

UNIVERSITY OF GHANA
COLLEGE OF HEALTH SCIENCES

**PSYCHOSOCIAL EXPERIENCES OF BREASTFEEDING HIV POSITIVE MOTHERS
IN TEMA METROPOLIS**

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SCHOOL OF NURSING

JULY, 2015

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BY

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**THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN
PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MPhil
NURSING DEGREE**

SCHOOL OF NURSING

JULY, 2015

DECLARATION

I, Angela Kwartemaa Acheampong certify that, this thesis is the result of a research undertaken towards the award of the Master of philosophy in Nursing Degree at the School of Nursing, University of Ghana, Legon. This research has been undertaken with the guidance and supervision of Dr. Florence Naab and Mrs. Adzo Kwashie, School of Nursing, University of Ghana, Legon. The undersigned supervisors certify that, they have read the thesis and have recommended it to the School of Nursing for acceptance.

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ABSTRACT

Breastfeeding is one of the main modes through which HIV is transmitted from mothers to their infants. Although the rate of transmission is drastically reduced when the breastfeeding mother is managed on anti retroviral therapy, there is still a probability of transmission. This puts a considerable level of strain on breastfeeding HIV positive mothers. The purpose of this study was to explore the psychosocial experiences of breastfeeding HIV positive mothers in the Tema metropolis. The study was guided by the self efficacy theory by Albert Bandura. Thirteen breastfeeding HIV positive mothers were recruited from the Tema General Hospital to participate in the study. A semi- structured interview guide was used as the data collection tool. The five main themes which emerged after thematic content analysis of the transcribed data were; self motivating factors of breastfeeding HIV positive mothers, factors which influence initiation of breastfeeding among HIV positive mothers, the role of social persuasion in breastfeeding attitudes of HIV positive mothers, psychological emotions of breastfeeding HIV positive mothers and coping strategies used by breastfeeding HIV positive mothers. The findings of the study illustrated that, breastfeeding HIV positive mothers motivated themselves due to their own previous experiences, hope in anti-retroviral therapy, encouragement by other mothers in similar situations and counselors. Socially, the opinions of their spouses, counselors and members of their community had a role to play in their decision to breastfeed. Psychologically, the women had fear, anxiety, blame and guilt. Strategies such as support groups, prayer and denial were some of the coping mechanisms. Therefore, breastfeeding HIV positive mothers should be attended to in private at the clinic so that their unique needs are met adequately.

DEDICATION

To Reuben Obiri Wilson, the love of my life who has been my strong pillar through it all. Also, to Mrs. Hanna Wilson, my second mother, friend and counselor. Finally, this work is dedicated to my children: Candace Obiribea Wilson and Jeslyn Kwartemaa Wilson.



ACKNOWLEDGEMENTS

I am forever grateful to God for taking me through this period. May Christ's name be praised.

I wish to express my sincere gratitude to my mentor and supervisor, Dr. Florence Naab. Words cannot express how grateful I am to you. To my second supervisor, Mrs. Adzo Kwashie; thank you for your inputs.

I am also grateful to the management and staff of Tema General Hospital especially Sister Sherie for all the support given to me during data collection. Another thanks goes to the staff of University of Ghana, School of Nursing for the support.

Finally, to every individual who contributed in different ways to bring this idea into a reality. May Jehovah God reward you profoundly.

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LIST OF ABBREVIATIONS

HIV	:	Human immune deficiency virus.
AIDS	:	Acquired immune deficiency syndrome
WHO	:	World Health Organization
ART	:	Anti retro viral therapy
UNAIDS	:	United Nations AIDS commission
NACP	:	National AIDS Control Programme
UNICEF	:	United Nations International Children Emergency Fund
PMTCT	:	Prevention of Mother to Child Transmission of HIV/AIDS

CHAPTER ONE

INTRODUCTION

This chapter presents the background of the study, problem statement, purpose of the study, objectives, significance of the study and the operational definitions of terms.

1.1 Background of the study

Human immunodeficiency virus (HIV) can be transmitted to the child during pregnancy, delivery and breastfeeding (WHO, 2010). Breastfeeding is culturally accepted as a norm in Ghana. Therefore, every mother is expected to breastfeed her offspring whether at public gatherings or in the exclusive comfort of her home. Some of the numerous benefits of breast milk include the fact that it is readily available, free of charge and contains protective agents such as phagocytes, lactoferrin, oligosaccharides and immunoglobulin. These protective agents help protect against common childhood illnesses such as diarrhoea and respiratory infections (Ibeziako et al., 2012). It then becomes a challenge since breastfeeding is also one of the main modes of transmission of HIV from mother to child. For the mother who is infected with human immunodeficiency virus, there may be different mixed emotions that may run through her thoughts knowing that there is still a chance of transmitting the virus to her young.

Globally, two hundred and eighty thousand (280,000) to three hundred and ninety thousand (390, 000) children were infected with HIV in 2011 and ninety percent (90%) of these figures were from Sub Saharan Africa (UNAIDS, 2012). Although, there has been a significant reduction (25%) in the number of new infections among children globally, the region was responsible for seventy two percent (72%) of infections worldwide in 2011. Infants continue to be at risk of contracting the virus so far as HIV infected milk is fed to them (NACP, 2011).

More than two hundred thousand (200, 000) new infections were recorded in twenty one (21) Sub Saharan African Countries which account for over ninety percent (90%) of all child infections of HIV. Although there has been a thirty eight percent (38%) decrease in the number of new infections in Sub Saharan Africa, it has been estimated that, nearly six hundred (600) children were infected each day in 2012 (UNAIDS, 2013).

Ghana continues to make tremendous efforts in decreasing the number of people living with the HIV infection. However, a lot still needs to be done to be able to achieve the millennium development goal six which states that; HIV/AIDS epidemic should halt and begin to reverse by the year 2015. As at 2011, there were one hundred and twenty five thousand, one hundred and forty one (125,141) females in Ghana living with HIV. Most of the above figures were in their reproductive age (NACP, 2012). Approximately thirty five percent (35%) of all HIV positive women may transmit the virus to their children through pregnancy, delivery and post-natally through breastfeeding if no measures are put in place to check these transmissions. Another ten percent (10%) to twenty percent (20%) of mothers are likely to transmit the virus to their infants through breastfeeding alone if there are no efforts to curb the rate of transmission (UNICEF, 2010). The table below illustrates the various rates of transmission in percentages if there are no interventions in place.

