47.3 (142)
<i>Church</i>	9.3 (28)
<i>Public Transport</i>	7.7 (23)
<i>Market</i>	15.3 (46)
<i>Social Functions (weddings, funerals, parties)</i>	9.7 (29)
<i>Workplace</i>	3 (9)
<i>Restaurant</i>	2 (6)
<i>Others (banks, hospitals etc.)</i>	5.7 (17)

4.7 Factors associated with women's perception of breastfeeding in public places.

Participants in the FGDSs identified factors associated with women's perception of breastfeeding in public as uncomfortable or inappropriate. Factors such as women's educational level, employment outside of home and occupation which exposes them to foreign culture were reported to negatively affect their perception of breastfeeding in public.

It is actually the foreign culture but I also think most of the women today are working, so they are exposed to the public. May be that's why they don't feel comfortable exposing their breast in public. FGD 4, Adult female, Shiashie East Legon.

Yeah, I think some women because of their education and the exposure they get, they think that with their social class, they cannot bring their breast out to feed. FGD 2 Adult female, CWC University Hospital, Legon.

Of the other women who reported otherwise, one said,
I think it's the individual's negative perception, Education doesn't say you should not breastfeed in public, it is the individual's way of thinking. FGD 2, Middle aged woman, Shiashie East Legon.

These comments corroborate the findings from the survey. Women's age above 25 years was associated with an increase in the odds of positive perception towards breastfeeding in public compared to women younger than 25 years. Also, women's education; secondary or higher was associated with a decrease in the odds of positive perception of breastfeeding in public compared to women of lesser than secondary education. However, these associations were not statistically significant, (OR=1.73 95% CI=0.76-3.94) and (OR=0.40, 95% CI=0.09-1.86) respectively. In the FGDSS, women who perceived breastfeeding in public positively and see it as a normal or acceptable practice, related it to factors such as knowledge of the benefits of breastfeeding, family/ close friend support of breastfeeding in public, parity of women, use of breast covers, and education on breastfeeding at ANC clinics.

I'm encouraged to breastfeed in public and I find it acceptable because I know breast milk is very good for babies so I will give it. It protects them, I know all the benefits so if I am in public I will breastfeed. FGD 4, Adult female, Shiashie East Legon

I went to church for the first time after giving birth and I was having a chat with my lady pastor when the child started to cry. I felt ashamed to have to bring my breast out because my husband and his brother were there too so I was shy. My lady pastor encouraged me to breastfeed, she just asked me to cover it. Since then I got the confidence to breastfeed in public so I do it, I just cover it. FGD 3 Young Mother, University Hospital, Legon.

In the survey, women who covered their breasts when breastfeeding in public showed a decrease in the odds of perceiving breastfeeding in public as acceptable. Women who favored breastfeeding in public, and perceived it as acceptable, were less likely to cover their breast when breastfeeding in public. This association was statistically significant, (OR=0.13, 95% CI=0.03-0.43). Also, the survey revealed that women who had high family/friend support for breastfeeding in public were more likely to perceive breastfeeding in public positively, compared to women with low family support for breastfeeding in public. The association was statistically significant, (OR= 7.91, 95% CI= 4.26-14.66). Meanwhile, women's marital status was not significantly associated with their perception of breastfeeding in public, women in a marital relationship were not different their odds of positive perception of breastfeeding in public compared to women who were not in any marital relationship. (OR= 0.35, 95% CI= 0.08-1.56), Table 4.5

Women who were informed about the benefits of breastfeeding at ANC visits was not correlated to the odds of positive perception of breastfeeding in public by the women (OR=1.22, %95=0.64-2.32).

However, women in the FGDSs stated that they were encouraged to breastfeed in public through their ANC attendance in the following statement.

Though I'm a first time mother, I learnt from the ANC to breastfeed on demand so I learnt to breastfeed in public though it's embarrassing. Also in public you have to cover it if you are feeling shy to make it easier to breastfeed in public. FGD3, Middle aged woman University Hospital, Legon.

A woman's parity was associated with an increase in the odds of positive perception of breastfeeding in public, women with more than three live births were more likely to have an increase in the odds of positive perception of breastfeeding in public compared to women with one live birth. This correlation was however not statistically significant, (OR=1.71, 95% CI=0.68-4.29). Occupation was not correlated to women's perception of breastfeeding in public. There was no statistically significant association between women's occupation and their perception of breastfeeding in public for all categories of women's occupation. Being informed about the benefits of breastfeeding at ANC visits was also not correlated to the odds of positive perception of breastfeeding in public by the women (OR=1.22, %95 CI =0.64-2.32).

4.8 Factors associated with women's practice of breastfeeding in public places.

Women who breastfeed in public reported in the FGDS that they were encouraged to breastfeed in public because they understood the benefits of breastfeeding, were supported

by their families to do so, knew how to be discreet when breastfeeding in public and were encouraged by their partners to do so. However younger mothers, women with higher educational levels and advancement in technology were reported to negatively affect women's practice of breastfeeding in public.

Education, there's been a lot of education on media lately with regards to the benefits of breastfeeding, so I think that's encouraging people to breastfeed in public. Yes, so me I think currently more women breastfeed everywhere because they know of the benefits. FGD 3, Young woman, University Hospital, Legon.

