

**RUNNING HEAD: EXCLUSIVE BREASTFEEDING AMONG PROFESSIONALS**

**EXCLUSIVE BREASTFEEDING PRACTICE AMONG PROFESSIONAL  
WOMEN IN THE ACCRA METROPOLIS**

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**Declaration**

I hereby declare that this thesis is my original work, which I have produced after conducted research. All references have been duly acknowledged. None of the material in this write up has been presented either partially or wholly to any other institution for the award of a degree.

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**Declaration by the Thesis Committee Members**

This is to certify that we the under-listed committee members have supervised the M'Phil thesis by

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And have found that it is complete and satisfactory in all respects.

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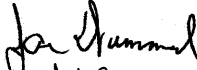
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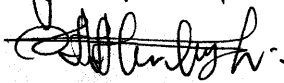
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## TABLE OF CONTENTS

	Page
<b>List of Words and their Meanings</b>	vi
<b>Abstract</b>	vii
 <b>CHAPTER 1</b>	
<b>1.0 Introduction</b> .....	1
1.1 Historical Perspective.....	2
1.2 Background and Statement of Problem.....	4
1.3 Purpose of the Study.....	7
1.4 Definition of Terms.....	8
1.5 Significance of the Study.....	8
 <b>CHAPTER II</b>	
<b>2.0 Literature Review</b> .....	10
2.1 Exclusive Breastfeeding.....	10
2.2 Factors Influencing the Duration of Exclusive Breastfeeding.....	13
2.2.1 Demographic Determinants of EBF.....	14
2.2.2 Location of birth.....	15
2.2.3 Maternal Employment.....	16
2.2.4 Psychosocial and Cultural Factors.....	17
2.3 Summary of Literature.....	20
 <b>CHAPTER III</b>	
<b>3.0 Method</b> .....	22
3.1 Setting.....	23
3.2 Sample.....	24
3.3 Data Collection.....	26
3.4 Data Management.....	27
3.5 Data Analysis.....	28

3.6	Trustworthiness.....	30
3.7	Ethics.....	32

## CHAPTER IV

4.0	Findings.....	34
4.1	Description of Sample.....	34
4.2	Thematic Findings.....	37
4.2.1	Commitment .....	40
4.2.2	Direct Facilitators of EBF.....	42
4.2.3	Physical Barriers.....	49
4.2.4	Psychological Barriers.....	51



## CHAPTER V

5.0	Discussion.....	55
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## CHAPTER VI

6.0	Conclusion/Recommendations.....	65
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References.....	73
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## Appendices

Appendix I: Ten Steps to Successful Breastfeeding.....	79
Appendix II: Information Sheet.....	80
Appendix III: Consent Form.....	83
Appendix IV: Interview Format.....	85
Appendix V: Ethical Clearance.....	86

**List of Words and their Meanings**

**Koko** - Porridge prepared from fermented corn dough

**Kenkey** - Moulded pudding prepared from fermented corn dough.

Quotations of study participants are presented in italics.

### Abstract

Over the past decade breastfeeding promotion, with a strong bias for exclusive breastfeeding for the first six months of life, is accounting for a gradual reversal in the decline of breastfeeding noticed in African countries in the late 1970's. Although there has been some increase in the rate of exclusive breastfeeding in Ghana, this rate falls significantly after the first two months, as complementary feeding before the sixth month is common. Despite the decline in the rate of exclusive breastfeeding after the second month, some mothers sustain the practice up to the sixth month.

A qualitative design was employed to investigate what has facilitated the practice of exclusive breastfeeding for four to six months among professionals. Ten professionals were purposefully sampled. In-depth audiotaped interviews were conducted in English. The results indicated that commitment was a strong enabling factor of exclusive breastfeeding practice, with education playing a key role. Commitment did not work in isolation. Direct facilitators like the availability of time, support and engagement in exclusive breastfeeding-related activities enhanced the role of commitment. Although some barriers that were potentially deterrent to the practice of exclusive breastfeeding were reported, the combined effect of commitment and direct facilitators enabled the practice for four to six months.

Among strategies that could be used to increase and sustain the adoption of exclusive breastfeeding is the strengthening of the educational component of the breastfeeding-promotion programme as that contributes to a better understanding of the completeness of breast milk as both food and drink for the infant. Other strategies include drawing on the experiences of women who have successfully exclusively breastfed, the establishment of self-help breastfeeding support groups and training health professionals in lactation management.

## CHAPTER I

### 1.0 Introduction

Breastfeeding of infants is a widespread practice in most societies. The advantage of breast milk for newborn infants is undisputed in professional and popular literature. In many parts of Africa and other low-income societies, breastfeeding has always been the norm, both in the urban and rural communities. Exclusive breastfeeding for the first few months of an infant's life is however not widely practiced.

Current literature on breastfeeding recommends exclusive breastfeeding (EBF) as the optimal feeding method for the first six months of an infant's life. This recommendation is based on the many health, economical and social benefits. It would seem reasonable that the cheapness of breast milk, in addition to its various benefits, should be welcome in low-income societies such as Ghana, as EBF presents with relatively no constraint on the family food budget.

The extent to which EBF is adopted in Ghana will depend on a number of factors. One of these is the extent to which the knowledge of the benefits of breast milk is appropriately disseminated, taking into consideration the level of literacy in the country. A second factor is the extent to which EBF is supported at the family, community and national level.

In this introductory section, the historical perspective for the decline of breastfeeding in African societies will be outlined. The background, problem statement and purpose of the research study will follow this historical outline. In the final part,

there will be an examination of some strategies that could be implemented to advance the adoption of EBF in Ghana.

### 1.1 Historical Perspective

In the late 1970's, a steady decline in the rate of breastfeeding in Africa, especially in urban areas, became a major cause for concern and the focus of study in the years following (Mandot-Benard, 1977). This decline in breastfeeding practice has been attributed to the Western influence on African culture. The trend was especially noticed among women with relatively higher education, who tended to be more influenced by Western lifestyles. Most of these educated African women were to be found in the professions and other employment that took them away from the home, promoting the use of bottle-feeding with infant formula. Companies marketing breast milk substitutes flourished at that time, as did their market strategies, which influenced more mothers to adopt bottle-feeding.

The situation in Ghana at the time typified the above phenomenon. For the few families whose budget could support the purchase of formula, their babies grew plump, giving rise to the popular term "lactogen baby". This category of babies became a status symbol for the affluent in society. Unfortunately, the budget of the average Ghanaian family could not adequately support the practice of bottle-feeding with formula and some of those who chose to go the way of the affluent in society realized disastrous results. Babies either failed to thrive on the often over-diluted formula, whose nutritional content was compromised, or had diarrhoea due to the unhygienic formula preparation practices.

At present, bottle-feeding is discouraged among very young children because of its negative effects on child health. Despite attempts to discourage the practice, the use of bottles with nipples is reported as relatively common in Ghana, with 17 percent prevalence among children from age zero to one month, which rises to 26 percent among children age four to five months (Ghana Statistical Service & Macro International, 1999)

The current recommendation of the World Health Organization (WHO) is that infants should be fed exclusively with breast milk from birth to six months of age (WHO, 2001). It is stated in the Innocenti Declaration, formulated at a United Nations International Children's Emergency Fund (UNICEF) and WHO-supported policy makers' meeting in Florence that exclusive breastfeeding means that an infant receives only breast milk and that "no other drink or food is given" (UNICEF/WHO 1990). Following the Innocenti Declaration, there have been efforts aimed at encouraging more mothers to adopt optimal infant feeding practices, including exclusive breastfeeding.

One strategy that could be adopted to accelerate spread of the practice of EBF is to use professionals who have successful experience with the practice. These women, as they share their experiences, can play a crucial role in breastfeeding support. This category of women are described as early adopters of an innovation (Rogers & Shoemaker, 1971). As these women have embraced EBF, they have set the trend for the practice and they are strategically placed to become important instruments of social change. If the phenomenon that prevailed in the late 1970's, when educated women championed the course of bottle-feeding, is anything to go by then it is possible that women in professional jobs practising EBF could positively influence the adoption of EBF.

## 1.2 Background and Statement of Problem

It is important to note that when urban communities in Africa were influenced by the infant-feeding trend of Western societies, some of the advantages of breast milk, such as the immunity-related benefits, were not widely known. As a result of this new knowledge, investments have been made in breastfeeding promotion with the result that breastfeeding initiation rates in Western societies have increased since 1990 (Heinig, 2001)

Optimal breastfeeding practices, including exclusive breastfeeding (EBF) for the first four to six months, increase the chance of survival for most infants, particularly in developing countries. Government leaders in Africa reported that a reasonable course of action in any programme designed to improve the nutritional status of children, is breastfeeding to the exclusion of any other form of feeding up to the age of five to six months (Mandot-Bernard 1977). The World Health Organization (WHO) supports this position and recommends EBF of infants from birth up to the sixth month (WHO, 2001).

The definition and recommended duration of exclusive breastfeeding exclude prelacteal and complementary feeding before six months of age. Prelacteal and complementary feeding within the early months are common practices in African societies, and do not guarantee optimal nutrition for the infant during this period. In Ghana, a number of researchers support the fact that though the duration of breastfeeding is long, complementary feeding within the first three months is extensively practiced (Armar et al 1992; Nutrition Division of MOH, 1989; Sodzi, 1991; Allotey, 1991; Lartey et al, 1992). Prelacteal feeding is also commonly practiced (Nutrition Division MOH, 1989).

In Ghana, health officials initiated a nationwide breastfeeding promotion programme in 1992, following the declaration of EBF for four to six months as a global. One of the main features of this programme was the establishment of baby-friendly health facilities. The Baby-Friendly Hospital Initiative is based on the principles described in the joint statement of WHO/UNICEF, synthesized in "Ten steps to successful breastfeeding" (WHO/UNICEF, 1990). These steps are practical ways of fostering good breastfeeding practices and constitute the criteria that health facilities should meet before they can be labeled as baby-friendly (Appendix I). At the time of the study, six health facilities within the Greater Accra region of Ghana had attained baby-friendly status and other facilities are working towards attaining this status.

In addition to the establishment of baby-friendly health facilities, breastfeeding promotion programmes in Ghana have consisted of training for service providers and education of the general public (Ministry of Health, 1999). Exclusive breastfeeding for the first six months is now emphasized in the promotion programmes following the passing of a law to regulate the promotion of breastfeeding in Ghana (Ghana, 2000). The following information is also transmitted in these programmes: breast milk is a cheap source of balanced diet for the first six months of life; there is less susceptibility to diarrhoeal and respiratory infections in breastfed infants; lactational amenorrhoea, beneficial for child spacing and consequent population control, is an outcome of breastfeeding.

Evidence from the five-yearly Ghana Demographic and Health Survey shows that breastfeeding promotion seems to be having some impact on the practice of EBF. In 1988 and 1993, the rates of EBF for children under four months were 2 and 19 percent

respectively (Ghana Statistical Service and Macro International Inc., 1994). The current rate of 21.8 percent for children under age four months, from the 1998 survey (Ghana Statistical Service and Macro International Inc., 1999) shows that there is an upward trend. However, for the same year, a higher rate of 42.7 percent was recorded for children under age two months, showing a marked drop in the rate between two to four months. What factors could be accounting for this reduction? What could be done to maintain the EBF rate of 42.7 percent and subsequently increase this rate? It is worthwhile to examine some of the challenges faced by breastfeeding mothers.

Continuing breastfeeding when the mother has to return to work in an environment where contact with the infants is not possible continues to pose a challenge for some mothers. In the home, a mother's attention to domestic chores can compete with time to be devoted to breastfeeding. Another factor that must be borne in mind is that though breastfeeding is natural, the art of it must be learned and this may present difficulties for some mothers, especially in the case of EBF, where breast milk is the only source of food and drink for the infant. In the absence of the appropriate support both from the clinic and the home, many motivated mothers can discontinue the practice.

Some form of formal support for breastfeeding is offered at Child Welfare Clinics, where mothers receive child growth monitoring and immunization services. Although one of the aims of these services is to promote EBF for six months, there seems to be the perception among mothers that efforts to achieve this goal sometimes make some health professionals less sensitive to concerns that they may have practising EBF. Mothers, who find the clinic environment not supportive enough, feel unable to discuss their breastfeeding challenges. These mothers simply report that they are practising EBF

even though that may not be the case, in order to avoid possible reprehension from nurses.