Table 1.1: HIV transmission rates during pregnancy, delivery and breastfeeding without control measures

Time of transmission	Transmission rate (%)
During pregnancy	5-10
During labour and delivery	10-15
During breastfeeding	5-20
Overall with breastfeeding for 6 months	15-20
Overall with breastfeeding for 18-24 months	30-45

Source: (NACP, 2012)

In Ghana, one thousand, seven hundred and four (1,704) new child infections were recorded in 2012. Annual AIDS deaths amongst children is estimated at two thousand and eighty (2,080) (NACP, 2012). The number of children living with the virus as at 2012 ranged from twenty three thousand to thirty three thousand (23,000 to 33,000). The number of children who died from AIDS related diseases in 2010 was two thousand, four hundred and seventy two (2,472). That of 2011 was two thousand and eighty (2,080). Antenatal prevalence among Ghanaians in 2011 also increased slightly from 2.0% to 2.1%. Central, Eastern, Greater Accra, Ashanti and Volta regions recorded an increase in HIV prevalence. Due to migration, Accra recorded an increase in the number of pregnant women living with the disease from 2.3% in 2010 to 2.5% in 2011. It is estimated that, most of the infections that occur in children (thus 0-14 years) is transmitted through pregnancy, labour and breastfeeding. Post-natally, breastfeeding is one of the main ways through which HIV is transmitted from mother to child if the mother or baby is not on anti retroviral therapy (NACP, 2012).

The World Health Organization has now established that, in terms of feeding, the international gold standard for infants born to HIV positive mothers is exclusive

breastfeeding for the first six months of the child's life. This should be continued with another six months of complementary feeding whereby breast milk is combined with other foods to make up to one year if the environment is safe (WHO, 2010). Breastfeeding should be terminated after six months if the environment is not safe since mixed feeding can predispose the child to various forms of infections including HIV. Safe environment refers to clean surroundings, availability of hygienic toilet facilities and potable drinking water. It is also highly recommended that, the mother should judiciously be put on short term anti-retroviral regimen during breast feeding to keep the viral load at bay. If the above conditions are well met and there are no complications like mastitis, nipple fissure or abscess, then the mother has less than 5% chance of transmitting the virus to the infant post-natally (WHO, 2010). It is also highly recommended that, the baby should not have any thrush or sores in the mouth (WHO, 2010). Most of the above conditions are difficult to meet so there are other feeding options which have been recommended by World Health Organization. There are the option of a wet nurse, breast milk banks and replacement foods (WHO, 2010). A mother who is HIV positive therefore has the chance to choose between breastfeeding and other feeding alternatives. Those who choose to breastfeed are likely to prevent their children from contracting diarrhoeal diseases but at the same time, predispose their infants to the HIV virus. Such a dilemma can have a toll on the HIV positive breastfeeding mother. However, not much has been done in the area of research concerning their experiences in Ghana.

Since 2007, literature has revealed that, most of the empirical studies done in the area of infant feeding in the context of HIV is geared towards disproving the old feeding guidelines. The old feeding guidelines from World Health Organization stated that, all mothers who were HIV positive had over 15% to 25% chance of transmitting the virus to their infants through breastfeeding (NACP, 2012). This led to the discouragement of breastfeeding among HIV positive mothers after delivery. Countries like Uganda and South

Africa were provided with free formula foods to be given to mothers who were HIV positive. Even when breast feeding was allowed, counselors were asked to inform the mothers to breastfeed their infants exclusively for at most the first six months. Complementary feeding; where breast feeding was combined with other foods was highly discouraged then. This was because scientists proved that, combining breastfeeding with other foods exposed the child to infections that led to symptoms such as diarrhoea and vomiting.

The current recommended guidelines were instituted after different studies were done to disprove it. A study that was conducted by Makumbi and colleagues in 2009 at Kampala, Uganda found the following: early cessation of breastfeeding in HIV exposed uninfected infants increased the risk of contracting gastroenteritis among those infants compared to those who were breastfed for a long period, usually more than one year (Onyango-Makumbi et al., 2010). Similar findings also came out when a quantitative study was conducted to find out the effect of clean water on diarrhoea interventions among children who were born to mothers living with HIV. It was found that, in almost all situations, the rate of diarrhoeal diseases in those children increased rapidly the moment the mothers stopped breastfeeding (Harris et al., 2009). Formula feeding in general has been found to have a strong correlation with high risk of mortality among infants born to HIV positive mothers. Therefore, formula feeding has been discouraged in many communities in the context of HIV. In response to this, a study was conducted at Rakai, Uganda where the HIV epidemic was at a high peak. That study re-emphasized the fact that, formula feeding is associated with high rate of infant mortality among children born to mothers living with HIV (Kagaayi et al., 2008). Abrupt weaning or prevention of breastfeeding in situations where the mother is HIV positive increases the rate of HIV infection from mother to child through breastfeeding. In addition to earlier stated studies in different parts of Africa, Kuhn and colleagues conducted a study at Zambia and suggested similar findings. They buttressed the point that, early abrupt stoppage of

breastfeeding in rural settings at Zambia by women who were HIV positive worsened their plight when it came to preventing mother to child transmission through breastfeeding (Kuhn et al., 2008).

Studies have also focused attention on ways to combine anti retroviral therapy with breast feeding as a way of reducing the risk of transmitting the virus to the infant through breast milk. Effective combination of anti retroviral therapy with breastfeeding in the context of HIV has been proven over the last decade to be very effective in preventing mother to child transmission of HIV post-natally. In Botswana, a study was conducted to find out the effectiveness of administering anti retro viral regimen to HIV positive patients during pregnancy and breastfeeding. It was found that, there was a high level of suppression of the human immune deficiency virus during pregnancy and breast feeding when participants were placed on a strict regimen of anti retroviral therapy (Shapiro et al., 2010). A similar study was replicated in 2010. The findings were that; extended prophylaxis with nevirapine or a combination of both nevirapine and zidovudine rapidly curtailed the number of infants at nine months who were infected with HIV-1 through breastfeeding (Kumwenda et al., 2008). Some infants born to HIV positive mothers at Abidjan in Cote d'Ivoire were put on anti retroviral regimen for their first eighteen months of life to attest to the effectiveness of short course anti retroviral regimen in preventing mother to child transmission of HIV. They found out that, this relatively simple and short course regimen radically reduced the number of infants who were infected with the virus. These findings were what gave birth to the new feeding policy by World Health Organization whereby rigid short term anti retroviral therapy was combined with breastfeeding when the mother is HIV positive.

Studies have also been done to find out why some HIV positive mothers choose breast feeding as their infant feeding option. Among most settings in Africa, there is a universal belief that every breastfeeding HIV positive mother would automatically transmit the virus to

their children through breastfeeding. This has increased the myth that, every mother who is not breastfeeding has the human immune deficiency virus. Therefore, mothers in most rural areas are chastised and stigmatized for not breastfeeding. The above hypothesis supports findings of four African countries about perceptions among breastfeeding HIV positive mothers. The study established that, almost all respondents of the study had a general belief that, an HIV positive mother would always transmit the virus to their infants through breastfeeding. Therefore, mothers who avoided breastfeeding were automatically branded as being HIV positive (Chopra & Rollins, 2008). The choice of the HIV positive mother to either breastfeed or not in the context of HIV depends on a host of factors. Some of the factors include the type of counsel that is received from health care practitioners who are believed to be knowledgeable in matters of HIV and AIDS. Other factors include support from partners or other significant others and the belief that, they are on the right path without any guilt of definitely transmitting the virus to their infants. A qualitative study which was conducted at Papua New Guinea to explore health workers' knowledge on standard recommended infant feeding options in situations where the mother is HIV positive brought out interesting findings. It was found that, health workers were not abreast with information on the new standard feeding guidelines recommended by World Health Organization in 2010. Most of the health workers who were in a good position to counsel these mothers who were living with HIV could not explain to the women what to feed their children with (Vallely et al., 2013). On the issue of partner support playing a cardinal role in the choice of the mother to breastfeed or not, a study conducted at Malawi supported it. It was found that, since the prevention of mother to child transmission of HIV (PMTCT) programme demanded partner disclosure, most men abandoned their partners the moment they found out about their HIV positive status. This led to a situation whereby the mothers had to live with not only the fear

of transmitting the virus to their infants through breastfeeding, but also the loss of income and support associated with departed husbands and social disgrace (Njunga & Blystad, 2010).