I feel that now younger people are giving birth and it is the younger people who have a problem with exposing their breast, they don't like breastfeeding in public. FGD 3 Middle aged woman, University Hospital, Legon.

The survey, however, revealed that women's age was not associated with their practice of breastfeeding in public, (OR = 0.69; 95% CI=0.23-2.14). Similarly, women's marital status and educational levels were not associated with the odds of practice of breastfeeding in public, (OR= 0.77, 95% CI = 0.10-6.09) and OR = 0.66, (95% CI= 0.27-1.61) respectively, (Table 4.5).

A key informant said in an interview when asked what factors could make women avoid breastfeeding in public,

Being educated! They think because they've gone to school and because of their educational status, they need not expose certain parts of their bodies in public. KII 1 Midwife, University Hospital, Legon.

Women who had given birth to more than three children were more likely to practice breastfeeding in public places compared to women with one child. This association was however not statistically significant (OR=2.68; 95% CI=0.32-22.46). Women who reported experiencing stigmatizing reactions from other people when they breastfed in public were not different with regards to subsequent practice of breastfeeding in public compared to those who have not had such negative experiences. (OR= 1.09, 95% CI= 0.31-3.87), (Table 4.5). Women in FGDs responded differently when asked whether their perception about breastfeeding in public has changed after observing uncomfortable reactions from people,

No, not at all. I will still do it. As for that, as long as my child cries or I see it is hungry I will give it. If I am shy, I will just cover it. If you are not comfortable you can leave. FGD 2, Young Mother, Shiashie East Legon.

I felt very bad, after that experience, I will not do it again, I will just give the bottle. KII 1 Midwife, University Hospital, Legon.

Women with strong family support for breastfeeding in public however showed a 200% increase in odds of practicing breastfeeding in public compared to those with poor/ family support for breastfeeding in public (OR=3.27, 95% CI= 1.31-8.18). Women who felt the need to cover their breasts when breastfeeding in public had a 31% less the odds of breastfeeding in public compared to women who did not feel the need to cover their breast in public. This association was however not statistically significant, (OR=0.69, 95% CI= 0.19-2.44). Partners feeling of discomfort with breastfeeding in public was negatively associated with practice of breastfeeding in public. Compared to women whose husbands

strongly disapproved of breastfeeding in public, there was a 3.99 odds of practicing breastfeeding in public among women whose husbands strongly approved of breastfeeding in public. A statistically significant association was found (OR=3.99, 95% CI =1.5 – 10.57), (Table 4.5). Women in the interviews did not describe their partner's feelings with regards to breastfeeding in public.

Controlling for women's age, education, parity and employment, family support for breastfeeding in public and women's feeling of the need to cover up their breasts when breastfeeding in public were significantly associated with the odds of positive perception of breastfeeding in public place. (OR=8.57, 95% CI=4.35-16.87) and (OR=0.12, 95% CI=0.04-0.40) respectively. (Table 4.6).

With regards to practice of breastfeeding in public, controlling for women's age, education and parity, women's family support for breastfeeding in public and the need to cover the breast when breastfeeding in public was not significantly associated with their practice of breastfeeding in public, (OR=1.86, 95% CI=0.52-6.62) and (OR=1.34, 95% CI=0.33-5.46). However, controlling for women's family support, need to cover breasts, age, education and employment, women whose husbands were comfortable with breastfeeding in public had an increase in the odds of positive perception of breastfeeding in public. (OR=3.85, 95% CI=1.03-14.29) (Table 4.6).

Table 4.5 Factors associated with women's perception and practice of breastfeeding in public places

Characteristic	Odds ratio	95% Confidence interval	
<i>Age</i>	1.77	0.71	4.39
<i>Education</i>	0.40	0.09	1.86
<i>Employment status</i>	0.89	0.44	1.80
<i>Marital status</i>	0.35	0.08	1.56
<i>Parity</i>	1.71	0.68	4.29
<i>Breastfeeding knowledge</i>	1.83	0.64	5.23
<i>Use of breast covers</i>	0.13	0.03	0.43
<i>Reactions from people</i>	0.46	0.34	0.89
<i>Family support</i>	7.91	4.26	14.66
<i>Partners feeling of discomfort</i>	7.56	4.01	14.27
Factors associated with women's practice of breastfeeding in public			
<i>Age</i>	0.69	0.23	2.14
<i>Education</i>	0.66	0.27	1.61
<i>Employment status</i>	2.08	0.76	5.65
<i>Marital status</i>	0.77	0.09	6.09
<i>Parity</i>	2.68	0.32	22.46
<i>ANC attendance</i>	3.44	0.37	32.22
<i>Breastfeeding knowledge</i>	1.99	0.42	9.42
<i>Use of breast covers</i>	0.69	0.19	2.44
<i>Reactions from people</i>	1.09	0.31	3.87
<i>Family support</i>	3.27	1.31	8.18
<i>Partners feeling of discomfort</i>	3.99	1.50	10.57
<i>Women's perception score</i>	3.62	1.47	8.91

Results obtained from Simple logistic regression model.