If breastfeeding promotion is to have a greater impact, more attention should be paid to creating a more conducive environment at Child Welfare Clinics for mothers to freely express their breastfeeding concerns without fear of reprehension.

In spite of these challenges, some mothers are managing to practice EBF for at least four months. It is possible for some of these mothers who have set the trend to encourage more mothers to practice EBF. For these mothers to become instruments of social change, it is important to determine the factors enabling them to practice EBF, especially in the face of employment-related and domestic challenges. Insight gained into their experiences could guide breastfeeding promotion efforts and help improve services related to breastfeeding.

### **1.3 Purpose of the Study.**

The purpose of this study is to identify the factors that promote EBF to at least four months for women in professional jobs. Women in professional jobs have been chosen for this study for two reasons. Firstly, women in this particular group generally have higher education and socio-economic status and they are often seen as trendsetters for the rest of the population. They are recognized as opinion leaders, have complex communication networks and generally like to adopt behaviours that have been reported to be helpful (Rogers and Shoemaker, 1971). Owing to current knowledge about the immunological benefits of breast milk, in addition to its nutritional value, and the subsequent worldwide efforts at promoting EBF, this form of infant feeding could be

considered as an innovation. Secondly, for professional women, most of whom are employed in jobs that allow a limited time for maternity leave, the practice of EBF for at least four months is a demonstration of a strong determination and commitment to what they have come to value regarding infant feeding.

The objectives of the research are to describe:

- 1) knowledge that mothers in professional jobs have about exclusive breastfeeding.
- 2) facilitators of exclusive breastfeeding for mothers in professional jobs.
- 3) barriers to exclusive breastfeeding that mothers in professional jobs experience.

#### **1.4 Definition of Terms**

**Facilitators:** Factors that enable mothers to exclusively breastfeed for at least four months.

**Barriers:** Difficulties or problems encountered by mothers in their practice of EBF.

**Professionals:** Persons in jobs that require educational preparation beyond the secondary level.

#### **1.5 Significance of the Study**

Experiences of this group of women will give insight into factors that are likely to be important in the practice of exclusive breastfeeding. Findings could serve as a useful guide for the establishment of breastfeeding support groups, an essential part of any breastfeeding promotion programme. By understanding the experiences of this group of mothers, frontline health workers could become more sensitive to problems faced by working mothers and devise appropriate strategies to address them. The insight gained

could also benefit efforts aimed at formulating appropriate policies to support optimal breastfeeding practices. This is because many investigators have emphasized the importance, not only of the education, but of the support that mothers receive in achieving success with breastfeeding.

The historical perspective for the decline of breastfeeding in African societies and the subsequent focus on its promotion to improve the health of children, have been outlined. This has been followed by an examination of some strategies that could advance the adoption of this infant feeding method in Ghana. One strategy that has been highlighted is the incorporation of the successful EBF experiences of professionals into breastfeeding promotion programmes. In the next chapter, the literature on breastfeeding will be reviewed to highlight factors that have been found to influence EBF. These factors will be examined in the light of studies that have been done on EBF in Ghana. An appropriate research design that will give better insight into the experiences of professionals engaged in the practice of EBF will be described in the third chapter. This will be followed by a report and discussion of main findings of the research. The concluding chapter will be devoted to a discussion of recommendations stemming from the research findings and acknowledgement of the limitations of the research study.

## CHAPTER II

### 2.0 Literature Review

In reviewing previous research related to exclusive breastfeeding, databases that were the most productive sources of information were Pubmed and Ingenta. Studies dating from 1989 to 2001 were reviewed. In order to gain a historical perspective, government papers dating from 1977 and WHO reports from 1979 were included. The review has been organized into two main parts. The meaning, recommended duration, benefits and the practice of exclusive breastfeeding are addressed in the first part. Factors influencing the practice of exclusive breastfeeding are examined in the second part.

#### 2.1 Exclusive Breastfeeding

Exclusive breastfeeding means that the infant receives only breast milk from his/her mother or a wet nurse, or expressed breast milk and no other liquids or solids is given, except drops or syrups consisting of vitamins, mineral supplements or medicines (WHO, 1996). This meaning came from the realization that many benefits of breastfeeding are dependent on the degree to which breastfeeding is exclusive and that even supplements of water are unnecessary and can be harmful (Almroth et al, 2000). The harm of water supplements stems from problematic access to safe drinking water. Water supplementation is unnecessary where exclusive breastfeeding on demand is the practice. Water supplementation can be harmful when access to safe drinking water and proper sterilizing of feeding tools cannot be

guaranteed.

Exclusive breastfeeding is to be distinguished from full or predominant breastfeeding, a form of infant feeding in which water and other liquids but not milk are given in addition to breast milk. Predominant breastfeeding has been found to be unnecessary since breast milk alone has been reported to meet the nutritional needs of infants up to the age of six months (Dewey, 2001).

A recommendation was made by WHO that infants should be fed with breast milk exclusively from birth to about four to six months of age. This recommendation resulted from a joint WHO/UNICEF Meeting on Infant and Young Child Feeding (WHO 1979). Since then, this recommendation has been reviewed and supported in two subsequent WHO publications (Brown et al., 1998; Lutter 1992). There is scientific evidence that normal growth of both normal and low birth-weight infants can be supported by exclusive breastfeeding for six months (Cohen et al. 1994). Based partly on this evidence, representatives of UNICEF, the American Academy of Pediatrics (1997), and most Ministries of Health in Latin America have changed their recommendation to six months of age or “about six months”. The current recommendation for the duration of EBF is six months (WHO, 2001).

Exclusive breastfeeding provides infants with protection against infections including upper and lower respiratory tract infections, skin infections and gastroenteritis (Perera et al., 1999; Brown et al., 1989). Exclusive breastfeeding also reduces the incidence of diarrhoeal diseases (Dewey et al. 1993, De Zoysa et al. 1991). An estimated 1.5 million infant lives can be saved each year if mothers breastfeed exclusively for six months (UNICEF 1997). There are also grounds for

assuming that prolonged exclusive breastfeeding may have long-term effects (Perera et al., 1999), including providing protection against later allergies (Saarinen & Kajosaari, 1995) and obesity (Kries et al., 1999). Exclusive breastfeeding is recognized as critical for the survival and optimal growth and development of infants in low-income countries (Ashraf et al. 1993).

The benefits of breastfeeding have been closely associated with savings in health care costs (Riordan 1997) in the United States of America. Infant diarrhoea in non-breastfed infants costs \$291.3 million; respiratory syncytial virus, \$225 million; insulin-dependent diabetes mellitus, from \$9.6 to \$124.8 million; and otitis media, \$660 million. These four medical diagnoses alone create just over \$1 billion of extra health care costs each year. When family food costs were calculated based on 62 days of exclusive breastfeeding versus formula feeding for healthy full-term neonates in Hawaii, the cost for formula feeding was \$119.14 compared to \$49.16 for a breastfeeding mother on a frugal diet plan (Yaros, 1993).

Gosh (1990) observed that both exclusive breastfeeding and breastfeeding rates have steadily declined in low-income countries. Studies from a number of countries indicated that by two months, less than half of all mothers are still engaged in exclusive breastfeeding (Lipsky et al., 1994; Perez-Escamilla et al. 1992; Azaiza 1995). This trend is found in Brazil where it is reported that the median duration of EBF is one month (Rea et al., 1999). There is a wide range of EBF rates for children under four months in African countries, with both very high rates (Ethiopia 95%) and very low rates (Nigeria 2%; Malawi 3%). In countries of the Eastern Mediterranean Region rates from 54 (Egypt) to 7 percent (Lebanon) have been recorded (WHO,



1995). The rate of EBF in Ghana for children between age four to five months is 21.8 percent (Statistical Service of Ghana & Macro International, 1999). In The Gambia, despite the high breastfeeding initiation rate and long total duration of breastfeeding, exclusive breastfeeding is reported as a rare practice (Semega-Janneh et al., 2001).

## **2.2 Factors Influencing the Duration of Exclusive Breastfeeding**

Factors influencing the initiation and duration of breastfeeding have been studied extensively. In most studies about the determinants of breastfeeding, the differences between EBF and other forms of breastfeeding have not been distinguished (Perez-Escamilla et al., 1995a).

Determinants of EBF duration in three Latin American countries (Perez-Escamilla et al.,) will be discussed as the organizational framework for this portion of the literature review. The setting of the study is similar to the one proposed for this research study in terms of the general stage of development of the three populations. The authors conducted a quantitative study that focused on the determinants of EBF in three different populations; Brazil, Mexico, and Honduras. A total of 2793 low-income urban women from Brazil (444), Honduras (1582) and Mexico (765) were interviewed at birth and in their homes at one month and two to four months after delivery. The participants were recruited from eight maternity wards. The Cox model, an analysis that takes into account multiple variables, was used to identify the determinants of EBF for each country. Determinants that were identified as common to more than one country were considered to reflect relationships that might apply in different geographical and cultural contexts.

Determinants of EBF included planned duration, infant gender, birth-weight, maternity ward where birth took place, socio-economic status and whether the mother was employed outside of the household. For this portion of the review, similar breastfeeding determinants that have been identified in other studies will be categorized into demographic, birth setting, maternal employment and psychosocial and cultural factors.

### 2.2.1 Demographic Determinants of EBF

Having a male infant was inversely associated with EBF success even after controlling for birth weight (Perez-Escamilla et al., 1995a). The authors have suggested that a possible linkage exists between this finding and the perceived notion among mothers and health workers that male infants have higher nutritional needs and should therefore receive non-breast milk fluids and foods earlier than female infants. From what is known about EBF however, it is well established that the nutritional needs of infants are adequately met, since milk production is related to infant demand (Daly & Hartmann, 1995). This contention is supported by the report of a longitudinal prospective study on the breastfeeding patterns in exclusively breastfed infants. Exclusive breastfeeding was studied among 506 infants in Uppsala, Sweden. The findings were based on daily recordings during the first six months. Out of the 40 percent of infants who were still being exclusively breastfed at six months of age, no gender differences were found in the breastfeeding patterns (Hornell et al., 1999).

Perez-Escamilla and associates (1995a) reported that lower infant birth weight was marginally associated with earlier discontinuation of EBF. Adair and Popkin (1996) support this finding. In a longitudinal study where the relationship between low birth weight and patterns of feeding in the first six months were explored, they reported that

low birth weight decreased the likelihood of breastfeeding or increased the likelihood of weaning before 6 months. This finding is consistent with the hypothesis that lower birth weight infants may have a weaker suck and this may inhibit establishment of an optimal maternal milk supply (Perez-Escamilla et al 1995b). This could lead to the maternal perception that insufficient milk is being produced.

Perez-Escamilla and associates (1995a) reported in the study of the three populations, that women from lower socio-economic backgrounds breastfed exclusively for longer periods of time. Rea and associates supported these findings later in a survey in a similar setting (Rea et al., 1999). They found that weekend work and higher socio-economic status were linked with shorter duration of breastfeeding among 69 factory workers in Sao Paulo, Brazil. A reverse finding is apparent in higher income countries where breastfeeding initiation and duration rates have been positively associated with higher social status (Scott & Binns, 1999). This is the case in England, New Zealand, Denmark, Sweden, Finland, Switzerland, Canada and USA.

### 2.2.2 Location of birth

Perez-Escamilla and associates (1995a) reported in their study of the three populations that women who delivered in hospitals with the most active breastfeeding promotion programmes tended to be more successful at breastfeeding exclusively. This finding is supported by an intervention study in which it was reported over a 7-month period that an increase in the compliance of a hospital to the WHO/UNICEF baby-friendly hospital initiative (BFHI) led to increase in EBF rates (Martens, 2000). No increase was reported in the EBF rate for the control hospital, which did not comply with the BFHI. These results support the hypothesis that hospital-based policies such as those

recommended by the BFHI are likely to have a positive impact on EBF (Perez-Escamilla et al., 1994). This finding is also consistent with the most current demographic and health surveys in Ghana (Statistical Services of Ghana & Macro International, 1999), which reported that children delivered in a health facility are more likely to be breastfed immediately after birth and within one day of birth. This can be partly explained by the observation that increasing numbers of health facilities are working towards the attainment of baby-friendly status, which mandates that babies should be put to the breast within 30 minutes to one hour following birth.