A few studies have focused on the HIV positive mothers' experiences during the period of breastfeeding of their infants. A study conducted at Burkina Faso to describe the HIV positive mother's experiences and reasons why they continued to breastfeed also brought out insightful findings. Most of the mothers acknowledged that fear was one of the main emotions they dealt with. Most of them were breastfeeding because it was the accepted norm in their society and were not ready to answer questions from curious family members as to why their infants were not breastfed. Others were also stressed out and fatigued since enough information was not given to them concerning the rate of transmission from mother to child (Cames et al., 2010). A study done at Karnataka, India also revealed that, stigma was associated with the reasons why most mothers refused to access anti retroviral therapy during breastfeeding. Fear of being questioned on why some of these mothers were not breastfeeding also led them to continue to breastfeed their infants without any interventions (Rahangdale et al., 2010).

Unlike a non-infected mother who is only concerned about feeding her infant with balanced diet, the HIV positive mother additionally harbours fears of transmitting the virus to her child through breastfeeding. It is now an established fact that, HIV can be transmitted from mother to child through breastfeeding. No matter the percentage, every mother may have hyped emotions and feelings as she breastfeeds her child. There may be questions on: "what if my child is infected through breastfeeding?" Meanwhile it has now been confirmed by the World Health Organization and other individual researchers that the child born to an HIV positive mother whether infected or not has a higher chance of survival if that child is breastfed for at least the first year of life (UNICEF, 2011).

There have been relatively few studies on the experiences of HIV positive breastfeeding mothers in Africa. Meanwhile, this is the part of the world that is home to over sixty percent of the world's HIV/AIDS population (UNAIDS, 2012). As stated above, most studies in this area are geared towards establishing the number who survive with or without anti retroviral regimen during breastfeeding. Some studies are also into testing which of the anti retroviral therapies is more effective during breast feeding. Little has been done to explore the experiences of HIV positive mothers who are breastfeeding in Ghana.

This study used the self efficacy theory as an organizing framework to explore the experiences of breastfeeding HIV positive mothers in the Tema metropolis.

1.2 Problem Statement

Breastfeeding in the context of HIV is an important public health issue because breast milk is a body fluid through which the virus can be transmitted.

HIV/AIDS can lead to short life span among children who are born with it. More than half of the babies born with HIV may die before their second birthdays if there are no rigid measures in place for them to receive anti retroviral therapy (UNAIDS, 2012). Only one out of three children globally living with HIV are receiving anti retroviral therapy (WHO, 2013). In 2011, 1.7 million people worldwide died from AIDS related ailments (UNAIDS, 2012). In 2009, there were a total of 1.8 million HIV-related deaths, 260,000 of these being children less than 15 years. Again, sub-Saharan Africa accounted for 72.2% (1.3 million) of these deaths and a total of 88% of the deaths in children less than 15 years (Morfaw et al., 2013). These figures indicate not only the magnitude of the problem, but also the fact that, paediatrics HIV infections are numerous and worrisome (Morfaw et al., 2013). This is because breast milk is the most common route through which infants contract HIV (WHO, 2010).

Children who contract the virus live with stigmatization on day to day basis. They are also abandoned by their fathers who consider them to be problematic and difficult to take care of (Visser, Neufeld, de Villiers, Makin, & Forsyth, 2008). A lot of individuals living with the virus are depressed due to gross discrimination across all spheres of life. This is due to the fact that, the mode of transmission of the virus is deemed unclean and evil by most Africans. Therefore, most of them are discriminated against (Simbayi et al., 2007). Psychologically, the depression and anxiety levels of people living with the virus is relatively higher than those in the normal population (Li, Lee, Thammawijaya, Jiraphongsa, & Rotheram-Borus, 2009).

Mothers who transfer the virus to their children live with guilt for the rest of their lives (Yeap et al., 2010). There is also shame and a feeling of worthlessness among mothers who transmit the virus to their children (Li et al., 2009). Most of them only consider the idea of attaining motherhood when there is an assurance from a significant other to take care of the surviving child in case of parental death (Kanniappan, Jeyapaul, & Kalyanwala, 2008).

Most people living with HIV have to live on medications on daily basis and there are toxic side effects of these medications which may affect the day to day activities of such individuals (Abdool Karim et al., 2010). Most of the drugs like zidovudine have toxic side effects. Signs and symptoms including anaemia, diarrhoea, nausea and vomiting have constantly been reported by people who have been on these anti retroviral therapies for prolonged periods (Burgoyne & Tan, 2008).

The above problems associated with living with HIV may haunt a mother as she breastfeeds knowing that, there is a possibility of transmitting the virus to the infant through breast milk. What runs through the mind of an HIV positive mother and what she goes through as she breastfeeds her infant knowing that she can transmit the virus to her child

through the process is virtually unknown in the Tema metropolis. The influence of the opinions of significant others and other HIV positive mothers were explored into detail. Most literature focuses on the rate at which mothers transmit the HIV to their infants through breastfeeding as well as the level of stigmatization when a mother refuses to breastfeed in most parts of Africa. This study therefore used the qualitative approach to explore the experiences of breastfeeding HIV positive mothers in the Tema metropolis.

1.3 Purpose of the Study

The purpose of this study was to explore the psychosocial experiences of breastfeeding HIV positive mothers in the Tema metropolis.

1.3.1 Objectives of Study

The specific objectives were to;

1. Explore the self motivating factors that influenced HIV positive mothers to breastfeed (mastery experience).
2. Explore the factors that influenced initiation of breastfeeding among HIV positive mothers (vicarious experience).
3. Describe the role of social persuasion on breastfeeding attitudes among breastfeeding HIV positive mothers.
4. Describe the psychological reactions of breastfeeding HIV positive mothers.

1.3.2 Research Questions

1. What are the self motivating factors that influence HIV positive mothers to breastfeed?
2. What factors influences initiation of breastfeeding among HIV positive mothers?
3. What is the role of social persuasion on breastfeeding attitudes of breastfeeding HIV positive mothers?
4. What are the psychological reactions of breastfeeding HIV positive mothers?

1.4 Significance of Study

Policy makers and other stakeholders may learn from the findings of this study and together with other studies, they may formulate policies for advocacy and counseling purposes. It will also undoubtedly contribute to enriching knowledge in the area of breastfeeding in the context of HIV. The findings may also assist nurse counselors to design programmes that are aimed at improving HIV counseling and guidance services in Ghana. Finally, the study may lead to further research in the area of breastfeeding and HIV.