4.9 Breastfeeding in public and bottle feeding.

Participants in the FGD and IDI reported that women avoided breastfeeding in public because they had other alternatives to feeding their children such as bottle feeding of formula or expressed breastmilk. Civilization and the availability of breast pumps for expressing breastmilk were some factors that were mentioned by respondents to be responsible for women not breastfeeding in public.

*Breastfeeding is something that is uncomfortable to do so what I normally do is that when I am going to a public place, I just express into a feeding bottle and keep it in a warmer (I have a warm bag) and then when baby is crying, I just introduce the bottle. **KII 1 Midwife, University Hospital, Legon.***

*Formerly, women walked about whiles their babies were breastfeeding but now, advancement in technology has led to feeding with bottles and expressing of breastmilk. So even me now I express my breast milk into a bottle when going to church. **FGD 4 Middle aged woman, Shiashie, East Legon.***

*A lot has changed, now women can easily pump their breastmilk into a bottle and feed so she will never expose her breast in public. **IDI 5, Adult male, Bawaleshie, East Legon.***



Table 4.6: Factors associated with women's perception and practice of breastfeeding in public places

Characteristic	Odds ratio	95% Confidence interval	
Factors associated with perception of breastfeeding in public			
age			
18-24	Ref		
25-29	2.13	0.79	5.71
30-34	3.06	1.07	8.79
35-39	1.17	0.39	3.53
40+	2.26	0.40	12.70
Education			
No formal education	Ref		
elementary	.58	0.11	3.02
secondary+	.49	0.10	2.53
Employment status			
unemployed	Ref.		
currently employed	.74	0.34	1.60
parity			
1 livebirth	Ref		
2-3 livebirths	.84	0.44	1.58
morethan3	1.52	0.49	4.70
marital status			
No relationship	REF		
In a relationship	.49	0.10	2.34
Need to cover breast			
No	Ref		
yes	0.12	0.04	0.40
Family support			
positive	8.57	4.35	16.87
Factors associated with practice of breastfeeding in public			
Age			
<25	Ref		
25-29	1.37	0.37	5.07
30-34	1.52	0.41	5.69
Education			
no education	Ref		
elementary	.51	0.17	1.51
Parity			
1 livebirth	Ref		
2-3 livebirths	.74	0.24	2.27
morethan3	2.91	0.28	30.07
Family support			
negative	Ref		
Positive	1.87	0.53	6.62
Need to cover breast			
No	Ref		
Yes	1.34	0.33	5.46
Partner feeling of discomfort			
Yes	Ref		
No	3.85	1.04	14.30

Results from multiple variable logistic regression model

CHAPTER FIVE

5.0 DISCUSSION

5.1 Socio-demographic and obstetric characteristics of participants.

The aim of this study is to describe women and community perceptions of breastfeeding in public and identify the relationship between some sociodemographic characteristics of women and their perception and practice of breastfeeding in public places. The respondents in the survey were predominantly young with 63% aged between 25 to 34 years, age of the women was not significantly associated with their perception of breastfeeding in public and women of all age categories were found not to be different in their perception of breastfeeding in public. However, women in the FGDs reported otherwise. They were of the view that, younger mothers were more likely to have negative perceptions about breastfeeding in public compared to elderly mothers. Regarding breastfeeding in general, Neji et al., (2015), found that a woman's age (above 25 years) was associated with the practice of exclusive breastfeeding compared to younger women. A similar association was expressed by the women in the FGDs. Nolan, Rossnagel, Conolly, Macfarlane, and Kelleher, (1998) also found that younger people disagreed with breastfeeding in recreational areas and felt disgusted when women breastfeed near them in public, this association may not have been represented in this study because majority of the respondents of the study were relatively younger, a study in a more age diverse population may help to better explain the relationship between women's age and their perception of breastfeeding in public places.

Several of the respondents were either formally or informally employed which could mean that they had to work out of home, these women's perception regarding breastfeeding in public was found not to be related to their employment status ($p > 0.05$, $CI = -1.82 - 1.73$) neither was their past or current practice of breastfeeding in public related to their employment status ($OR = 1.44$ $p = 0.1$, $CI = .88 - 2.38$). However, Komodiki et al., (2014), reported that working mothers found breastfeeding at their workplaces very challenging because the facilities and the needed resources for breastfeeding or expressing breastmilk comfortably was not available. Also, Mackean and Spragins, (2012) reported that many women avoided or stopped breastfeeding because of the discomfort associated with breastfeeding or pumping breastmilk in uncomfortable places or settings when in public places. Women in this study may not have experienced such challenges with breastfeeding from their workplaces this could be because majority of the women were self-employed and may have had more flexible working conditions. However, with the increasing number of women working in corporate workplaces, if the challenge of where to breastfeed or express breastmilk exists, then the breastfeeding outcomes will be poor for a country like Ghana which is experiencing a decline in its exclusive breastfeeding rates (63.7% in 2008 to 46% in 2011, (www.ghananewsagency.org). There is therefore a need to address factors that affect nursing mothers' ability to continue exclusive breastfeeding and provide needed interventions in the workplaces such as maternity regulations which support breastfeeding breaks in both public and private work places for mothers.