Even though the importance that breastfeeding policies of birth sites have in influencing EBF rates have been highlighted, it is not known how EBF is sustained when mothers leave these locations. It is possible that it is EBF initiation and not duration that is positively influenced by the location of birth.

### 2.2.3 Maternal Employment

Mothers who had returned to work were less likely to breastfeed exclusively (Perez-Escamilla et al., 1995a). It was not possible to know if return to work caused the discontinuation of EBF or if women did so in anticipation of the event. There is considerable research that supports the hypothesis that maternal employment is an obstacle to breastfeeding in many countries. For example, Yimyam and Morrow (1999) reported that resumption of employment generally had negative effects on breastfeeding rates and duration among 313 employed women in Chiang Mai, Thailand. At six months postpartum, they reported that women working inside the home breastfed more than those working in the formal sector of jobs with inflexible hours. In a study where factors associated with breastfeeding duration among 350 mothers in Auckland, New Zealand

were identified, it was reported that mothers' return to full-time work in the first year led to a shorter duration of breastfeeding (Vogel et al., 1999). Though the authors did not state whether breastfeeding was ever discontinued altogether, they did seem to suggest that return to work was negatively associated with breastfeeding. In northwestern Pennsylvania, for 245 women, returning to work was one of the major causes for deciding to switch to bottle-feeding (Arora et al., 2000).

In these studies, paid employment was a crucial factor in the decision about whether to continue breastfeeding. Employment, especially outside the home, is likely to exert a strong influence in determining the duration of EBF for the recommended period of six months. Scott and Binns (1999), in a review of the literature on factors influencing the initiation and duration of breastfeeding, support this assertion. They observed that employment has become a stronger influence in the past decade, as the number of women with children either remaining in or re-entering the workforce has increased.

Though no study has been published in Ghana about the impact of maternal employment, especially outside the home, in an unpublished study on the effectiveness of EBF among mothers in the banking and teaching institutions, return to work was given as the most common reason for discontinuing EBF (Wie-Jonah, 1998).

#### 2.2.4 Psychosocial and Cultural Factors

In Ghana, most of the studies done on breastfeeding have outlined the importance of psychosocial and cultural factors. A number of studies support the fact that complementary feeding within the first three months is extensively practiced (Armar et al, 1992; Nutrition Division of MOH, 1989; Sodzi, 1991; Allotey, 1991; Lartey et al, 1992;). A commonly cited reason for early introduction of complementary feeding is

insufficient breast milk, which is evidenced by crying of the infant. However, in a study done in the Greater Accra Region of Ghana to investigate factors affecting food intake and nutritional status in infants, the researcher found that inadequate burping practice, crying before and during breastfeeding and leaving soiled napkins unchanged during breastfeeding were factors that affected breast milk intake (Brakohiapa, 1998). The researcher further found that burping the infant twice or more during breastfeeding, in addition to other comfort enhancing measures, reduced crying, enhanced breast milk intake and prolonged sleep and intervals between breastfeeds. The findings of this study provide a basis for evaluating some of the practices related to infant feeding in Ghana.

The intention to breastfeed and the planned duration of breastfeeding have been found to be positively associated with the duration of EBF. In the study of the three populations, it was reported that planned duration of EBF was positively associated with the subsequent practice of this infant feeding method (Perez-Escamilla et al., 1995a). This finding was supported by Lawson and Tullock (1995) when they examined the role of prenatal intent and the postnatal experience in breastfeeding duration among 28 primiparas. Mothers who were fully breastfeeding three months after the birth of the baby had intended to breastfeed longer. Bourgoin and associates (1997) also reported that a decision to breastfeed before the child was born was one of the factors influencing longer duration of breastfeeding up to six months postpartum among 350 breastfeeding mothers in the Sudbury region of Canada.

The role of intention as to what form infant feeding should take is seen as important in the actual practice of breastfeeding. In one study in Kuala Lumpur (Chye et al., 1997), of 500 mothers with singleton pregnancies and healthy infants interviewed at 6

weeks postpartum, mothers who were practicing EBF were reported to be more likely to have had antenatal plans to breastfeed.

Although social support in the form of presence or absence of the infant's father was not reported as an exclusive breastfeeding determinant (Perez-Escamilla et al., 1995a), it was found to positively influence breastfeeding duration. Interventions that increased informal support for breastfeeding or provided formal support are found to increase breastfeeding initiation and duration (Raj & Plichta, 1998). In a review of factors that have had a positive impact on infant feeding trends in New Zealand, Ryan (1997) identified support groups as the most influential factors for changing practices and attitudes within society. In an editorial related to the cost of breastfeeding support, Heinig (2001) emphasized that support for breastfeeding during the postpartum period is one factor that has been observed to be very important in positively influencing breastfeeding duration.

EBF duration seems to be longer when there is a support group, as indicated by a WHO-supported research. The purpose of the WHO initiated effort in Pelatos, Brazil was to develop growth charts based on exclusively breastfed infants. A lactation support group, trained to help mothers to breastfeed their babies, made a remarkable difference in the duration of breastfeeding (Alberanaz et al., 1998). Of the 296 mothers who were still enrolled out of an initial 375 mothers, 56.8 percent were exclusively breastfeeding at 3 months while 16.9 percent were predominantly breastfeeding. The early cessation of breastfeeding (before four months) was reportedly reduced from 39.4 to 11.1 percent. Other forms of support such as that from a spouse or a relative have been reported as crucial in breastfeeding duration. In a review of studies related to factors associated with

the initiation and duration of breastfeeding, Scott and Binns (1999) observed that support from the partner, family and friends was an important influence on the initiation and the duration of breastfeeding.

In Ghana, it is observed that social support for breastfeeding plays a pivotal role in both breastfeeding initiation and duration. However EBF for six months, which is a relatively new practice in both traditional and urban societies of Ghana, is yet to receive the full benefits of both formal and informal support. Mothers have been the main targets of the ongoing breastfeeding promotion programme, with emphasis on EBF for the first six months. Education on breastfeeding is provided at antenatal clinics and at young women's group meetings in various churches. The need for educating other significant persons such as grandmothers and fathers has become apparent. Some mothers who are motivated to exclusively breastfeed have reported opposition, especially from grandmothers, who play key roles in supporting women during the postnatal period. The appropriate education of such significant people on the importance of EBF will likely lead to its increased social acceptance and hence foster the needed support for the practice of this infant feeding method.

### **2.3 Summary of Literature**

There is widespread recognition that EBF is the optimal infant feeding method up to the age of six months. The immunity-related benefits of breast milk, in addition to its nutritive value, has led to increased investment in breastfeeding promotion with the result that breastfeeding initiation rates have increased over the past decade in Western societies. In most low-income countries, an estimated 1.5 million infant lives can be saved each year by breastfeeding exclusively for six months.

Despite the promotion of breastfeeding, the practice of EBF for the recommended duration of six months has been low. Very little of the research in breastfeeding has focused on EBF. Demographic factors such as socio-economic status, birth-weight, birth setting and psychosocial/cultural factors, like infant feeding practices, maternal intention and support, have been found to influence EBF practice. In general, maternal employment has been found to have a negative influence on the duration of EBF. While quantitative research has led to the identification of some of the important determinants of breastfeeding, including EBF, the interaction and interdependence of these factors as well as the complexity of the total breastfeeding experience have not been addressed. The few studies done on EBF in Ghana that have been cited are quantitative in nature and therefore did not focus on the totality of the EBF experience. For this reason a qualitative research project was undertaken to explore the EBF experiences of mothers in professional jobs.

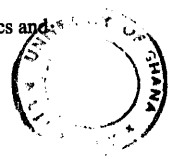
The research question was “What are the EBF practices of mothers in professional jobs?” Since mothers in professional jobs face work-related challenges to breastfeeding, in addition to other challenges in the home environment, their report of ability to practice EBF is seen as a demonstration of a sense of determination and commitment to an innovation they have adopted. The participants’ articulation of their experiences with EBF could be a source of encouragement for other women to adopt this practice. Insight gained from their experience could also be of tremendous benefit to efforts aimed at establishing breastfeeding support groups in communities, an aspect of the breastfeeding promotion programmes in Ghana that has not received much attention.

## CHAPTER III

### 3.0 Method

The purpose of this study was to describe the experiences of mothers in professional jobs practicing EBF. The specific research questions addressed were the following: What are the factors that enhance EBF practice for mothers in professional jobs? What are the barriers to EBF practice for these mothers? This study is based on the assumption that the practice of EBF for four to six months is an innovation in Ghanaian society, as it is a departure from the traditional infant feeding practice of full or predominant breastfeeding. As Rogers and Shoemaker (1971) stated, the early adopters of an innovation are characterized by relatively higher education and socioeconomic status and they generally like to adopt what has been found to be good. Mothers in professional jobs practicing EBF can be considered to possess these characteristics and their adoption of the innovation of EBF represents a phenomenon similar to that described by the authors.

A qualitative design is employed for the research study. The qualitative method is considered appropriate, as the study aims to understand or gain unique insight into a phenomenon being studied (Morse & Field, 1996). The phenomenon of interest is the practice of EBF among mothers in professional jobs. The philosophical basis for qualitative research rests on the belief of the inherent complexity of humans and their ability to shape their own experiences. Concepts drawn from these experiences form realities, upon which truth is evaluated (Polit & Hungler, 1999). In this research, the reported breastfeeding practices of mothers in professional jobs, based primarily on what



they have understood from current knowledge on EBF, forms the basis of reality for this group of women.

A descriptive and exploratory qualitative method is appropriate for the study (Morse & Field, 1996). The descriptive aspect deals with the EBF experiences of mothers in professional jobs, while the exploratory aspect deals with the related research question 'What are the facilitators/barriers to EBF among mothers in professional jobs?' This method enables the researcher not only to determine the factors that facilitate or hinder the practice of EBF by this group of mothers, but also to gain understanding of the relationship between these factors. This gives better insight into the total EBF experience.

### 3.1 Setting

Mothers were recruited from the Child Welfare Clinics of five baby-friendly health facilities within the Accra metropolis. There are 22 fully government-run health facilities within the six districts of the Accra metropolis including one school dental clinic. Out of this number, eight offer full maternal and child health services including antenatal, labour, postnatal, and child growth monitoring and immunization services. Four other health facilities offer the above services with the exception of child delivery services. There are also two quasi-government health facilities full maternal and child health services. There are a number of privately owned clinics also offering maternal and child health services.

At the time of the study, five health facilities have been designated baby-friendly by a special committee because of their conformity to a set of criteria, which represent

practical ways of fostering good breastfeeding practices. These facilities provide antenatal services where mothers are given education on breastfeeding. At the labour wards of these facilities, mothers are encouraged to initiate breastfeeding within a half-hour of birth, where possible. In these facilities staff ensure that newborn infants receive no food or drink other than breast milk, unless medically indicated. At the postnatal and child welfare clinics, mothers are encouraged to continue EBF up to six months.

The baby-friendly health facilities from which participants were selected included La Polyclinic, Korle Bu Teaching Hospital and Achimota Hospital, all of which are fully run by government, and 37 Military Hospital and Police Hospital, both of which are quasi-government health facilities. The other government-run health facilities offering full maternal and child health services are working towards baby-friendly status.

### 3.2 Sample

The study participants were made up of a convenience and purposeful sample. The sample was a convenient one in that only mothers who attended the various clinics at the time of the researcher's visits were selected. Mothers with certain characteristics were deliberately selected to advance the purpose of the study. As the study sought to find out the EBF practice among mothers in professional jobs, one of the criteria for selecting participants was the type of employment in which they were engaged. Engagement in employment that required educational/professional preparation beyond secondary level qualified a mother to be a participant. A second criterion for sample selection was a mother having at least a three-month old baby whom she had exclusively breastfed since birth and intended to do so until at least four months. Alternatively, a

mother with a baby less than 12 months and whom she exclusively breastfed for at least four months since birth also qualified to be a participant.