1.5 Operational Definitions of Terms

Replacement feeding: This is a situation whereby an HIV positive mother chooses to feed her child with other foods and not breast milk.

Wet nurse: This is a woman who is HIV negative and has decided to breastfeed the child of an HIV positive mother.

Mixed feeding or complementary feeding: This is a situation whereby the HIV positive mother combines breastfeeding with other meals available to her in her locality to feed her child.

Significant others: These are the people who are directly related to the care of the breastfeeding HIV positive mother and her baby such as the parents, siblings, partners and counselors.

Motivation: This is the encouragement received by HIV positive mothers with respect to breastfeeding and care of the baby from mothers in similar situations.

Mastery experience: This is where an individual is convinced that a particular task can be performed again since it has been mastered already in a previous similar task.

Vicarious experience: This is where the observation of the successes and failures of others (models) can influence one's self efficacy tendencies.

Social Persuasion: This refers to verbal encouragement of an individual to increase their self efficacy tendencies with the hope of successfully accomplishing certain perceived challenging tasks.

CHAPTER TWO

THEORETICAL FRAMEWORK OF THE STUDY/ LITERATURE REVIEW

This chapter describes the theoretical framework of the study and reviewed literature on previous studies that have been conducted in the field of HIV and breastfeeding.

2.1 The Self Efficacy Theory

The self efficacy theory was developed by Albert Bandura in the early 1970s but it was finally published in 1977 (Bandura, 1977). Before this ground breaking work about what motivates people to take initiatives, behaviour was viewed as something that only had psychodynamic basis. The self efficacy theory erupted during the development of the social learning theory. Self efficacy was viewed as a subset of the social learning theory which was published earlier by Albert Bandura.

Self efficacy refers to a person's perceived ability to execute a certain action within the stipulated time frame accorded (Ventura, Salanova, & Llorens, 2014). It is also defined as one's own beliefs in his or her capabilities in terms of initiation and accomplishment of a particular task or an individual's belief in his or her ability to be successful at performing a task or an action (Bandura, 1977). Self efficacy beliefs determine how people think, feel and motivate themselves in terms of their capabilities to execute a particular task. A high sense of self efficacy enhances an individual's self esteem and motivates the person psychologically to initiate a task and end it successfully. On the other hand, a person with low self efficacy tendencies withdraws from activities and not motivated by anything and therefore views any task as an impending threat (Bandura, 1977, 2012; Bandura, & Ramacha, 1994).

According to Bandura, there are four sources of self efficacy influences which include; mastery experience, vicarious experience, social persuasion and psychological or emotional reaction (Bandura, 1977, 2012; Bandura, & Ramacha, 1994). The above mentioned sources play varying degrees of roles in the accomplishment of one's task.

Mastery experience is also referred to as self modeling, self mentorship and self motivation. An individual's previous experience is able to motivate and give the assurance that, a particular task can be accomplished again. Previous experiences in overcoming obstacles enhance a person's confidence in the belief that a similar task can be overcome. Therefore, the thought and realization by an individual that a previous experience was successful is able to urge the person on to proceed on taking a particular action over a particular time frame thereby increasing the self efficacy of the individual (Bandura, 1977; Bandura, & Ramacha, 1994).

The second source of self efficacy influence which was explicitly outlined in the self efficacy theory by Albert Bandura was vicarious experience. Vicarious experience refers to modeling someone who has similar characteristics. Due to the fact that, there are similar characteristics, an individual's self efficacy is heightened with the hope that, the person can also achieve something similar. If the model is totally different from the individual in terms of individual characteristics, there is an inherent belief that self efficacy is totally reduced or even nonexistent. The vicarious experiences are basically provided by social models who dwell within the society (Bandura, 1977; Bandura, & Ramacha, 1994).

According to Bandura, social persuasion also has a strong influence on a person's ability to achieve high efficacy beliefs. Social persuasion refers to verbal appraisal of an individual with the hope that they possess certain abilities that can urge them on to approach difficult situations. Verbal encouragement and believing in people can increase their self efficacy in order to attempt certain difficult tasks. On the other hand, mere verbal appraisal and encouragement may not be enough for an individual to obtain and maintain a high self efficacy attitude. This source of self efficacy influence often works better when it is combined with other sources of efficacy influences. When the appraisal or verbal encouragement is unrealistic, individuals tend to doubt it and scorn the words of the person

who is giving the verbal appraisal. This may end up reducing an individual's self efficacy abilities rather than increase or heighten it (Bandura, 1977; Bandura, & Ramacha, 1994).

The last source of self efficacy influence is emotional or psychological reaction or state. Some people judge their abilities to achieve a certain task based on their somatic and emotional reactions. A feeling of anxiety, tension and agitation is often times interpreted as a sign of misfortune. Therefore, when individuals physically and emotionally react to the initiation of a certain task in a negative way, they draw back, question and doubt their capabilities. Personal efficacy is also judged based on the mood of the individual. Whereas a positive mood increases perceived self efficacy tendencies, negative moods on the other hand reduce one's perceived personal efficacy tendencies. A poor physical reaction or approach to personal or self efficacy can be interpreted as a facilitator or a debilitator based on the individual's view point. One individual may interpret anxiety and tension as a perceived arousal and therefore increase self efficacy whereas another individual may also view the same somatic and psychological reaction as a threat which would end up reducing self efficacy tendencies (Bandura, 1977; Bandura, & Ramacha, 1994). The figure below gives a diagrammatic representation of the self efficacy theory.

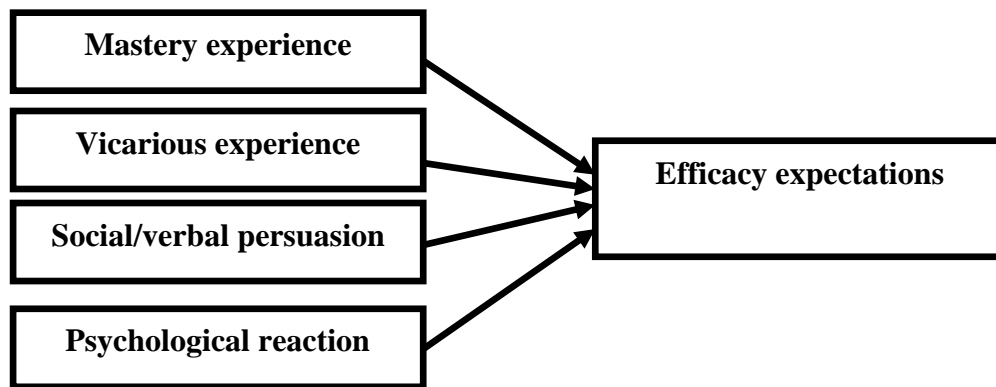


Figure 2.1: The Self efficacy model (Bandura, 1977)

The self efficacy theory has been viewed by many as revolutionary explanation to human behaviour in terms of what motivates an individual to initiate an activity as well as proceed or continue to the end. Albert Bandura's self efficacy theory was judged as the most cited theory in the twentieth century on only coming fourth to citations from B. F. Skinner, Sigmund Freud, and Jean Piaget according to a survey that was conducted in 2002 by Stanford Magazine. The survey also revealed that, Albert Bandura is the most cited psychologist who is still alive (Foster & Christine, 2003).