Majority of the respondents had secondary education or higher, though this was not associated with their perception of breastfeeding in public places, respondents in focus group discussions said highly educated women were more likely to perceive breastfeeding

in public as being unacceptable. These findings are both inconsistent with what Mulready-Ward and Hackett, (2014), found. They found that, significantly more respondents with high school education or less reported feeling uncomfortable when women breastfeed near them in public. The survey results corroborate Hall and Hauck, (2007) study report that highly educated women struggled with the same challenges as did more vulnerable women with regards to breastfeeding including the perceptions and feeling of discomfort with breastfeeding in public places. They concluded that regardless of a woman's education or socioeconomic status, factors that inhibit breastfeeding in general cuts across all groups. Yet with regards to this study it could be explained that since these women live in the same community and access healthcare and other social resources from the same sources, they all experienced similar exposures from their society including societal perception of breastfeeding in public, which has been passed on to women regardless of their educational levels therefore, similar perceptions of breastfeeding in public.

5.2 Perception of breastfeeding in public places.

Majority of the women in the survey perceived breastfeeding in public as a normal and acceptable practice. Also participants in the FGDs said that breastfeeding in public was normal because the baby is of priority. Mulready-Ward and Hackett, (2014) however found that, half (50.4%) of study respondents were not supportive of breastfeeding in public and agreed that breastfeeding should only be done in private places. This is not the perception of women in this study, rather women in this study were supportive of breastfeeding in public and majority did not find it uncomfortable to breastfeed in public, this may be because women in this study who predominantly had secondary education or higher were well informed and better understood the benefits of breastfeeding their children regardless

of wherever they find themselves and so found it normal to breastfeed when the child cries for it. Boyer, (2012) in her study, found women reporting negative experiences of breastfeeding in public including negative comments from people around them. This made the women think of breastfeeding in public as being embarrassing and unacceptable. A minority of women reported ever observing uncomfortable reaction from people when they breastfed in public. Though these observed reactions were associated with women's perception of breastfeeding in public, it did not affect their subsequent practice of breastfeeding in public places. This could be because though women entertained different perceptions towards breastfeeding in public after experiencing negative reactions from people, they did not avoid breastfeeding in public subsequently because they chose to obtain the full benefits of continued breastfeeding regardless of people's reactions.

Twenty-seven percent of women in this study felt it was embarrassing for women to breastfeed in front of others and generally respondents in the focus group and interviews also said that women perceived breastfeeding in public as unacceptable because of the feeling of shyness and discomfort associated with it. The feeling of embarrassment and discomfort that has been associated with breastfeeding in public was reported by Stolzer, (2010) as a contributory reason why some women do not initiate breastfeeding or stop breastfeeding early. Women may feel shy with breastfeeding in public because of the perception that they are exposing their breasts for others to see, women need to understand that when breastfeeding, the breast is serving its natural purpose. Furthermore, few women in this study reported feeling of discomfort when watching other women breastfeeding in public and some were personally uncomfortable when they breastfeed their own babies in public places. This finding is similar to what was observed in the (National Office on

Women's Health, 2006) study which found that 57% of their study participants felt uncomfortable seeing other women breastfeed in public and 47% were themselves uncomfortable breastfeeding their own child in public. The reasons identified were women's confidence with breastfeeding, their ability to be discreet with breastfeeding and the age of the breastfeeding child. Though these findings are about 10 years old and not in an African region, they are similar to what was found in this current study showing that society's perceptions are not changing in favor of breastfeeding in public.

With regards to covering the breast or finding privacy when breastfeeding, majority of respondents agreed that it was necessary for women to do so. An unexplored finding in this study was that, women with Moslem outlook were more likely to feel the need to cover up or find privacy when breastfeeding in public, they also said other women needed to do same. These findings confirm Nolan et al's., (1998) study which found that women perceived breastfeeding in public as acceptable when it is done in places that provided them some degree of privacy and Komodiki et al., (2014) finding that though breastfeeding in public was supported by legislation, mothers in the USA felt it was more acceptable and generally welcomed when they are discreet about breastfeeding in public. Covering the breast with a piece of cloth was also reported in the FGD as a means of providing oneself with some privacy when breastfeeding in public. The use of breast covers has been described as a means to eradicate any embarrassment for the mother and members of the public. However, Amir, (2014, p. 187) in her study said that this message is a deception by nursing covers companies in order to advertise their product. She mentioned that covering the breasts during feeding has implications for maternal and infant health and well-being. She said that:

“In my clinical practice, I’ve seen a woman who developed mastitis after feeding awkwardly because she was concealing her breast in a public setting. I feel saddened whenever I see this: where is the eye contact and reciprocal communication between mother and child?”

If the general population is well educated on the benefits of breastfeeding and begins to see breastfeeding in public as a feeding avenue for infants, then women can breastfeed comfortably in public without the need to use breast covers which undermines some benefits of breastfeeding. Women need to be confident about breastfeeding so that they can do so anywhere without feeling the need to cover up their breast.