After permission was granted by the heads of the baby-friendly health facilities for the research to be carried out, the researcher approached nurses in charge of the Child Welfare Clinics to introduce herself and to enlist their support for the study. The nurses were given information leaflets (Appendix II) that detailed the purpose of the study, the information that was to be gathered from study participants, the form the information gathering was to take and how confidentiality was going to be ensured. The criteria for selection of participants were explained to the nurses and they were also made to understand that they were to inform the researcher about only those who were willing to participate in the research. The nurses played a key role in the identification of potential participants, as they knew their clients fairly well. The researcher later made contact with any mother who agreed to participate in the research and again explained the purpose of the research to her and what role she was expected to play. Each participant was also given a copy of the information leaflet and the contact address/telephone number for each participant who was to be interviewed in the home.

Selection of participants was done only on the weekly clinic days of the facilities concerned. A number of visits had to be done at each of the five facilities in order to obtain the required sample size. A total of 10 mothers participated in the study as saturation of categories occurred with this number (Mayan, 2001; Morse & Field, 1996). Two mothers were selected from the 37 Military Hospital, three from Achimota Hospital, three from Police Hospital, one from La Polyclinic and one from Korle Bu Teaching Hospital. Each participant was given the option to choose a site for the interview that

would most suit her. Seven mothers chose to be interviewed in their homes and one mother chose to be interviewed at the school where she taught. Two of the mothers chose the clinic as it was the most suitable site and they were interviewed in a senior nurse's office. All participants signed a written consent form (Appendix III), just before the interviews were conducted. Demographic information was collected on each participant.

### 3.3 Data Collection

Tape-recorded interviews were conducted in the English language. A semi-structured interview guide (Appendix IV) was used to collect data on participants' EBF experiences. The semi-structured interview is used when the researcher knows the questions to ask but cannot predict the answers (Morse & Field, 1996). As the technique permits participants to respond freely to questions posed by the researcher, it allows the latter to get participants to describe and explain occurrences in a way that can provide a rich descriptive context. This descriptive context adds value to qualitative research. The basic questions posed to participants included their knowledge of EBF, its recommended duration, how long they had practiced EBF on their present babies or how long they were intending to do so and the factors that had either facilitated or hindered the practice of EBF. Participants were encouraged to speak freely and as much as they could on each question posed to them. Exploratory questions and probes to solicit expansion of information specific to each participant's experience were also posed in order to obtain rich data. The duration of each interview was between 30 to 60 minutes.

The data collection was done within a time interval of four months. The main source of data was the interview transcripts. Pieces of non-verbal communication that were observed during the interview were presented in brackets within the transcripts. The transcripts were supplemented with field notes. Field notes are jottings of salient points and they may take the form of description of events, conversational excerpts or reconstruction of interactions that occurred during the data collection process. They may also be used to identify ideas on relationships within the data that can provide the basis for later analysis (Morse & Field, 1996). During the data collection the researcher made notes of impressions from the first few interviews in a small book. These impressions proved useful in the process of coding. A note that was made of an interesting interaction that occurred in the course of interviewing one participant was useful during the analysis stage. A note was also made of the outcome of a follow up telephone call to find out whether one participant was able to complete four months of EBF as she had intended; the information obtained was useful in the data analysis.

Demographic data relating to the number of children participants had and their ages were incorporated into the interviews. Data on participants' ages were obtained after the interviews, as the researcher was more comfortable with this arrangement. Information on participants' occupation was obtained when they were first referred to the researcher as potential participants.

### **3.4 Data Management**

The audio-taped interviews were first transcribed verbatim on to sheets of paper before typing them out, as the researcher was not very skillful in transcribing directly into print form. Numbers were used to identify participants on the transcripts. Each line of

the transcript was numbered on the left hand side, starting with the Arabic numeral '1'. Wide margins were left on the right hand side of the transcripts to allow space for coding. A file was created for the interview transcripts for each study participant and each file was named with the corresponding number used to identify a participant; thus, 'interview 1' was the file name given to the 'participant 1'.

### 3.5 Data Analysis

Qualitative analytical software was not employed in analyzing the data. The transcripts were read several times in order for the researcher to get familiar with each participant's unique experience. Content analysis (Mayan, 2001) was used to identify common themes from the data. The first level of analysis included coding which involved identifying words, phrases and paragraphs within the data and assigning a label to a portion of the data to give it meaning (Morse & Field, 1997).

An initial list of codes was prepared to label the themes emerging from the data. The codes in the list were revised and renamed as necessary during analysis and grouped together into larger thematic areas. In the search for core meanings and essences, the researcher also paid attention to nuances and non-verbal communication but eliminated redundant information in participants' responses. For example, all participants mentioned that they had knowledge about EBF and were able to identify its essential defining characteristics. Any portions of the data that had such essential characteristics of EBF as 'giving only breast milk', 'giving no water', 'feeding baby from birth on only breast milk to six months' were given the label 'knowledge of EBF'. These mothers had the knowledge from the education they had received. They found that EBF was

beneficial because of the elements of low cost, health benefits for infants, convenience and time saving. The label 'benefit' was used to code any portions in the transcripts where these elements were seen. The benefits of EBF were related to the mothers' decision to practice it. In other words, participant mothers' focus on the benefits reinforced their decision to practice EBF. Some mothers verbalized this urge as 'determination', and this was responsible for their resolve to practice EBF even in the face of opposition and some physical problems. The label 'determination' was used to code portions of the data where mothers either expressed determination or a resolve to continue with the practice of EBF. The label 'commitment' was later used as a broader category to capture the essence of how the knowledge and experience of the benefits of EBF can direct a mother's will to practice EBF. Another theme identified that enabled the practice of EBF was direct facilitators. They were subcategorized into time, support and key activities related to EBF.

A separate file was created for the themes that emerged out of the data. This file was named 'code pages' and it contained a list of the labels or codes given to various portions of the transcripts. Quotations from the transcripts that conveyed a meaning similar to a particular label or code were placed under these labels, using the copy and paste menu from the word processing software. The transcript number and the line numbers were placed in brackets against each quotation in order to trace it to the original source. For example, a code like 'determination' was placed in the 'code pages' file and a quotation that typified determination was copied from its original source and pasted under this 'determination' in the 'code pages' file, with its transcript and line numbers. As the codes or labels were modified, they were changed accordingly in the 'code pages'

file. This strategy enabled the researcher to readily gain access to these quotations and present them in support of the thematic findings.

The relationship among the themes was best conceptualized by the use of integrative diagramming (Strauss & Corbin, 1998). The enabling and inhibiting factors of EBF practice are presented as circular forces exerting their influence towards an inner core. Commitment, as the overarching theme, is represented as a big circle, with its strong positive influence gravitating towards the inner core. The direct facilitators of time, support and key activities related to EBF are presented within a smaller circle, with their positive influence moving towards the inner core. Barriers to EBF, which did not emerge as a strong theme, are represented as an intermediate circle with a broken circumference and as being overshadowed by commitment (This is described in full details on page 38).



### 3.6 Trustworthiness

In seeking to maintain the quality of the data, the researcher used the four categories of qualitative trustworthiness described by Lincoln and Guba (1985), including credibility, dependability, confirmability and transferability.

Establishing credibility involves those activities that increase the probability that credible findings will be produced (Lincoln & Guba 1985). The researcher used member checks to establish credibility and this involved summarizing or repeating statements made by participants during the interviews, as a way of validating what they had said. This strategy provided opportunity for the clarification of information.

Dependability in qualitative research has been likened to reliability in quantitative inquiry and it refers to the stability of the qualitative data over time and over conditions. Polit & Hungler (1999) reported that the technique of inquiry audit is related to dependability. This involves a close examination of the data and relevant supporting documents by an external reviewer. For this research project, the researcher used transcripts prepared from the interviews as the main data source. From this data source, quotes were chosen to support the selection of themes. Other supporting documents used were the demographic data on participants and noted observations that were found relevant to the research.

Confirmability is related to dependability in qualitative research and has been likened to objectivity or neutrality of the data in quantitative research. It means that there should be agreement between two or more independent people about the relevance or meaning of the data (Polit & Hungler 1999). In qualitative research, the focus of the objectivity or the neutrality is not on the researcher but the data. An audit trail (Polit & Hungler 1999) developed by the researcher in the form of systematic collection of materials and documentation that will allow an independent auditor to follow the decision trail of the researcher. In this research, the systematic collection of information through the conduct of interviews, the preparation of interview transcripts and documentation on how the information was managed and analyzed have been outlined in the earlier part of this chapter. These steps have been taken in order for any interested independent investigator to follow the decision trail of the researcher and thus ensure confirmability of the research findings.

Transferability refers to the probability that the findings of the study have meaning to others in similar situations (Streubert & Carpenter 1995). Judgment as to whether the findings are transferable rests with the potential user. In order to enable judgment about the transferability of the findings of this research, the researcher has provided a thorough description of the research setting or context and has given a detailed description of the research findings.

### 3.7 Ethics

Ethical considerations for the research included seeking of ethical clearance by an approved Ethical Committee, formal permission from heads of health institutions where participants were going to be selected, informed consent of participants and maintaining confidentiality throughout the conduct of the research.

The Institutional Review Board of the Noguchi Memorial Institute for Medical Research granted ethical clearance for the research (Appendix V). The heads of health facilities where the research was to be conducted granted permission following a formal request made on the researcher's behalf by the Head of the Department of Nursing, University of Ghana, Legon. Mothers who met the criteria for the research and were willing to participate in the research were given leaflets that provided information on the purpose and data collection strategy for the research study. Information in the leaflet also included how confidentiality would be maintained. Written informed consent was provided by each participant. Confidentiality was achieved by using numbers to represent participants on the interview transcripts. Pseudonyms were also used for

reporting on participants' demographic details and for reporting of direct quotes in the presentation of findings.

In this chapter, information has been given on the design of the research, the setting in which the research was conducted, how participants were selected and how data were collected. Efforts made to maintain a measure of credibility to the research and to preserve the principles of ethics were also discussed. All of such information is essential in providing a basis for evaluating the quality of the research and its relevance to other settings or contexts. The findings of the research are reported in the next chapter.

## CHAPTER IV

### 4.0 Findings

This chapter is devoted to a description of the research findings. These findings, which are based on data obtained from interviews granted by the study participants, are supported substantially by quotations. The findings therefore reflect participants' report of their EBF experiences. Demographic details of the participants are given in the first part and the thematic findings are described in the second part.

#### 4.1 Description of Sample

Ten mothers reported that they were either practising or had completed practising EBF for a minimum of four months. They held jobs that included teaching, accounting, nursing, film directing, marketing and administration. All these jobs required educational/ professional preparation beyond the secondary level. Three of the participants were first time mothers, five had one child each from previous pregnancies and two had two children each from previous pregnancies. At the time of interviewing, the ages of the participants' babies ranged from three to eight months (full demographic details are given below).

Fati is a thirty-year old lady. She has two children: a three-year old girl, who attends nursery and a seven-month old baby girl, whom she breastfed exclusively for four months. Fati lives with her husband and a domestic help. She was at home throughout the breastfeeding period and she resumed work after the fourth month. She stopped EBF when she returned to work.

Adwoa is thirty-three years. She is a first time mother and her baby girl of eight months was exclusively fed with breast milk for four months. After her maternity leave of three months, Adwoa returned to work and had to express milk with a breast pump for another month. She lives with her husband. Her mother who lives not very far from her home, has been an important source of support for her. According to Adwoa, the inability to cope with the demands of EBF was the reason why she stopped this infant feeding after the fourth month.

Abla is twenty-eight years old and a first time mother. Her three-month old baby boy has been exclusively breastfed and she hopes to continue to EBF for another month until she returns to work. Though she has a breast pump, which in her estimation is cost effective, she is unsure about how she can manage to express enough milk to feed the baby when she resumes work. Abla has a non-residential domestic help, who will also be providing childcare when she resumes work.

Aku is thirty-eight years old and a mother of three. She has two boys aged twelve and nine years. Aku's three and a half month old baby girl has been exclusively breastfed since birth and she intends to continue with EBF until the sixth month. Aku counts herself fortunate as she is allowed to bring her baby along with her to work. Although she has no domestic help, Aku says that her family supports her with house chores.