The self efficacy theory has been used in different disciplines to find out about individuals' attitudes toward different activities and to rate what increases or decreases personal efficacy levels or attitudes. Some of the disciplines include Nursing, Psychology, Business, Education, Medicine and Sports.

In Nursing, different scholars in the field have utilized the self efficacy theory in maternal and child health, specifically in breastfeeding. Cindy Lee Dennis was the first Nursing scholar who developed the breastfeeding self efficacy theory and the breastfeeding self efficacy scale at Toronto, Canada with the intention of studying post partum depression among women of reproductive age. This theory was developed based on the self efficacy theory by Albert Bandura. The breastfeeding self efficacy scale has been adopted and reproduced all over the world by different scholars in the following countries: Argentina,

Australia, Brazil, Canada, China, Croatia, England, Finland, France, Germany, Greece, Iceland, India, Iran, Ireland, Italy, Japan, Jordan, Korea, Mexico, Poland, Saudi Arabia, Scotland, Sri Lanka, Spain, Sweden, Taiwan, Thailand, Turkey, the United States and Vietnam. The breastfeeding self efficacy theory which evolved from the self efficacy theory by Albert Bandura states that a woman's ability to initiate and continue breastfeeding to the stipulated time is based on perceived self efficacy which is influenced by mastery experience, vicarious experience, social persuasion and psychological reaction (Dennis, 2006; Wheeler & Dennis, 2013).

In both qualitative and quantitative studies, different studies have reported the fact that self efficacy is affected by the four sources of influences which include; mastery experience, vicarious experience, social persuasion and psychological reaction (Aghdas, Talat, & Sepideh, 2014; Blyth et al., 2002; Dennis, 2006; Keemer, 2013; Loke & Chan, 2013; Nichols, Schutte, Brown, Dennis, & Price, 2009; Noel-Weiss, Rupp, Cragg, Bassett, & Woodend, 2006; Otsuka, Dennis, Tatsuoka, & Jimba, 2008; Wheeler & Dennis, 2013; Wu, Hu, McCoy, & Efird, 2014; Zhu, Chan, Zhou, Ye, & He, 2013). Some Nursing scholars have also conducted studies that have reported that nurses and midwives who use the breastfeeding self efficacy scale to educate their clients pre- and post natally are able to achieve high percentage of self efficacy attitudes towards breastfeeding among mothers (Hannula, Kaunonen, & Tarkka, 2008; Toyama, Kurihara, Muranaka, & Kamibeppu, 2013).

In Psychology, a lot of work has been done using the self efficacy theory by Albert Bandura. In a meta analysis of several studies that have been done to find out about the sources of self efficacy influences, Sitzmann and Yeo (2013) reported that individuals with mastery experience had a high sense of perceived self efficacy compared to individuals with positive psychological reaction towards a given task (Sitzmann & Yeo, 2013). Further studies have reported positive correlation between personal self efficacy in one's ability to

accomplish a task within a particular time frame and one's attitude towards it (Cardenas et al., 2013; Clum, Rice, Broussard, Johnson, & Webber, 2013; Collins, 2013; Esposito, Gendolla, & Van der Linden, 2014; Jerome & McAuley, 2013; Ouweneel, Blanc, & Schaufeli, 2013; Tims, Bakker, & Derks, 2014; Valois, Zullig, Kammermann, & Kershner, 2013). Increase in stress among workers in most fields especially those in social work has been found to have a link with low self efficacy tendencies (Clum et al., 2013; Collins, 2013). The therapeutic effect of positive self efficacy in an individual has been reported to have a positive influence on the recovery rate of some patients with chronic diseases like cancer (Clum et al., 2013; Sitzmann & Yeo, 2013; Yeung, Lu, & Lin, 2014).

The discipline of education has utilized the self efficacy theory by Albert Bandura to find out about its relationship with students' performance and outcomes. The discipline continues to use students' perceived self efficacy tendencies and ideation to evaluate the approaches of students towards a particular course or another (Hen & Goroshit, 2014; Joo, Lim, & Kim, 2013; Komarraju & Nadler, 2013; Mason, Boscolo, Tornatora, & Ronconi, 2013; Putwain, Sander, & Larkin, 2013; Sanders-Reio, Alexander, Reio Jr., & Newman, 2014; Silvestri, Clark, & Moonie, 2013; Zuffianò et al., 2013). Some studies have also outlined that, high teacher self efficacy has a positive influence on classroom management and teacher efficiency (Klassen et al., 2013; Spurk & Abele, 2014). On the other hand, an unexpected negative correlation was found between self efficacy of childhood special education teachers and students with language impairment in Mid West United States of America (Guo, Dynia, Pelatti, & Justice, 2014).

The field of sports use self efficacy as a tool to encourage sportsmen to perform better and view challenging tasks as something feasible that can be achieved. Some studies have reported that, participants who scored high on a self efficacy test were able to perform better in various types of physical activities (Bruton, Mellalieu, Shearer, Roderique-Davies, &

Hall, 2013; Caldieraro-Bentley & Andrews, 2013; Derscheid, Kim, Zittel, Umoren, & Henry, 2014; Park & John, 2014).

Upon a thorough search through the literature, the researcher noticed that, the self efficacy theory by Albert Bandura had not been used as a guide to study breastfeeding attitudes among any particular group of mothers in Ghana. With the indelible contribution of the self efficacy theory to the study of breastfeeding in different settings in the world, the researcher was curious to apply the theory and use it as a guide to study breastfeeding practices among HIV positive mothers in the Tema Metropolis (A suburb of Accra, Ghana).

This study explored how mastery experience, vicarious experience, social persuasion and psychological reaction influenced breastfeeding HIV positive mothers to initiate breastfeeding as an infant feeding choice and continue till weaning.

2.2 LITERATURE REVIEW

The rest of the chapter focuses on the review of relevant literature on HIV and breastfeeding. Studies have been sampled from different recognized data bases such as Science Direct, PUBMED, Sage, Willey online Library, Taylor and Francis online Library, HINNARI, Google Scholar, Ebsco host and Elsevier. Search phrases and words used included breastfeeding, self efficacy, HIV positive mothers, infant feeding choices, standard feeding guidelines among infants, infants exposed to HIV, mothers' attitude towards breastfeeding and motivation to breastfeed. The review of relevant literature in the area of HIV and breastfeeding were grouped according to the constructs of the self efficacy theory as follows;

- Overview of HIV and breastfeeding
- Self motivating factors that influence mothers to breastfeed (Mastery experience)
- Factors that influence initiation of breastfeeding (vicarious experience)
- The role of social persuasion on breastfeeding attitudes of HIV positive mothers
- Psychological Reactions/Emotions of HIV positive Mothers

2.2.1 Self motivating factors that influence mothers to breastfeed (Mastery experience)

Mastery experience is the confidence an individual has in him or herself about an ability to accomplish a particular task due to the fact that a similar task has been performed before. It is the highest source of self efficacy influence (Bandura, 1977). Studies have reported from different parts of the world that mastery experience is the highest source of self efficacy influence in terms of breastfeeding (Aluş Tokat, Okumuş, & Dennis, 2010; Dai &