5.3 Family support and breastfeeding in public

Women perceived their family as being supportive of breastfeeding in public and majority agreed that their partners feel comfortable when they breastfeed in public places. Women were more likely to favor breastfeeding in public and also breastfeed in public if their family/partners supported it. Family support therefore is important in ensuring continued breastfeeding and for improving the declining rates of breastfeeding globally. As was reported by the U.S. Department of Health and Human Services, (2011) that friends and families of women who are knowledgeable about breastfeeding influenced women’s choice and duration of breastfeeding. Therefore, educating friends and family of women about the importance of breastfeeding on demand will help to make them accept and practice it. Women whose husbands were uncomfortable with breastfeeding in public were more likely to perceive breastfeeding in public as a negative or wrong practice. Nolan et al., (1998) also found that women mentioned their husband/partner, mothers and other family as those who influenced them most to breastfeed. Very few women mentioned health professionals

as their source of influence to breastfeed. Education on the benefits of breastfeeding should target spouses and family members to help provide the needed support to women with regards to breastfeeding and in public places.

5.4 Practice of breastfeeding in public.

Women whose partners were comfortable with breastfeeding in public had a higher likelihood of breastfeeding in public compared to women whose partners were uncomfortable with the practice. Similar to these findings is the results of a qualitative study by (Mitchell-Box and Braun, 2012), that male partners of pregnant women and new mothers from low income settings, acknowledged that they were uncomfortable with breastfeeding in public. Because male partners are more likely to inform women's decision on breastfeeding, this finding suggests a need for partner oriented interventions that increases their knowledge of the benefits of continued breastfeed in and as such promote their support and ensure their acceptance of breastfeeding in public.

5.5 Breastfeeding in public and the law.

Only 7% of women agreed that breastfeeding in public should be against the law and a majority of women said there is no legislation against the practice. Breastfeeding in public was not linked to the law on indecent public exposure of body. This was because respondent perceive that exposing the breast was for the purpose of feeding a child. This perception of breastfeeding in public and the current law on indecent exposure of body as being unrelated is good for the breastfeeding situation in Ghana, if mothers don't feel that they are violating any law when they breastfeed in public, they are more likely to practice it without feeling restricted. This further confirms women's acceptance of breastfeeding

in public as normal, enforcing breastfeeding in public and making women and society to find the practice acceptable will help them to strongly support the practice. However, few women mentioned that breastfeeding in public violates the law on indecent exposure when it is not done discreetly.

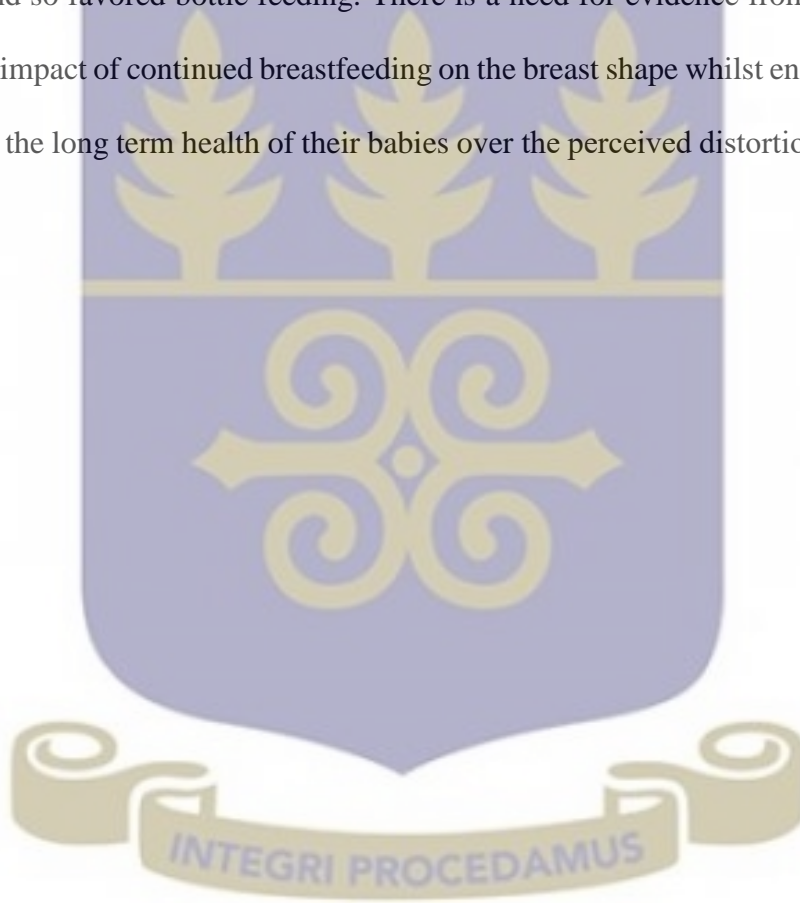
Having the wrong perception about breastfeeding in public and how it relates to the laws of Ghana means that women will shy away from breastfeeding with the fear of offending others. Also, people may react negatively towards women who breastfeed in public because they do not know what laws protect them. Breastfeeding in public must be supported in all areas in Ghana so that women feel less vulnerable when they breastfeed in public.

5.6 Breastfeeding in public and bottle feeding

The mention of bottle feeding as an alternative to breastfeeding when in public suggests that the challenges associated with the latter leads to sub optimal practice which undermines the efforts to scale up quality breastfeeding globally. This puts infants at risk of immediate and long term health risks such as developing dental caries and obesity. Bottle feeding has been reported by Li et al., (2010) to affect infants self-regulation of food intake and has been associated with why bottle fed children regardless of the kind of feed are more likely to have an increased risk of obesity compared to breastfed children because of the associated rapid weight gain (Li et al., 2012). Women may choose to bottle feed because they are unaware of any potential long term risk to the infants. This will make Ghana suffer a double burden if women bottle feed and predispose their children to obesity and type-2 diabetes later in life. Therefore, mothers need to be well informed of the risk to their child when they bottle feed even with expressed breastmilk, and not just the

immediate benefits of feeding breastmilk. This knowledge will motivate women to make informed choices when they have to breastfeed in public.