Yaa is thirty-two years old and a mother of two. She is happy with the health of her five-month baby boy, whom she has breastfed exclusively since birth, with encouragement from her husband. Yaa says that her older child of three years, who was not exclusively breastfed, was often ill with diarrhoea as a baby. She says she will be

resuming work soon and that she is quite anxious about how she will continue with EBF up to the sixth month. She has been taught how to express milk manually and she hopes to use the skill when she resumes work.

Efua is a thirty-five year old mother of three. Efua stayed at home throughout the four months she exclusively breastfed her baby girl. She returned to work after this period and though she has stopped EBF, she is happy with the health of her baby, who is now six months. Her husband's encouragement has been an important source of emotional support. Efua's mother, who was formally not in favour of EBF at the time of birth of her first child, has now accepted the practice and has become another source of support.

Ami is thirty-two years old and a mother of two. Her baby girl of four months has been exclusively breastfed since birth. Her older three-year old boy attends nursery. Her husband, with whom she lives, is currently out of the country. Ami, who has enjoyed her maternity and annual leave, will be returning to work after the fifth month. She will be going to stay with her mother, who will care for her baby while she is at work. She hopes to continue EBF until the sixth month with the aid of a breast pump.

Akosua is thirty-three years old and a mother of two. Her baby boy of six months was exclusively breastfed for four months. She lives with her husband and a residential domestic help. Although she breastfed her first boy, who is now three years, exclusively for six months, she realizes that she has not been able to do the same with her second baby, who she says was not getting enough after the fourth month. Akosua expresses milk manually from her breasts, a practice she started with the birth of her first baby when she returned to work after the fourth month.



Esi is a thirty-one year old mother of two. Her five-month old baby girl has been exclusively breastfed since birth. Her older child, a three year-old boy was also exclusively breastfed while she was outside the country with her husband. Though she expressed breast milk with a pump for her first baby, she had not done so with the present baby as she had been at home since the birth of her baby. Esi's maternity and accumulated leave will give her six months to devote to EBF. Esi lives with her husband and has someone assisting her with domestic chores.

Mary is a twenty-nine year old first time mother. Her husband is currently not living with her as he works in another part of the country. Mary's eight-month old baby boy was exclusively breastfed for six months. The last one and a half months of this period was the most challenging for her, as she had resumed work. She expressed milk with the aid of a breast pump when she returned to work and the experience of her work colleague proved very useful to her. Mary took pains to educate her domestic help on EBF so that the latter could provide her child with the appropriate care while she was away at work.

#### **4.2 Thematic Findings**

The analysis revealed that the practice of EBF had become an important value for the participant mothers mostly because of the benefits that would accrue to their infants. The sources of their knowledge included nurses, books on breastfeeding and friends who had gone through the practice of EBF. As a result of the value placed on this form of infant feeding, these mothers demonstrated a strong sense of commitment to the practice of EBF for as long as possible and it accounted for their determination to continue despite

the odds. The state of being willing to devote time and energy to EBF was enhanced by concrete or direct facilitators, including the availability of time and support and mothers' engagement in activities related to EBF. Physical and psychological barriers were used to describe factors that had the potential of hindering EBF. These factors included physical discomforts like interruption of sleep, tiredness, sore nipples and backache as well as psychological ones like concern about body image and negative remarks about EBF.

The experiences of mothers in professional jobs practicing EBF were sorted into the following three major categories: commitment to the practice of EBF, direct facilitators of EBF practice and barriers to EBF practice. The themes are conceptualized as circular forces exerting their sphere of positive influence towards an inner core of EBF (See figure I on page 39). The biggest circle, with a thick circumference represents the strongest theme, commitment. Its distance from the inner core shows the quality of its nature, as being more of an intangible rather than a tangible entity. The more tangible entity of direct facilitators, which includes time, support and key activities related to EBF, are presented within a smaller circle nearest to the inner core. This smaller circle also has a thick circumference to show its importance to EBF. The intermediate circle represents the physical and psychological barriers to EBF. The position of this circle between the two circles shows its tangible and intangible nature. The broken outer edge demonstrates its inability to overcome the strong positive influence of commitment and direct facilitators of EBF. Each of these categories is described below.

FIGURE I

Relationship among themes



#### 4.2.1 Commitment

Commitment emerged as a very strong theme in the participant mothers' practice of EBF. Although mothers viewed commitment in different ways, a willingness to devote their attention to what they perceived to be the demands of EBF characterized these mothers' attitude. For some, the search for more information beyond what was received at the antenatal clinics could be considered as a positive step towards a willingness to commit to the practice of EBF. This additional information was obtained from books on EBF, the advice they sought from professionals and then from experienced friends.

*And I got to know about EBF while pregnant. I read about it, I asked for advice from my medical doctor, who was seeing to me. And then I talked to other friends who had practiced it. I discussed it with my husband and we realized that it was maybe the first gift we could give to our child because of the advantages we knew went with it. (Mary)*

*So I really took the classes serious and I bought some books also from Challenge Bookshop on breastfeeding. So I read those books and then got knowledge also from the antenatal classes. (Esi)*

For Esi, commitment meant eating at the risk of gaining undesirable weight, in order to maintain milk supply.

*And you have to eat even if you're not feeling like it, for the sake of the baby, because you have to breastfeed.....I don't want to gain weight; the more you eat, the bigger you become.....but I've made up my mind that come what may, I'll eat and get breast milk for my baby..... (Esi)*

For Fati, commitment meant ‘standing one’s ground’ against the suggestion of complementary feeding with ‘koko’, from her mother-in-law, who thought that breast milk was not satisfying her three-month old baby.

Commitment was reinforced by mothers’ actual experience of the benefits of EBF. One of these was the health benefit for their infants tangibly seen as ‘not reporting to the hospital’. Mothers could point to another concrete indicator of EBF benefit as not having ‘to buy or pay for baby food’. A third benefit was the ‘time saving’ and ‘convenient’ nature of EBF.

Commitment to EBF, as a strong force, was verbalized by mothers as **determination**:

*But when you are determined- this means you have to be really determined, then you can do that. Thinking about your child, you know how precious they are, you have to actually make up your mind and then do it. (Aku)*

*..... What I would say is that it takes a determined mother – a determined working mother to do it. If you are not determined to get the best for your baby, you can give a lot of excuses. (Akosua)*

The strength of commitment worked as a positive force against what could be considered as hindering the practice of EBF. For Akosua, its embodiment as a ‘sacrifice’ for her baby enabled her to ‘forego comfort’ so that she could express breast milk when ‘people are sleeping’. For Esi, commitment meant eating and drinking to maintain milk supply, even when ‘you don’t feel like’ doing so, suggesting that one is robbed of the element of personal gratification.

#### 4.2.2 Direct Facilitators of EBF

Direct facilitators were resources and skills essential for EBF success. They were critical in determining whether a mother would continue EBF for a minimum of four months. They were: time, support and key activities.

Time:

Time was an essential element enabling mothers to practice EBF. Following the birth of the baby, the mother needs time to go through a period of adjustment to get into the rhythm of caring for the baby. Although breastfeeding is a natural process, for the new mother, the art of it needs to be learned. A mother who is not new to the practice of breastfeeding is also confronted with the additional task of seeing to needs of other children in the family, who make demands on her time, necessitating the need for planning.

Mandatory maternity leave of three months allowed mothers to have the time to devote to breastfeeding for that period. The mothers often added their annual leave from their employment to the maternity leave. This gave them a minimum of four months for EBF. This accumulation of time required elaborative planning:

*For the first four and a half months I was at home because I arranged before hand to have my annual leave and then my three months maternity leave at the same time, so for four and a half months I was at home.*  
(Mary)

*I gave birth in January, my maternity leave was three months and I added my last year deferred leave, to make it four and a half months. (Yaa)*

For most mothers, time was equated with the period they had away from formal employment following delivery. The period beyond this time marked the end to the practice of EBF. This demonstrates how crucial time is to the practice of EBF. For

instance, Fati attributed her ability to exclusively breastfeed her first baby for the recommended duration of six months to the fact that she was at home. For her second baby, her four months' stay at home meant that she could practice EBF for only that period. Efua found that her practice of EBF would have been impossible if she had not stayed at home.

Yaa was an enthusiastic mother who had found that practicing EBF for the first time had had health benefits for her second baby. Though she wanted to exclusively breastfeed for the recommended period of six months, she had to remain content with five months of maternity and accumulated annual leave. She saw that the solution to this problem was a change in legislation that would allow mothers to have a longer maternity leave so that they could have the time to devote to breastfeeding.

The issue of time was an important one for Aku. Though she took her child along with her to work, she saw this as a privilege that other mothers could not enjoy. She saw a change in legislation as the way out. That time was such an essential element enabling the practice of EBF was evident in the experience of Abba, who exclusively breastfed her baby for four months. Though she had purchased a breast pump to facilitate EBF, she found that she could not express enough milk to meet her baby's requirement on her return to work, a situation which could have been avoided if she had more time to stay at home. It appeared that most mothers would prefer that they had more time away from work to devote to breastfeeding.

Support:

In addition to making the time to practice EBF, support from a spouse, the extended family or others was found to be a crucial enabling factor. Although

breastfeeding is widely practiced in Ghana, EBF for the first few months of life is relatively new and the acceptance of this form of infant feeding represents a social change that needs to be supported. Health education on what EBF is all about and its benefits for both infant and maternal health has in the main been the beginning of this support.

Working mothers adopting the practice of EBF found continuing support either formally from child welfare clinics/experts or informally from family, friends and others, to be key in their ability to continue with the practice. Formal support for mothers came from the Child Welfare Clinics where mothers went for growth monitoring and immunization services. It seemed that the support element from these clinics had to do with nurses encouraging mothers to exclusively breastfeed their babies for the recommended period and the reassurance that they gave to mothers that their babies' growth was being adequately supported by EBF. Apart from these elements of formal support, mothers differed in their opinions on how supportive the clinics had been to them. Yaa stated that the clinic nurse had done a "demonstration" on how to manually express breast milk. Fati, who attended a different clinic from Yaa, stated that she was in doubt as to the benefits of education and support given at the clinic she attended. Mary admitted that the formal support from the clinic she attended was not as beneficial as the information and encouragement that she had obtained from friends who had practised EBF. Akosua stated that she had greatly benefited from the support of a worker from the health ministry, who happened to have had formal training in lactation management.

The informal support of the family was very important in enabling mothers to practice EBF. This support came in various ways. For mothers, it appeared that



‘encouragement’ from their spouses was a very important factor. Akosua found her husband’s “encouragement” a source of emotional support. Others reported similar patterns of support from their spouses. Yaa and Efua stated that their husbands had “encouraged them”.

Another source of informal support for mothers was the encouragement from grandmothers. These grandmothers had probably embraced EBF as a result of the educational campaigns on it. Adwoa stated that though her mother was of the ‘old school’, she had accepted the idea of EBF. Consequently, Adwoa could confidently leave her baby with her mother, as she was sure that her mother would feed her baby with only milk that she had expressed. Ami, who would be resuming work during the fifth month, was also sure that her mother would keep to the regime of feeding her baby with expressed breast milk.

A third source of informal support for EBF was domestic assistants or house helps. Mary reported that her house help, whom she had educated on the importance of EBF, fed her baby with expressed breast milk while she was away at work. Grandmothers and house helps also supported EBF by taking on other domestic chores so that the mother could have more time to devote to EBF.

Another important source of informal support for mothers came from friends who had practised EBF before. Experienced friends were particularly helpful in letting mothers get the ‘know how’ of EBF, especially on return to work. Adwoa and Mary mentioned how their friends had been supportive. Mary related how much a friend’s experience had particularly been useful to her:

*.....but it is mostly from my friends, particularly, from a friend at my work place who had a baby about 4 months before me and we are mostly*

*on the same job schedule so it was easy following that pattern because she had maybe done a few mistakes, learned from them and adjusted, so I just picked it from there and I also encouraged some other colleagues who were after me – there were two after me. (Mary)*

*I think there was a friend who gave a lot of encouragement. She had gone through it. She was successful in going through it for six months. Going to work for six months. (Adwoa)*

The extent of this support from friends probably made a difference in the length a mother exclusively breastfed. For instance, if one were to compare the above reports of Mary and Adwoa, one would appreciate that Mary's account suggests that she had learnt some definite things from her interaction with her friend. Adwoa only mentioned that her friend gave her encouragement. This could account for the reason why Mary practised EBF for six months whilst Adwoa stopped the practice after the fourth month, even though both of them were first time mothers. No mention was made by any of the mothers about the formation of mother support groups in the communities.