Dennis, 2003; Gerhardsson et al., 2014; Gregory, Penrose, Morrison, Dennis, & MacArthur, 2008; Loke & Chan, 2013; Noel-Weiss et al., 2006; Otsuka et al., 2008; Wheeler & Dennis, 2013; Zhu et al., 2013). According to Bandura (1997, 2012) and Dennis (2006), individuals who have confidence in themselves about their ability to accomplish a certain task have high self efficacy (Bandura, 1977, 2012; Dennis, 2006). This personal self efficacy is enhanced when the individual has performed a similar task with similar characteristics (Bandura, 1977). It has been reported by some studies that breastfeeding self efficacy is influenced by mastery experience which is explained as the confidence in a mother to be able to breastfeed based on past experience (Dennis, 2006; Loke & Chan, 2013; Otsuka et al., 2008; Wu et al., 2014). Studies done in Hong Kong, China and Turkey have reported significant differences between the breast feeding self efficacy scores among multiparous women.

This trend tends to be the opposite when primiparous women are compared with the multiparous women (Aluş Tokat et al., 2010; Dai & Dennis, 2003; Ip, Yeung, Choi, Chair, & Dennis, 2012). The reason that has been attributed to this trend is the fact that the multiparous women have high efficacy and confidence. This is due to the fact that multiparous women view breastfeeding as an exercise which they have performed before so they do not consider it as a threat that must be avoided (Aluş Tokat et al., 2010; Ip et al., 2012). On the other hand, it has been reported in a study in China that the breastfeeding self efficacy of primiparous women improved significantly after breastfeeding self efficacy intervention programmes were put in place (Wu et al., 2014). Studies that have been conducted in high-income countries such as China, United States, United Kingdom, Australia, Canada, Sweden, Japan and Hong Kong seem to present similar results with studies that have been conducted in the low-income such as Turkey and Iran about the fact that mastery experience has a significant role to play in a woman's ability to achieve high breastfeeding self efficacy (Aghdas et al., 2014; Aluş Tokat et al., 2010; Creedy et al., 2003; Dai & Dennis, 2003; Gerhardsson et al.,

2014; Gregory et al., 2008; Ip et al., 2012; Loke & Chan, 2013; Noel-Weiss et al., 2006; Otsuka et al., 2008; Wheeler & Dennis, 2013; Wu et al., 2014; Zhu et al., 2013).

The opinion of health workers plays a role in motivating breastfeeding mothers to continue to breastfeed successfully. Some of the breastfeeding mothers may or may not breastfeed due to the counsel that is given by health workers since to them, the words of such people are taken with all seriousness without questioning or verification. A study conducted at Tehran reported that, the women who were unable to successfully breastfeed attributed their failure to discouragement by their physicians not to breastfeed (Dalili et al., 2014). Another study conducted at Hong Kong reported that, one to one breastfeeding support for the participants did not increase exclusivity and duration of breastfeeding (Wong, Fong, Lee, Chu, & Tarrant, 2014).

Self motivation is also influenced by the presence and access to anti retroviral therapy. Anti retroviral therapy has normalized the lives of a lot of people living with HIV including breastfeeding mothers. A study conducted at Uganda concluded that, the access to ART motivated HIV pregnant women to go through the demands of pregnancy and motherhood successfully without much challenges (Kastner et al., 2014).

Personal motivation of mothers is also influenced by cultural and religious beliefs according to some studies. Culture is a way of life of a group of people and what those people believe shapes their perspectives. Studies have reported that, the culture of mothers motivates them to breastfeed. The culture influences the women in such a way that, whatever is expected of a mother in terms of breastfeeding is what is practised. In societies where breastfeeding is not encouraged, mothers are reluctant to do so. On the other hand, mothers are indirectly pressured to breastfeed if the society expects them to breastfeed. Therefore, exclusivity and duration of breastfeeding are influenced by the society's expectations

(Maharaj & Bandyopadhyay, 2013; Serizawa, Ito, Algaddal, & Eltaybe, 2014; Tampah-Naah & Kumi-Kyereme, 2013).

2.2.2 Factors that influence initiation of breastfeeding (vicarious experience)

Vicarious experience refers to the process of observing others perform a task which is similar to what one is about to attempt. Observing their successes and failures can have either positive or negative impact on the success or otherwise of accomplishment of the task (Bandura, 1977, 2012). Extrapolating the same concept, breastfeeding self efficacy can be improved when a mother observes others who are able to accomplish a similar task and this can also lead to initiation and continuation of breastfeeding at the specified duration (Dennis, 2006).

There is a general consensus among a lot of studies about the fact that there is a strong relationship between vicarious experience and self efficacy influence on breastfeeding (Dai & Dennis, 2003; Entwistle, Kendall, & Mead, 2010; Gerhardsson et al., 2014; Glassman, McKearney, Saslaw, & Sirota, 2014; Hoddinott, Kroll, Raja, & Lee, 2010; Ip et al., 2012; Leahy-Warren, McCarthy, & Corcoran, 2012; McCarter-Spaulding & Gore, 2012; McQueen, Dennis, Stremmer, & Norman, 2011; Street & Lewallen, 2013; Wu et al., 2014). A study conducted among African Americans in the United States reported that although most participants scored very high on the breastfeeding self efficacy scale, the actual action to breastfeed may not reflect the intention expressed during pregnancy. Therefore, it is imperative that healthcare workers actually follow up the breastfeeding mothers and continually outline the benefits of breastfeeding to them through continual support (Robinson & VandeVusse, 2011).

Modeling involves copying the activities of a person with similar characteristics so watching other mothers in a particular age group breastfeed successfully may influence other

mothers about to initiate such a task to approach it with zeal. On the issue of maternal age and its influence on a mother's infant feeding decision, a study concluded that, maternal age had no significant influence on the decisions of a mother to make healthy choices about their infant feeding options (Gil, Shah, Raines-Milenkov, & Bowman, 2015). The authors further explained that their basis for grouping the mothers into young and middle age was on the fact that, the brain fully matures at twenty five years of age. They therefore grouped the mothers who were between eighteen and twenty five and considered them as young whereas those between twenty five and forty were considered as matured or middle aged.

Watching mothers with formal work schedules breastfeed successfully may influence others in similar work schedule to also breastfeed. Studies in different parts of the world have found out that, initiation and continuation of breastfeeding is influenced by the work schedule of the mother. Flexible work schedule and long breaks from work after delivery have been identified by those studies as factors that encourage initiation and continuation of breastfeeding to the stipulated time frame (Atabay et al., 2014; Kimani-Murage et al., 2015; Kobayashi & Usui, 2014; Kottwitz, Oppermann, & Spiess, 2014; Stewart, 2014). Such mothers can practise exclusive breastfeeding and continue with complementary feeding for a longer period of time in contrast to mothers who have stringent work schedules.