In order to maintain the breasts shape and prevent it from becoming flat or saggy, women reported that they opted to bottle feed, this corroborates the findings of Anstey, (2014) and Henderson et al., (2000) that women blamed breastfeeding for painful nipples and saggy breasts and so favored bottle feeding. There is a need for evidence from future studies to know the impact of continued breastfeeding on the breast shape whilst encouraging women to choose the long term health of their babies over the perceived distortion of their breast's shape.



CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions.

Breastfeeding in public is viewed by most women and respondents in this study as normal and acceptable so many of them practice it. However, 52% of them reported discomfort and shyness as a reason for avoiding breastfeeding in public. About 81.3% considered breastfeeding in public as acceptable and necessary for the sake of the infant. Also, 85% of women expressed a positive perception toward breastfeeding in public places and 93% of them indicated they currently or previously practice breastfeeding in public places.

Family support for and partners feeling of comfort about breastfeeding in public practice were positively associated with women's perception and the practice. Such women were more likely to breastfeed in public. Women with a positive perception towards breastfeeding in public were more likely to practice breastfeeding in public places. Also women who observed negative reactions from people when they breastfed in public were less likely to favor breastfeeding in public places. Eighty-one percent of women felt the need to use breast covers when breastfeeding in public and such women were more likely to perceive the practice as acceptable. No significant association was found to exist between most of the women's sociodemographic characteristics and their perception and practice of breastfeeding in public. However, women's age between 30-34 years was significantly associated with their perception of breastfeeding in public.

6.2 Limitations of the study.

This study did not collect information on women's religious or ethnic backgrounds to explain the influence of such characteristics on the women's perception and practice of breastfeeding in public places. Also this study was limited to a set of communities that are urban with more educated women. The findings of this study may therefore not represent the situation in rural communities and or among less educated women.

6.3 Recommendations

- The study found that majority of the women favored the use of breast covers when breastfeeding in public places. A study should be carried out to investigate factors that influence women to use breast covers and the role of women's religious or ethnic affiliation on this practice.
- About 29.7% of women said they were counselled about breastfeeding in public, the Ministry of Health and stakeholders of infant and young child feeding as well as health care professionals at CWC and ANC should enforce education of women and their families on breastfeeding and breastfeeding in public places as part of the baby friendly hospital initiative to equip women and their partners with the needed knowledge to practice breastfeeding everywhere a child needs it knowing the benefits thereof.
- Fifteen percent of women had experiences of negative reactions from people when they breastfed in public. There is a need to scale up education of women and society to support breastfeeding in all public places in order to protect women from these negative or uncomfortable reactions of people around them when they breastfeed their babies in public places and make it more socially acceptable.

- Majority (83%) of women in the study were employed; a substantial number work in corporate jobs. There is therefore the need to ensure that all public and private work places where women work have adequate designated places for women to breastfeed when at work, also women should be allowed frequent breaks in order to comfortably breastfeed their babies after they return from maternity leave.
- There is a need to address women and community perception of breastfeeding in public through targeted public education in order to promote support for breastfeeding in all public places.



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APPENDICES

APPENDIX I

Participant Consent Form

Research title - Perception and practice of breastfeeding in public places in Ayawaso-West Wuogon Sub-metro, Greater Accra Region

Name of Researcher: Miss Coomson Justine Boatemaa

Research Supervisor: Dr. Richmond Aryeetey, Senior Lecturer, University of Ghana School of Public Health, Legon

PART I: INFORMATION SHEET

Introduction

My name is Justine Boatemaa Coomson, a Masters of public health student of the University of Ghana. As part of the academic requirements I am conducting a research on the community perception of breastfeeding in public places and will like to invite you to participate but you do not need to decide immediately to participate.

I will explain the details of this consent form to you so you understand what the study entails.

Purpose and Nature of the Study

This study will require that you answer some questions about your perception of breastfeeding in public places. It has been found that some women refuse to breastfeed their children when in public places such as the workplace, restaurant or on public transports. I will like to know what your perception is, about a mother breastfeeding her child in a public place. The information you will provide will help us to learn what people think about breastfeeding in public places so that interventions that can help mothers to breastfeed no matter where they find themselves can be put in place for more women to practice breastfeeding as is recommended.

Potential Risks and Discomforts

In participating in this study, I will be asking you to share some personal views and experiences concerning breastfeeding with me and you may feel uncomfortable talking about some of the topics. You do not have to answer every question or take part in the research if you don't wish to do so. Also, you may withdraw from the study at any time that you wish. I will give you an opportunity at the end of the interview to review your responses, and you can ask to change any responses that you want. You do not have to give me any reason for withdrawing.