#### **Engagement in Key Activities Related to EBF:**

A third element directly enabling the practice of EBF for working mothers was their engagement in certain key activities to facilitate EBF. These included taking in adequate fluids and nutritious foods, expressing breast milk either manually or with a breast pump and taking the baby to work. Taking in nutritious foods and adequate fluids during the postpartum period is a deeply ingrained traditional practice in Ghana. Soups prepared from the palm fruit and groundnuts, for example, are thought to aid in the production of milk following birth and most mothers are encouraged by the older folk to take it. This traditional practice has a scientific basis as most books on breastfeeding

encourage the ingestion of adequate amounts of fluids. Soups, especially ones prepared from the palm fruit, were featured regularly in the diets of most mothers:

*I was told to eat porridge and groundnut – roasted groundnut; I was taking that one. I was told palmnut soup and all the soups that you can think of – I was taking those ones. You have to make sure that you take in a lot of fluids. But when you are taking the fluids – not just any kind of fluid – something that you think can be nutritious to both the mother and the baby. (Akosua)*

*I've been taking a lot of fluids- kenkey that is mashed with groundnuts and then palm soup. It gives enough breast milk to feed the baby. (Ami)*

Expressing milk either manually or with a breast pump and then storing it allowed mothers who were returning to work to continue EBF. Before the introduction of EBF in Ghana, complementary feeding of infants was generally introduced well before the sixth month, in some cases, as early as the second or third month. Return to work was not therefore thought to present any special challenge for mothers. The adoption of EBF as the optimal feeding method for the first six months of an infant's life has encouraged the practice of expressing breast milk for mothers who resume work and cannot take their babies along with them. This practice has to be carefully planned if the baby is to receive adequate nourishment from the expressed breast milk.

Adwoa, Akosua and Mary were mothers who expressed breast milk because they had to resume work during the EBF period. The milk was stored in the fridge and warmed when their babies needed to be fed. For these mothers, this activity involved "banking" the milk so that there was enough to feed their babies in their absence. In fact, two of these mothers, Akosua and Mary, stated that careful planning was required in order to acquire the amount of milk needed for a day away from their infants.

*What I normally do is when I am leaving, before I resume, I get the house help - to know how much the baby will take whilst I'm away. So if I realize that the baby can take 120 mls, then when I'm going I leave about say - 360 mls in three different bottles so that the baby will take it three times before I come. So it's like - I set them like that. (Akosua)*

*But then afterwards I had to go to work for the next one and a half months. What I did was that I used the breast pump to express milk and refrigerate it and then to be fed to the baby whilst I was away. You just take it from the fridge as and when he needs it and warm it for him. I normally start expressing from around 9 p.m in the evening till morning - anytime, so I could get enough for him. I think for every night I had to express around 500 or 600ml for the baby. (Mary)*

Mothers found that expressing breast milk was not an activity that could be done at just one sitting. It had to be done “anytime” or whenever there was a “feeling of milk coming in”, suggesting the special attention that mothers had to pay to the language of their bodies. A return to work for these mothers also meant that EBF would involve bottle-feeding with expressed breast milk (EBM).

Expression of milk was done either by hand or with a breast pump. Expressing milk by hand seemed to make demand on a working mother's time than expressing with a breast pump. Akosua, the only participant who expressed milk by hand, was emphatic about this.

*.... you don't have the time to play because you would have to get up and prepare and go to work..... if you sleep and get up at five to express the milk, what time will you get to prepare and go to work? ..... your employers expect you at work, the same time as the others so you don't have to ..... As soon as you wake up and you realize that oh there's milk, you have to express*

With the expression of milk comes the additional care that needs to be given to milk storage and the proper cleaning of milk bottles, teats and breast pump equipment. Milk

storage was adequate as mothers reported that they refrigerated the EBM. Mothers reported that they gave adequate attention to the washing and sterilizing of feeding equipment to avoid contamination, which could result in their babies developing diarrhoea. This precaution is particularly important, in order to avoid the paradoxical situation in which EBF could be associated with diarrhoea in infants.

The activity of expressing and storing milk is not required when the mother can take her baby along with her to work. Aku had a workplace that allowed for this: "I'm very lucky. I've got a management that allows me to bring the child to school. I'm very lucky".

Some mothers reported certain problems associated with their practice of EBF. Two types of problems were identified as likely to affect the success of EBF. They included physical barriers and psychological barriers. As these barriers did not come up as strong themes like direct facilitators of EBF, the force of their negative influence did not seem to match up the combined positive influences of commitment and direct facilitators of EBF.

#### 4.2.3 Physical Barriers

Physical barriers, which were physical problems that few mothers associated with EBF, did not emerge as a strong theme. These physical problems included tiredness, sore nipples, interruption of sleep and backache. That mothers continued to exclusively breastfeed for at least four months was an indication that these physical barriers were tolerable or to a large extent, manageable. The ability to tolerate the physical problems could also account for the reason why most of the mothers did not report their experience

of them. The physical barriers identified were tiredness, sore nipples, interrupted sleep and backache.

#### Tiredness:

Physical exhaustion was reported to stem from the fact that EBF was a very engaging and physically demanding activity. This is especially so as the baby grows and needs to suckle longer at the breast before feeling satisfied. Esi, a mother of two, who had planned her job schedule in such a way that she would be at home for the whole EBF period, stated that she was “always tired”. Abla, a nurse and a first time mother also mentioned that she experienced tiredness as she had “other things to do”.

#### Sore Nipples:

Sore nipples was also associated with EBF and this problem was linked with the frequent demand of the baby to satisfy both hunger and thirst, coupled with the prolonged time of sucking to satisfy the needs of the growing baby. Akosua and Esi reported that they had sore nipples and for the former, the experience of pain could make her “cry” when her baby was suckling.

#### Interruption of Sleep:

Another problem that mothers encountered in their experience was interruption of sleep, especially in the night. Mary found that waking up several times in the night to either feed or change baby's diaper as well as express milk was a “hectic” time. Akosua reported that sometimes she had to express milk when her eyes were ‘heavy’.

#### Backache:

Backache was also associated with sitting down to breastfeed for a long time. Mary experienced this problem in addition to the hectic time she had waking up several times in the night:

*I had a lot of backache, sitting to breastfeed the baby for a long time – he takes his time to feed and sometimes he could even take more than 30 minutes at a time. And then afterwards, because he was growing up he wanted more and more milk so it was more difficult.*

Backache was not peculiar to Mary alone, as Akosua also found out that the strain of having to bend when expressing milk manually could lead to this problem. She managed the problem of backache by getting “somebody to massage” her back.

#### 4.2.4 Psychological Barriers

From the data, certain factors were seen to have the potential to negatively influence mothers’ decision to either pursue or to continue the practice of EBF. Negative remarks from those who directly opposed EBF and the mothers’ own perceptions that could make them unfavorably disposed to breastfeed exclusively were identified as psychological barriers to EBF. These factors were subcategorized into discouraging remarks about EBF and mothers’ concern about body image

#### Discouraging Remarks About EBF:

Unfavorable remarks about EBF from family members, friends or others were seen to have the potential of dissuading mothers from going through with the practice of EBF. These remarks sometimes stemmed from ignorance about EBF, especially, the composition of breast milk and the physiology of lactation. A common practice in Ghana

is to give babies water, as it is believed that they must drink water as adults do. While the need for water is a basic human need, there is ignorance about the fact that breast milk contains about 98% water and when fed exclusively on demand to babies, is able to provide for their total fluid needs. The tenacity with which this belief is held seems to be reinforced by the fact that in Ghana, the weather is very warm and humid for most part of the year. Esi recalled an unpleasant experience of being called “wicked” by someone who was apparently concerned that she had not given her five month-old baby water since birth.

Ignorance about the physiology of lactation leads some to believe that the amount of milk produced by the breasts is directly proportional to the size of the breasts. Fati reported how some family members commented that the size of her breasts would make it impossible for her baby’s nutritional requirement to be met solely with milk from her breasts:

*So when they came here they’ll say “look at your baby! Look at your breast! They are too tiny. You don’t have milk”. They will be telling you as if they are authorities on it.*

#### Mothers’ Concern/Perception About Body Image:

From the data, other factors that could be considered as psychological barriers to the practice of EBF were mothers’ concern about body image and their perception that some mothers were discouraged from pursuing the practice of EBF because of its negative effect on body image. For Akosua, the concern about body image was so subtle that it unconsciously affected a key activity such as eating and drinking what she considered adequate for maintaining her milk supply. Her husband was quick to remark that he had noticed that his wife had cut down on her food intake for fear of weight gain.

The reply of Akosua, who had earlier argued that it was her inadequate supply of milk that was the reason for stopping EBF after the fourth month, was very insightful:

*Unconsciously, that's what I may be doing but it's not intentional that ..... because I'll be glad – more than glad – to be able to supply my baby the needed milk. If that is his observation that I've cut down on the intake of food, maybe I wouldn't say he is wrong, because before then, with the first one, maybe I wasn't as big as this time, but now, (laughs) – it means I'll add more. So maybe, let's take it like that.*

It appears that the fear of weight gain accounted for why Mary thought that EBF was frowned upon by some of her colleagues because she made mention of the fact that the modern trend for some of her working colleagues is to keep a 'trim' figure. Mary and Esi made an effort to surmount this potential barrier by engaging in physical exercise and later cutting down on their food intake after the period of EBF.

The fear of altered breast shape was perceived by Aku as also accounting for the unwillingness of some young mothers to consider breastfeeding and especially EBF for as long as one possibly can. Apparently, this perception was not one that could easily be verbalized by Aku, as was evident in her statement:

*Some of the ladies – us, women, some, especially the younger ones, they say when you breastfeed a lot, the breasts become like you know, whatever it is.... After all, God gave us our shape and we can also support ourselves with good brazzieres – yes.*

This perception is not without foundation as observation supports this. As with the other barriers, it was of insufficient strength to deter breastfeeding.

The findings of the study illuminated the important underlying factor of commitment as enabling the practice of EBF by these mothers in professional jobs.

Other enabling factors that worked in close relation with commitment were the

availability of time, support and women's engagement in activities related to EBF.

Physical and psychological barriers were also found. The physical symptoms (backache, sore nipples, tiredness, interrupted sleep) and psychological barriers (fear of altered body image, discouraging remarks from others) were not wide spread among the participant sample. Each of the barrier categories was outweighed by the strength of commitment.

## CHAPTER V

### 5.0 Discussion

In this chapter, the main themes that were found in participants' report of their EBF experiences will provide the basis of discussion. Each theme will be examined in the light of available literature to determine areas of congruence or otherwise. The relevance of the themes within the Ghanaian context will also be examined.

#### Commitment

Mothers' willingness to commit themselves to the practice of EBF had come as a result of the value they had placed on it. Does it mean that the value placed on breast milk had not existed before the advent of the campaign on EBF? The widespread practice of breastfeeding in African societies leads one to believe that some amount of importance is attached to breastfeeding. It appears that the importance placed on breastfeeding diminished in African societies in the late 1970's, when feeding infants with artificial milk became common. Although the popularity of bottle-feeding has been associated with the influence of companies manufacturing artificial milk, it could be argued that the immunological benefits of breast milk were not widely known at the time. It is not surprising that as a result of increased knowledge and promotion on the benefits of breast milk, more Western societies have experienced an increase in breastfeeding rates (Heinig, 2001).

Knowledge about the benefits of EBF has reached African societies largely through the efforts of WHO and other international organizations concerned about the health and welfare of children. Though the channel for the widespread knowledge of the benefits of breast milk has been educative campaigns, another channel for the spreading

of this knowledge is literature on breastfeeding directed to consumers. When this literature is used literacy becomes an issue. There is evidence to prove that literacy has a positive effect on breastfeeding outcomes (Kaufman et al, 2001). In developing countries, where the literacy rate tends to be very low, only a small percentage of women can access the literary information on breastfeeding that supplements information obtained from educative campaigns. The small percentage of women who can access literary information on breastfeeding can 'personalize' this knowledge and be influenced to adopt any good thing related to it. This process marks the beginning of commitment to an innovation (Rogers & Shoemaker, 1971).