Despite the challenges associated with breastfeeding, mothers ignore those challenges and go ahead to initiate and continue to breastfeed knowing its importance to the health of their children. It has been reported that, women with high formal education have a higher tendency to breastfeed their children for longer periods due to the awareness of the immense benefits of breastfeeding. Studies conducted in Iran and India reported similar findings on this issue. Those studies concluded that, women with higher formal education significantly had higher rates of breastfeeding compared to their counterparts who were illiterates or had

little formal education (Srivastava & Awasthi, 2014; Veghari, Ahmadpour-Kacho, & Zahedpasha, 2014).

To avoid suspicion, HIV positive mothers prefer to breastfeed. In most conservative cultures, all mothers are expected to breastfeed their young. Failure to breastfeed leads to automatically being branded as HIV positive (Chopra & Rollins, 2008; Levison, Weber, & Cohan, 2014; Sultana, 2014). This therefore sometimes becomes the sole motivation behind a mother's decision to breastfeed.

Motivation can also emanate from educational interventions whereby experts encourage and promote breastfeeding among mothers in the hospital settings. Sometimes, these experts may introduce mothers to others who have successfully been able to breastfeed despite all odds. That may encourage others to also mimic a similar activity. A study conducted at Southern Ethiopia found out that, educational interventions that are implemented with the aim of promoting breastfeeding had a positive impact on duration and initiation of breastfeeding (Adugna, 2014). Another study concluded that mothers are likely to breastfeed if it is recommended by their health professionals (Odom et al., 2014).

Some women may breastfeed without considering other infant feeding choices due to economic challenges. Poverty has been documented as being a reason for some women to initiate breastfeeding. Southern European mothers living in poverty stricken areas are more susceptible to choose breastfeeding over artificial food due to the fact that breast milk is free (Vanderlinden, Levecque, & Rossem, 2014).

2.2.3 The Role of Social Persuasion on Breastfeeding Attitudes of HIV Positive Mothers

Verbal or social persuasion refers to the verbal encouragement that is received by individuals from others about their faith in them to be able to accomplish certain tasks (Bandura, 1977). It has been reported that self efficacy is influenced by social persuasion

from significant others in the life of the person who must accomplish a particular task within a specified time frame (Bandura, 1977, 2012; Dennis, 2006). Denis has reported that breastfeeding self efficacy tendencies are heightened when the mother has significant others who encourage her to breastfeed (Dennis, 2006).

The challenges associated with infant feeding are problematic and full of dilemmas. This complex situation is worsened when the mother is HIV positive. Therefore, significant others like partners, in laws and closely knit family members of the mother have roles to play. The role of close family members such as the woman's partner plays an important role in influencing the rate and duration of breastfeeding (Dashti, Scott, Edwards, & Al-Sughayer, 2010; Odom, Li, Scanlon, Perrine, & Grummer-Strawn, 2014). In this section of the review, the studies that have been done on the perceived roles individuals play in breastfeeding in the context of HIV would be brought to bare on the study. The review in this section is sub divided into the following areas: the roles of husbands/partners and the role of support systems in the form of family member support received by HIV positive mothers.

2.2.3.1 The role of husbands/partners

Husbands and partners of breastfeeding HIV positive mothers have been noted to play both positive and negative roles in preventing mother to child transmission of HIV post natally through breastfeeding (Morfaw et al., 2013). In a systematic review by Morfaw et al to analyze the facilitating factors and barriers male partners create in prevention of mother to child transmission of HIV, a multitude of factors were attributed to the reasons why males may contribute positively or negatively to the prevention of mother to child transmission of HIV. A total of twenty four peer reviewed articles were analyzed. One was from Europe, two from Asia and twenty one were from sub Saharan Africa. Societal, health facility and individual level barriers were the main themes that emerged from the analysis as the barriers to male involvement in prevention of mother to child transmission of HIV.

The notion that prevention of mother to child transmission of HIV is an all female affair and therefore, a man who gets involved is considered weak was the main theme that emerged out of the societal level (Morfaw et al., 2013). At the health facility level, long queues, discouragement by healthcare providers and male unfriendly services at PMTCT sites were discovered as the main reasons why males were deterred from getting involved in prevention of mother to child transmission programmes. Finally, at the individual level, most mothers refused to disclose their HIV statuses to their partners for fear of spousal abuse, stigmatization and isolation. Consequently, their partners were not aware of their HIV positive status to be able to support them to breastfeed. The issue of fear in most studies usually surpasses most mothers' determination to prevent the transmission of the virus from themselves to their infants through breastfeeding or get the much needed support. This is due to the fact that most of them refused to disclose their statuses to their partners thereby leading to their inability to frequently access the services of health facilities for their required anti retroviral therapy (Kanniappan et al., 2008; Leshabari, Blystad, Paoli, & Moland, 2007; Morfaw et al., 2013). Meanwhile, short term prophylaxis of anti retroviral regimen has been found to reduce the rate of transmission from mother to child through breast milk at significantly low levels (Kagaayi et al., 2008; Kuhn et al., 2008; Leroy et al., 2008; Onyango-Makumbi et al., 2010; Peltier et al., 2009; Shapiro et al., 2010). The involvement of partners in PMTCT programmes may ensure emotional, financial and psychological support needed by the woman to gather all the necessary strength to face the uncertainties and dilemmas that living with a chronic disease brings. In some studies, findings reported that, partners of the breast feeding HIV positive mothers who are equally supportive always took different approaches. They always ensured that the psychological stress that is mostly associated with their circumstances was lessened and this went a long way to ensure successful breastfeeding till their children were weaned (Chinkonde, Hem, & Sundby, 2012). It seems that perhaps,

there is a strong relationship between spousal support and the success of initiation and completion of breast feeding among HIV positive mothers according to the above reviewed literature.

2.2.3.2 Role of support systems

Apart from the partners of breast feeding HIV positive mothers who play a major role in the successful initiation and completion of breastfeeding, others such as close family members, in-laws and health care providers (counselors) may play crucial role in the process. Perhaps the opinions of these persons in the life of breastfeeding HIV positive mothers may determine whether the mother would initiate breastfeeding and continue it till weaning. A study conducted by Levy et al. (2010) in Malawi found that almost all of the participants reported that without adequate support and education from counselors, they cannot achieve successful exclusive breastfeeding for six months of their infants' lives (Levy, Webb, & Sellen, 2010). Support was in the form of counseling and constant provision of information on the appropriate feeding guidelines for HIV exposed infants.

Health care providers are basically the source of information when it comes to issues relating to HIV and AIDS in rural low-income countries in Africa and other parts of the World. A study conducted in New York by Sanders (2008) went into detail to find out the experiences of HIV positive mothers with the different health workers they mostly had contact with. Although the general receptiveness of health workers was poor, it was identified that the nurses participants had contact with were more receptive to their plight than the others (Sanders, 2008). In general, studies have reported hostilities on the part of health service providers during interactions with HIV positive women (Leshabari et al., 2007; Levy et al., 2010; Piwoz et al., 2006). Some studies have reported that the health workers who are supposed to make the breastfeeding HIV positive mothers feel welcomed do otherwise.