Additional Costs and Compensation

You will not have to spend money in partaking in this study and you will not be compensated for participating. If you agree to participate in the study, I will visit you at

home or any place that you think is comfortable for you. You will only have to spare 30 minutes of your time to answer the questions I will ask

Confidentiality

No information shared with me will be disclosed to any of your community members or to anyone who is not part of the study team and I will not need your name in this study. The information that I will collect from this study will be used only for academic purposes.

Contacts for Additional Information

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact me Coomson Justine Boatemaa, School of Public Health, Legon on the following numbers 0246546707 / 0269726669 or justinecoomson@yahoo.com or

Dr. Richmond Aryeetey, School of Public Health, Legon on 0261128506 or raryeetey@ug.edu.gh

You can also contact the GHS-ERC Administrator, Madam Hannah Frimpong on 0507041223 for any clarifications on this research.

PART II: CERTIFICATE OF CONSENT

I have been invited to participate in a study on the perception of breastfeeding in public. The document describing the nature and purpose as well as risks and benefits of the study has been read and explained to me.

I have been given an opportunity to have any questions about the study answered to my satisfaction. I agree voluntarily to participate in this study.

_____	_____	<input type="text"/>	_____
Full name of participant	Signature or	Thumb print	Date

Declaration by witness (if participant cannot read the form herself)

I was present while the benefits, risks and nature and purpose of the study were read to the participant. All questions were answered and the participant has agreed voluntarily to take part in the study.

_____	_____	<input type="text"/>	_____
Full name of participant	Signature or	Thumb print	Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this study have been explained to the above individual to the best of my ability. I confirm that the participant was given an opportunity to ask questions about

APPENDIX II

Study Questionnaire

SCHOOL OF PUBLIC HEALTH, COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

PERCEPTION AND PRACTICE OF BREASTFEEDING IN PUBLIC PLACES IN THE AYAWASO WEST WUOGON SUB METRO, ACCRA

RESPONDENTS CODE

INVESTIGATORS CODE

SOCIODEMOGRAPHIC INFORMATION

1. How old are you? _____ (Completed years)
2. What is your current marital status?
 Single Married Cohabiting Divorced Widowed
3. What is your highest educational level completed?
 No Formal Education Primary Education Junior High Education
 Senior High/Vocational/Technical University/ Polytechnic/ Training College Other
4. Number of years completed for highest level of education _____ out of _____ years.
5. What is your **main** occupation? _____.
6. Are you currently employed?
 Yes- self-employed Yes-employed by other No- unemployed

OBSTETRIC HISTORY

7. How many live births have you had in your life? _____.
8. Did you breastfeed your last/ current child? Yes No
9. How long (in months) did you breastfeed your last/current child? _____.
10. Did you attend ante-natal clinic when you were pregnant? Yes No
11. If yes how many visits did you make to the ante-natal clinic before delivery?

12. Did you feel that you were ready/ prepared to breastfeed before your last/current child was born?
 Yes, well prepared/ ready
 Yes, somehow prepared/ready
 Neither prepared nor otherwise
 No, not prepared/ready.
13. Were you informed or counselled about breastfeeding during ante-natal visits by a health professional?
 Yes No

14. Were you ever counselled regarding **breastfeeding in public** during ante-natal or post-natal clinic visits?
 Yes, counselled
 Yes, somehow informed
 No, Not informed

PERCEPTION OF BREASTFEEDING BY FAMILY AND FRIENDS

15. Do you have any family members or friends who are currently /recently breastfeeding?
 Yes No
16. My close family and friends support exclusive breastfeeding for six months
 Strongly agree Agree Neutral Disagree Strongly Disagree Undecided
17. My close family and friends support exclusive breastfeeding for
 between 3 and 6 months
 until the child looks big enough to eat other foods
 until they start work
 other
18. Concerning breastfeeding in public places such as (Restaurants, public transport, shopping centers, work place etc.), my close family and friends **encourage me to do so**
 Strongly agree Agree Neutral Disagree Strongly Disagree Undecided
19. Concerning breastfeeding in public places such as (Restaurants, public transport, shopping centers, work place etc.), my close family and friends **consider it as a normal practice**
 Strongly agree Agree Neutral Disagree Strongly Disagree Undecided
20. Concerning breastfeeding in public places such as (Restaurants, public transport, shopping centers, work place etc.), my close family and friends **do not approve of this**
 Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

PERCEPTION OF BREASTFEEDING IN PUBLIC.

(To what extent do you agree or disagree with the following statements?)

21. I should be able to breastfeed anywhere I want to
 Strongly agree Agree Neutral Disagree Strongly Disagree Undecided
22. I do not feel comfortable breastfeeding in a public place?