For the greater number of women who cannot access literary information due to low literacy, education on breastfeeding would only be beneficial if appropriate language is used and opportunity is provided for their concerns to be expressed in a non-threatening environment. For instance, the knowledge that EBF is to be preferred to complementary feeding with carbohydrate-based porridges within the first few months of an infant's life would be better appreciated by the uneducated if the nutritive value of breast milk is compared with that of porridges in a way that could easily be understood. The finding that complementary feeding of infants with porridges within the first few months of life is extensively practised in certain areas of Ghana, where the literacy rate is low, may be indicative of the need for more appropriate and creative written material, such as billboards, posters, newsletters and pamphlets, directed towards information relevant to EBF.

In the study, all of the participants were well educated and hence could easily read the available literature on breastfeeding. They demonstrated their commitment to the

practice of EBF in concrete terms: purchasing a breast pump at a relatively prohibitive price to facilitate the practice on return to work; foregoing the comfort of a restful night's sleep to express milk; getting into the regime of taking in foods and drinks that one would otherwise not have taken, in order to maintain milk supply; and standing the risk of being criticized by those opposed to the practice.

The different types of commitment behaviour participants reported were related to their employment schedules. For instance, while purchasing a relatively expensive breast pump would be viewed as commitment by those who had to resume formal employment before the period they intended to complete EBF, the use of a breast pump would be seen as unnecessary by a mother who could take her baby along to work. For the latter, commitment probably meant experiencing the stress of carrying her baby at her back and boarding public transport every working day.

The participants in this study were very positive in their commitment to EBF. A few did however experience some barriers. These were categorized into physical symptoms (backache, sore nipples, tiredness, interrupted sleep) and psychological barriers (fear of altered body image, discouraging remarks from others). The physical symptoms are directly and necessarily associated with any attempt to breastfeed. The psychological barriers were not widespread in the participant sample. Psychological barriers that could potentially hinder the practice of EBF appear to be subtle in nature. For instance, the fear of altered breast shape, for some women, could be related to the perception of the breast as primarily a sex symbol. With this perception in mind, an activity like breastfeeding that alters the shape of this sex symbol may not be thoroughly pursued. The apparent reluctance for one to verbalize such a position may be related to

the consequent social isolation that one could experience within the Ghanaian cultural context. It is possible that with wider dissemination on the benefits of breast milk, those who hold the above position may accept EBF. In this research study, each of the barrier categories was outweighed by the strength of commitment demonstrated by the participants and that was largely gained through education and written material on breastfeeding.

In summary, commitment was a major theme in the research. The literature suggests that commitment for EBF is supported through the production of appropriate readings and having sufficient literacy to understand the reading material. Commitment is further enhanced by the availability of direct facilitators. Three important facilitators emerged: time, support and engagement in key activities related to EBF. Finally, the commitment demonstrated by the participants outweighed the physical and psychological hassles of EBF.

#### **Time**

Time constraint is usually cited as reason for discontinuing EBF, especially for mothers who need to return to work. In a number of studies, return to work has been found to affect EBF duration (Raj & Plichta, 1998; Yimyam & Morrow, 1999; Arora et al, 2000). The maternity leave of three months enjoyed by most women working in the formal sector has contributed to the success of EBF for this period. A commitment to the practice of EBF for a duration as near as possible to the recommended period of six months comes in the form of careful planning to incorporate one's normal annual leave into this maternity leave period to enable one to devote a longer time to EBF.

The availability of time does not seem to be a critical issue if mothers resort to expressing breast milk either manually or with the aid of a pump. Neither practice appears to be common in Ghana. The prohibitive cost of the breast pump could be one of the reasons why. It is noteworthy that each of the participants that possessed breast pumps had complained about the high cost. From experience, a commonly cited reason for failure to express breast milk manually is that the procedure is long and inefficient. Though this may be true, there also seems to be a gap in the knowledge and skill of manual expression of breast milk, a procedure that could be effectively taught in the clinics as part of the postnatal services by experts in lactation management. Perhaps, with better availability of breast pumps and/or expert instruction in manual breast milk expression, the length of time engaged in EBF could be extended. That is, although time to expend on EBF is important, mothers can, when returning to work, extend the length of EBF through breast milk expression if they were able.

### **Support**

The role of informal and formal support in facilitating the practice of EBF is supported by literature (Ryan, 1997; Albernaz et al, 1998; Tarkka et al, 1999). Support from one's informal social network appears to create an enabling environment for one committed to the practice of EBF. In the study, it was found that encouragement from either the spouse or mother was an important source of support for the woman. The importance of spousal support in positively influencing EBF is supported by the finding of a study in which mothers' perception of their spouses' attitude towards breastfeeding was one of the factors that influenced their choice of feeding (Arora et al, 2000).

Spousal support for EBF is becoming increasingly important in Ghana, as there seems to be a gradual shift from the extended family towards the nuclear family. The current tendency, particularly in urban areas, is for women to stay with the nuclear family during the postnatal period. In this context, the husband's involvement in decisions on infant feeding comes as a matter of course and his positive attitude towards EBF becomes a great source of encouragement for the woman. The additional encouragement and assistance with other domestic chores especially, from an elderly woman, in most cases, the grandmother of the infant, relieves the mother from activities that may not be directly related to breastfeeding. This creates an enabling environment for the woman to practise EBF.

The acceptance of EBF in the Ghanaian society seems to be gaining ground as education is being targeted to other members of the family. The quality of this education is very important. If EBF should become fully accepted by the majority in the society, the education must be accessible to all family members. In addition to education on the benefits of breast milk, related concepts like demand feeding and nutrient capacity of breast milk need to be included in order to prepare the women and their families psychologically for successful EBF.

In the study, the finding that friends and colleagues were important sources of support for the women is supported by literature (Lipsky et al, 1994; Grossman et al, 1990; Rentschler, 1991). Both the positive and challenging experiences of friends can prove invaluable, especially for first time mothers, as was the case with one of the study participants. This first time mother was able to exclusively breastfeed her baby boy for six months despite return to work during the fifth month, following the support she had



of the nurses offering advice at these clinics may not have personally practiced EBF, and may also lack comprehensive training in lactation management to competently manage challenging cases.

#### **Engagement in Key Activities Related to EBF**

Mothers overwhelmingly reported the taking in of nutritional foods and drinks to maintain milk supply during the postpartum period and a few actively associated this activity with undesirable altered body image, especially, weight gain. The eating of foods and drinks known to aid the production of breast milk is a traditional practice in Ghana. Though the accompanying weight gain has been valued in Ghana, it appears that this value is gradually changing, with the younger generation tending to prefer trimness. This could affect current attitude towards food preferences and eating habits, with a bias for foods with lower calories. Although breast milk is produced even in cases where the mother does not eat adequately, it is important that nurses reinforce the traditional value of eating nutritional foods and drinks. This could be accomplished by having knowledge of the nutritional value of especially local foods that are easily affordable and by assisting different client groups to make food choices aimed at maintaining good health. Such advice should, as much as possible, be in keeping with their values and resources.

As already discussed, mothers preferred to stay at home to facilitate the practice of EBF for the recommended period. Since this was not possible because of return to employment, some mothers resorted to expressing and storing breast milk to be fed later to the baby. This activity was not without its challenges as mothers had to put in extra effort to leave behind adequate amount of milk for the while they will be away, as well as maintain cleanliness of breastfeeding utensils, equipment to prevent possible infection of

their babies and educating caregivers to use only the expressed milk. Although a few mothers in the study reported that they expressed milk for their babies on return to work, most mothers discontinued EBF when they returned to work. This suggests a preference for having more time at home to feed the baby than to take on the hassles of expressing milk to be fed to the baby. The extra demand on a mother's time possibly coupled with a lack in the skill of manual expression could account for the reason why most mothers stop the practice of EBF when they have to return to work. Since only two or three of the participants were able to express breast milk, it became clear that a key activity that supports EBF, is gaining the skill for expression of breast milk. Although manual expression of breast milk is advised at baby friendly health facilities owing to cheapness, it is not known how much of this skill is taught by demonstration and return practice at these clinics. The teaching of this skill is essential in order for mothers to gain the needed confidence and also to help evaluate its suitability for their unique circumstances.

An activity like taking the baby along to work in employments where this is allowed could help to eliminate a potentially challenging activity like the expression and storage of milk or stopping the practice of EBF on account of return to work. However, the employment practices of most professions do not allow for this and mothers wishing to continue the practice of EBF on return to work have to resort to expressing breast milk manually or with a pump.

The committed mothers in the study were content to have practiced EBF for at least four months. In Ghana, the recommendation of six months EBF is backed by legislation. This legislation provides a goal that could further enhance the health of infants in Ghana if sufficient infrastructure and other resources, such as day-care centres

at work places, nursing breaks and longer maternity leave were easily provided by the national economy. Since this level of support will be slow in coming, it is left to health care providers to give the foundation for EBF. The emphasis of health care providers would profitably be in the provision of appropriate and sustainable practices that will enhance commitment to EBF: teaching the skill of manual expression of breast milk, fostering the formation of support groups in various communities and being actively involved in other breastfeeding promotion programmes. Finally, health care providers should support all moves on the part of women to reach even a portion of this six months goal, and celebrate the four months that is attainable by committed mothers, like the participants in this study.

Overall, commitment mainly accounts for the practice of EBF among women in professional jobs. This commitment stems from the high value they place on breast milk as the best food and drink for infants in the first few months of life. Education seems to play a key role in bringing about the valuing of EBF, which then leads to commitment to the practice of EBF. In addition to commitment, factors such as the availability of time away from paid employment and support are important to the success of EBF. With careful planning, employment privileges such as maternity and annual leave can afford most women in professional jobs about four months to devote to EBF. The availability of a combination of appropriate support and efficient breast milk expression can allow a well motivated working mother to continue with EBF up to the recommended period of six months.

## CHAPTER VI

### 6.0 Conclusion/Recommendations

Insight gained into the experience of participants of this study who practised EBF for at least four months could help advance the adoption and sustained practice of EBF in Ghana. The study will first be briefly summarized below. Second, the limitations will be outlined. Third, implications for nursing practice and research will be presented. Finally, influences of the study findings on health policy will be discussed.

Breastfeeding promotion over the past decade is accounting for the gradual reversal in the decline of breastfeeding in African countries in the late 1970's. Exclusive breastfeeding for six months is emphasized as part of the breastfeeding promotion programme. Exclusive breastfeeding has been found to be the best infant feeding method and it is to be preferred to sub-optimal forms of infant feeding such as predominant breastfeeding and complementary feeding within the first few months of life. Although there has been some increase in the rate of EBF in Ghana, this rate falls significantly after the first two months, leaving only a few practising this infant-feeding method for four to six months.

A qualitative study was used to find out what facilitated the practice of EBF for four months in a group of professional women who face domestic and employment-related constraints. The qualitative method also enabled the researcher to determine how these factors facilitated EBF through in-depth interviews. This gave better insight into the total EBF experiences for this group of women. The results indicated that commitment was a strong enabling factor of exclusive breastfeeding practice, with education playing a key role. Direct facilitators like the availability of time, support and

engagement in exclusive breastfeeding-related activities enhanced the role of commitment. Although some barriers such as backache, sore nipples, tiredness and interrupted sleep, which were potentially deterrent to the practice of exclusive breastfeeding were reported, the combined effect of commitment and direct facilitators enabled the practice for four to six months.

### **Limitations**

The selection criteria of women exclusively breastfeeding for at least four months was due to researcher bias. This bias stemmed from the researcher's personal EBF experience where the practice of EBF beyond four months was not possible due to return to employment as a professional. The return to paid employment in part accounted for limiting the EBF practice to at least four months instead of the current recommendation of six months. The fact that a few of the research participants were able to complete six months of EBF despite return to employment indicated that a more stringent selection criteria of six months EBF was probably achievable for this study.

### **Nursing Practice**

In this study, education was found to play a key role in getting women committed to the practice of EBF. This finding emphasizes the need for making information accessible to everybody. As nursing plays a frontline role in breastfeeding promotion, pre-service nursing education on breastfeeding should aim at enhancing the information, education and communication skills of nurses so that they can provide appropriate education to different client groups. To this end, the breastfeeding component of the

post-registration educational curriculum should be taught in such a way as to promote nurses' critical thinking on the subject. This will stimulate them to adopt a problem-solving approach to breastfeeding-related issues and hence individualize nursing practice to the contexts of the client.

In this study, the participants experienced challenges with expression of breast milk. Therefore opportunity should be provided within the post-registration curriculum for nurses to acquire a skill like manual expression of breast milk, in order for them to assist mothers to use this skill efficiently if the need arises. Indeed, comprehensive training on lactation management could be provided as part of in-service education for nurses who are found to show interest in this area, in order to strengthen and sustain the formal support base for breastfeeding.

The participants of the study reported that they gained support from peers. It should be possible, in this regard, for nurses to provide opportunity for women who have been successful with EBF to share their experiences with prospective mothers and lactating mothers at antenatal and postnatal clinics respectively. This strategy can open a window of opportunity for the establishment of self-help breastfeeding support groups in various communities, an important element for the growth and sustenance of the breastfeeding promotion programme.

### **Nursing Research**

Findings of this study indicate that further nursing research is required in the area of service implementation. Findings of such research can directly benefit nursing practice and general service delivery. It is also important to validate the model developed

in this project by conducting further research aimed at expanding nursing knowledge on the subject.

The acceptance of EBF as the optimal infant-feeding method for the first six months of life in the Ghanaian society represents a goal for social change. A research strategy that contributes to the process of social change is action research (Carr & Kemmis, 1986). The use of action research can empower nurses to identify problems, implement solutions and systematically monitor and reflect on the process and outcomes of change related to breastfeeding. As participation is fundamental to action research, it is important that researchers and research participants (nurses, mothers and others) be willing to play active parts in the research and the change process. There should also be consultation among them as to how the research will be evaluated in order to strengthen their ownership of it.

Three areas could be considered for action research in relation to EBF. These include the establishment and sustenance of community mother support groups; support for manual expression of breast milk; and appropriate breastfeeding education for marginally literate women.

Research to foster the formation of mother-support groups could begin with the identification of a few mothers within a defined locality, who have had successful EBF experiences. These mothers will act as resource persons for prospective mothers with the researchers playing a liaison role in the process. Research for the support of manual expression of breast milk could be implemented by first identifying a Child Welfare Clinic. This could be followed by identifying an expert to offer intensive training for interested nurses to acquire the skill of manual expression of breast milk. They will then

be required as part of the research to assist mothers both at the clinic and in the homes to acquire this skill. The process of this knowledge dissemination would be the object of an action research project.

Research to help implement a breastfeeding education programme for marginally literate and illiterate women could be initiated with the identification of prospective mothers with very little or no literary abilities who are leaders in their neighbourhoods. In collaboration with an agency that provides functional literacy for adults, appropriate literary material on breastfeeding will be produced. The main research agenda will be to assist these women to use information contained in the programme and to improve the programme using the action research approach.

To explore the validity of the model developed in this research, another research study could be done to examine the following question: what is the EBF prevalence among semi literates and illiterates? This study will determine participants' knowledge of EBF and investigate the role of commitment in their practice of EBF. The study will also determine the relationship between commitment, if any, and other factors.

### **Policy**

The research findings have implications for three policy areas. These areas include education, employment and health. Governmental support for breastfeeding could be fostered and strengthened through the formulation and implementation of policies in the three areas mentioned.

### Educational Policies

The possible link between education and commitment seems to suggest that literate women are more likely to access information that can potentially influence them to make more informed decisions regarding optimal infant nutrition. The relatively low literacy rate in Ghana potentially affects the acquisition of breastfeeding information through this means by the majority of females. The introduction of free compulsory universal basic education in Ghana and the increasing emphasis on girl-child education seems to provide a means by which more females can become literate.

There is however growing concern about the quality of education generally in public schools providing basic education for the majority of Ghanaians, which raises questions as to the extent to which the problem of low literacy can be adequately addressed. The strengthening of adult literacy programmes being run in the country to improve the literacy rate in the country could also provide the means for making literary information on breastfeeding accessible to more marginally literate illiterate females. With the creation of two Ministries; Girl Child and Secondary Education, and Women's Affairs, the platform seems to have been set for addressing important issues related to the education and health of females, including breastfeeding.

### Employment Policies:

Over the years, recommendations on extending the paid maternity leave period have been made to government, to help foster better breastfeeding practices of women. The apparent lack of response on the part of government seems to suggest the costly implications of considering such recommendations. One of these costly implications is

the economic impact of extending the paid maternity leave period, which is understandable, considering the prevailing economic conditions of the country.

Employment-based policies that support breastfeeding, on the other hand seem to be more feasible. As more women take up formal employment, benefits related to their maternity needs will assume greater significance. The trend towards more friendly human resources policies in progressive organizations will demand the adoption of more innovative ways of ensuring that needs like maternity leave are adequately met without compromising employee output. For example, it may become necessary for organizations that have not allowed the accumulation of paid annual leave to consider this option for female employees in their reproductive years. This strategy could be weighed against the resource implications of providing, for example, employment-based nurseries, where mothers could go and breastfeed their babies during working hours.

### Health Policy

Health officials in Ghana initiated a nationwide breastfeeding promotion programme following the declaration of EBF for four to six months as a global goal. As a result, some health facilities have adopted an EBF policy, and others are working towards adopting this policy. While this move is a step in the right direction, it is important to back this policy by increasing the capacity of health professionals to adequately support EBF. Although some effort has been made in this regard by the provision of in-service education for a number of health professionals, it appears that not all them have sustained interest in EBF promotion. This is evidenced by the lack of

human resources to competently handle challenges faced by lactating women interested in EBF.

This underscores the need for an evaluation of the breastfeeding education offered to health professionals. In addition to this, the mode of selection of health professionals for training must be revisited, with the view to concentrating educational efforts on those who demonstrate interest in supporting breastfeeding. This is necessary for the growth and sustainability of the formal support base for breastfeeding in the country. Furthermore, in view of what is known with regard to the risk of HIV transmission through breastfeeding, such professionals could be instrumental in advocating for support of research to identify ways of minimizing risk of HIV transmission while breastfeeding. They could also help to address issues that are important for review of EBF policy.

In this research study, it was found that commitment to EBF was key to its implementation. Commitment was directly related to knowledge of the benefits of breast milk to infants. Knowledge of the benefits was related to the level of formal education. Commitment did not prevent the experience of certain barriers to EBF, but caused them to be overcome. Nursing practice and research efforts, along with support and aggressive policy implementation are proposed with the goal of optimizing commitment in the Ghanaian population while simultaneously setting in place strategies to minimize the challenges of EBF.



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## APPENDIX I

### “TEN STEPS TO SUCCESSFUL BREASTFEEDING”

Every facility providing maternity services and care for newborn infants should:

- have a written breastfeeding policy that is routinely communicated to all health care staff;
- train all health care staff in skills necessary to implement this policy;
- inform all pregnant women about the benefits and management of breastfeeding;
- help mothers initiate breastfeeding within a half-hour of birth;
- show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants;
- give newborn infants no food or drink other than breast milk, unless medically indicated;
- practice rooming-in – allow mothers and infants to remain together 24 hours a day;
- encourage breastfeeding on demand;
- give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants;
- foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

**APPENDIX II**  
**INFORMATION SHEET**

**“Exclusive Breastfeeding: Its Practice Among Mothers in Professional Jobs in the  
Accra Metropolis”**

**Purpose:**

The researcher plans to find out how mothers employed in the formal sector are practicing exclusive breastfeeding.

**Methods:**

You are being asked to talk to the researcher about your experience with exclusive breastfeeding. The researcher will ask you questions and you can answer in your own words. There are no right or wrong answers. The interview will last for about 1 hour.

After the interview you may be asked to talk to the researcher again. The reason for this is to make sure the researcher understands what you meant. The researcher may also want to ask some questions that were only thought of after the first interview. This interview should take about 30 minutes. The interview will be done in a quiet place and at a time that will best suit you. You will be asked to complete a consent form before the interview.

**Confidentiality:**

The interview will be recorded on tape. A secretary will type out the tape. Your name will not be recorded on the tape or paper. Instead, a number will be given to that interview. This number will be used on anything that gets written about the interview.

Only one person will know the name of the person on the tape. This is the person who did the interview. All the information that has your name on it will be locked up.

**Benefits:**

This study will not have any direct benefits for you. It is hoped that the experiences of working mothers giving only breast milk for the first four months will be better understood.

**Risks:**

It is not expected that being in this study will harm you.

**Withdrawal from the Study:**

Even after you have agreed to do the interview you can decide you do not want to do the interview anymore without giving a reason for it. This can be done before or in the middle of the interview. If you are asked to do a second interview you can decide that you do not want to. Deciding not to take part will not affect the health care that you are getting.

**Use of Your Information:**

This study is being done for a Master's thesis. What you say in the interview will not affect the care you receive from any hospital or clinic. The researcher is a student at the University. What everyone says will be made into a report and may be presented or published in a journal. If you want a short version of this report, arrangements will be

made for you to get one. None of the reports that get made will have your name in them.

If your interview is used in future research, it will have to be approved by the appropriate ethics committee.

**CONTACT PERSONS:**

Should you have any questions about this study, you can contact:

Ms. Joanna Laryea – Dept of Nursing, University of Ghana, Legon.

Gladys Brew – 781745

### APPENDIX III

#### CONSENT FORM

Title of Research Project:

Exclusive Breastfeeding: Its Practice Among Mothers in Professional Jobs in the Greater Accra Region.

Investigator:

Gladys Brew  
Master of Philosophy (Nursing) Candidate.  
Department of Nursing,  
University of Ghana, Legon.

Please circle answer:

Do you understand that you have been asked to be in a research?      Yes    No

Have you read and received a copy of the attached Information Sheet?      Yes    No

Do you understand the risks and benefits involved in taking part in the study?      Yes    No

Have you been able to ask questions and discuss this study?      Yes    No

Do you understand that you can stop taking part in this study at any time without giving a reason for it?      Yes    No

Has confidentiality been explained to you?      Yes    No

Do you understand who will be able to hear what you said?      Yes    No

Do you know what the information you say will be used for?      Yes    No

Are you ready to participate in this study?      Yes    No

"I have read all the above questions, received answers concerning areas I did not understand and I am willing to participate in this study."

Signature of Participants:

Address:

Date:

**INVESTIGATOR'S / HEALTH CARE PROFESSIONAL'S AFFIDAVIT**

I certify that I have explained to the above individual the nature and purpose of the study, potential benefits and possible risks (if any) associated with the study. I have answered any questions that have been raised and witnessed the above signature and dates.

**Name:**

**Address:**

**Date:**

**APPENDIX IV**  
**INTERVIEW FORMAT**

**Can you tell what you know about exclusive breastfeeding?**

**Can you share your exclusive breastfeeding experience with me?**

**What have you found to be particularly helpful in your experience with exclusive breastfeeding?**

**What are the obstacles you have faced and how did you overcome them?**

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**ETHICAL CLEARANCE**

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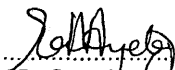
**TITLE OF PROJECT** : Exclusive Breastfeeding : Its Practice  
Among Mothers in Professional Jobs in  
the Greater Accra Region

**Principal Investigator** : Gladys Brew

**Supervisors** : Ms. Joana Laryea  
Dr. Jane Drummond  
Dr. Anna Lartey

**Name of Institute** : Noguchi Memorial Institute For  
Medical Research, (NMIMR) University  
of Ghana, Legon.

Study Approved by NMIMRs Institutional Review Board.

Signature of Chairman:   
Rev. Dr. Samuel Ayete Nyampong  
(NMIMR – IRB, Chairman)

cc: Professor David Ofori-Adjei  
(MB CHB, FRCP, FWACP)  
Director, Noguchi Memorial Institute  
for Medical Research, University of Ghana, Legon.