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

23. I feel it is acceptable to breastfeed in public.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

24. Women should be able to breastfeed in public without any problems.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

25. It is uncomfortable to have to watch someone breastfeed in public

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

26. Breastfeeding should be allowed in all public places.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

27. Women should cover up their breasts when breastfeeding in public.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

28. Mothers who breastfeed in Public places need to do so in a place that gives them privacy.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

26. It is embarrassing for a woman to breastfeed in front of others.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

27. It is embarrassing for others when women breastfeed in public.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

28. I am comfortable when other women breastfeed their babies near me in public

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

29. My partner (husband) does not feel comfortable when I breastfeed in public.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

30. I am comfortable offering breastmilk to my child wherever my child cries for it.

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

31. Breastfeeding in public should be against the law

Strongly agree Agree Neutral Disagree Strongly Disagree Undecided

32. Which public place make/made you most uncomfortable to breastfeed at?

33. Which of these places will you consider **most** inappropriate to breastfeed

Restaurant

Cafe

Clothes Shops

church

market

Other, Specify _____

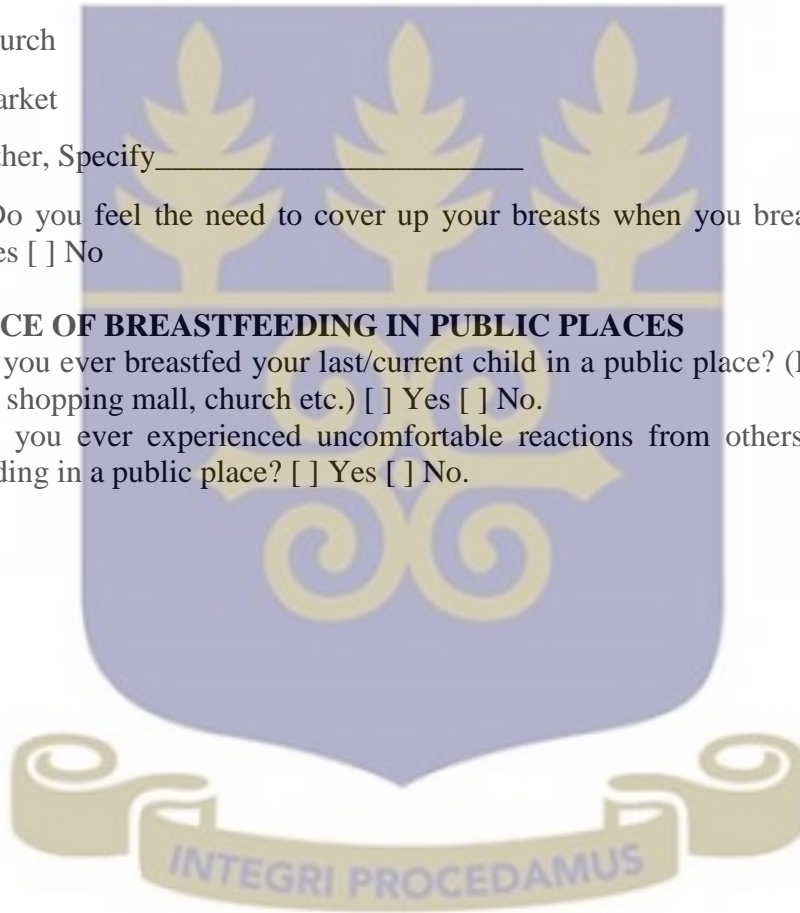
34. Do you feel the need to cover up your breasts when you breastfeed in public?

Yes No

PRACTICE OF BREASTFEEDING IN PUBLIC PLACES

35. Have you ever breastfed your last/current child in a public place? (Restaurant, public transport, shopping mall, church etc.) Yes No.

36. Have you ever experienced uncomfortable reactions from others when you were breastfeeding in a public place? Yes No.



APPENDIX III

Focus Group Discussion Guide

Vignette:

Think about this story, you may have experienced it in real life. A woman is carrying a young baby in the supermarket. The baby is wailing at the top of her voice. To stop the baby from crying, the mother occasionally, rocks the baby gently to make her quiet. But after a few seconds the baby starts crying again. Other shoppers are looking at this woman and thinking, why is she not feeding the child? One or two older women who passed by came near and asked her to put the child to the breast. She looks around, wondering if that is appropriate to do in the shop. Rather, she was hurrying on with her shopping so that she can get back to her car and privately breastfeed her child.

Focus group 1 – Women of reproductive age, with history of child birth in the last 5 years.

1. What does this tell you about the woman, her baby and breastfeeding?
2. What do you think about breastfeeding in public or public places? (Market, church, on public transport, supermarket, workplace)
3. What will you consider as a public place regarding breastfeeding? Probe why for response.
4. Tell me any experiences or stories you have heard about people who find it difficult to breastfeed in public?
5. How common/widespread is the issue of women who find it difficult to breastfeed in public among people you know?
6. Indicate any reason(s) why women will not want to breastfeed in public. In other words Indicate any reason(s) why women find it acceptable to breastfeed in public
7. In your opinion what do you consider as a problem/ challenge regarding breastfeeding in public? Why?

8. What is **your** personal experience of an uncomfortable situation regarding **someone** breastfeeding in a public place?
9. How do you feel when **other women** breastfeed their babies near you in a public place?
10. Let us compare how people perceived breastfeeding in public a few years (10 years) back to how it is perceived now.
11. What do you think are the reasons for the differences in perception over time?
12. How does breastfeeding in public relate to the laws of Ghana?
13. What do you know about the law in Ghana on indecent public exposure of body?
14. What do you think of such a law?
15. Where do women breastfeed their babies in your workplace?
16. What are people's reaction to women who breastfeed in your work place?
17. What measures do people take to be able to breastfeed in public?
18. What is your personal experience of a problem/challenge with breastfeeding in public?
 - a. How has this changed your perception in any way?