The health workers sometimes make them feel worthless and they stigmatize them. Some are also judgmental and this makes it uncomfortable for women living with HIV to access the Prevention of mother to child services (Chinkonde et al., 2012; Rahangdale et al., 2010; Sanders, 2008; Yeap et al., 2010). Prevention of mother to child transmission of HIV services enhances HIV positive mother's confidence to breastfeed successfully with reduced stress. This is due to the fact that, the services provided in those clinics are aimed at assisting pregnant women and mothers to live normal lives like other mothers in the community. As the world rejoices to the fact that there are ways to reduce the rate of transmission from mother to child, if the mothers refuse to access prevention of mother to child transmission services, the rate of transmission can increase tremendously. This would go a long way to defeat the World Health Organization and United Nations AIDS Commissions' target of preventing new infections by 2015 (UNAIDS, 2012). Most health workers have also been noted for giving conflicting reports about the rate of transmission through breastfeeding as well as provision of wrong information to the HIV positive mothers (Leshabari et al., 2007; Levy et al., 2010; Piwoz et al., 2006). This therefore may lead to uncertainties about the rate of transmission through breastfeeding which may frustrate breastfeeding mothers living with HIV. Some studies that focused on exploring the experiences and opinions of HIV/AIDS counselors on the type of services they provide at prevention of mother to child centres did not prove otherwise. The counselors themselves admitted to the fact that their confidence level in themselves was very low and they were not in agreement with some of the recommended feeding guidelines by World Health Organization because of their personal cultural backgrounds (Leshabari et al., 2007; Piwoz et al., 2006). Leshabari et al. (2007) researched further to explore the reasons why health care workers at HIV/AIDS support centres seem stressed out and psychologically derailed, thereby exhibiting frustration during provision of antenatal services. Interesting findings were reported. Most of the counselors

attributed this attitude to work overload thereby leaving them stressed out and frustrated most of the time. Most of the workers also admitted that their responsibility to maintain a high degree of confidentiality is mostly challenged when there are conflicts of loyalty. They felt that there was a sense of responsibility on their part to disclose the status of these breastfeeding HIV positive mothers to close relatives (Leshabari et al., 2007).

Most of the above studies are qualitative in nature and therefore, their findings may not be generalized to the general population although they give in-depth accounts and explanations of experiences of the HIV positive mothers and all other stakeholders involved in curbing the HIV/AIDS health menace.

Besides the perceived strong influence spouses and health care providers have on the ability of HIV positive mothers to initiate breastfeeding and successfully continue till weaning, closely knit family members seem to also have a great deal of impact on the success or otherwise of the whole process. It seems the strong extended family ties that exist among Africans make it difficult for breastfeeding HIV positive mothers to exclude their influences. In a study conducted by Visser et al. (2008), findings proved that most of the HIV positive mothers deemed it as a sense of responsibility to disclose their statuses to at least few trusted members of their families (Visser et al., 2008). This may be due to the support which can be received from such family members. Some of the studies reported that most of the HIV positive women were discriminated against and strongly criticized by the close members of their families whom they confided in (Chinkonde et al., 2012; Kanniappan et al., 2008; Rahangdale et al., 2010).

On the other hand, some family members especially the parents of the HIV positive mothers had positive reactions. Although the parents initially received the news about the HIV status of their children with shock and grief, most of them adjusted quickly and were

very supportive throughout every decision they took (Chinkonde et al., 2012; Kanniappan et al., 2008). Few studies have specifically touched on the specific roles mothers-in-law play in the success of breast feeding in the context of HIV. One study conducted by Falnes et al (2011) in Tanzania reported that the mothers-in-law in that setting had little influence on the decision of the couple concerning child bearing and breast feeding. However, the mothers-in-laws generally expected their daughters-in-law to breastfeed so any form of shortening of breast feeding in those settings were met with resistance and were frowned upon (Falnes et al., 2011).

2.2.4 Psychological Reactions/Emotions of HIV Positive Mothers

The psychological burden experienced by breastfeeding HIV positive mothers have been reported by most studies to be varied and full of uncertainties. A study conducted in New York to find out the lived experiences of HIV positive mothers revealed that the news of pregnancy is mostly received with mixed emotions. Most of the women in the study expressed frustration and anxiety as the most constant emotions that engulfed them. This was due to fear of transmission of the virus to their children. However, in the midst of the fear and frustration, there was hope due to the normalcy motherhood may present (Sanders, 2008). Contrasting and comparing similar studies in India and Malawi, most of the reported psychological reactions from the participants were negative. There was virtually no source of hope as seen in the study conducted in New York. In those studies, the participants reported fear, guilt and frustration as the main psychological burdens they battled with on daily basis (Rahangdale et al., 2010, Levy et al., 2010). The guilt is at its highest peak anytime the mothers have to observe and hold their children for phlebotomy in order to get them tested for HIV (Shannon, 2015).

In their study, Levy and colleagues (2010) showed through their analysis that psychological disturbances led to physiological consequences. They realized that disease

progression from HIV infection to AIDS was rapid when the people living with the virus suffer psychological distress (Levy et al., 2010). In settings such as Asia and Africa, the guilt and other stresses participants experienced were more intense due to rigid cultural norms concerning motherhood and breastfeeding. The fear experienced by the participants in Rahangdale et al.'s study was much intense because of stigmatization and other social isolation practices which prevented these mothers from accessing anti retroviral therapies thereby increasing their chances of transmission of the virus from mother to child. They therefore reported that only a third of mothers living with the virus accessed ART services. Severe stigmatization was also reported in Iran among people living with HIV where members in the community classified them as shameful and unclean (Karamouzian, Akbari, Haghdoost, Setayesh, & Zolala, 2015).

It appears fear of rejection, abandonment and isolation run through most studies in low-income countries where stigmatization against mothers living with HIV is high. Isolation mostly seems to be their primary concern because of economic hardships which come about as a result of withdrawal of loved ones due to their HIV statuses. Studies conducted in India, South Africa and Malawi reported similar findings whereby most of the participants felt that fear was also emanating from the fact that they might end up losing the much needed financial support (Kanniappan et al., 2008; Levy et al., 2010; Visser et al., 2008). It is this greater economic independence which the mothers do not have that leads to the hyped fears and frustration among breastfeeding HIV positive mothers in economically less endowed countries in Asia and Africa. The psychological distress experienced by breastfeeding HIV positive mothers may also affect their decision to breastfeed or not.

The unanswered question is, why do mothers in high-income countries where there is economic support for people with chronic disease and therefore economic independence have other psychological burdens like worry, frustration and guilt? This shows that the problem of

psychological distress goes beyond money and the thought of economic independence. Most studies have reported that guilt is especially one psychological dilemma that plagues almost all breastfeeding HIV positive women in the World. Most studies have reported that the mothers always feel a sense of responsibility for a possibility that the virus can be transmitted to their innocent children from mother to child through breastfeeding (Doherty, Chopra, Nkonki, Jackson, & Greiner, 2006; Moland, Paoli, et al., 2010; Sanders, 2008). In their studies, the HIV positive breastfeeding women reported that, guilt was one of the main emotional distresses they dealt with on a day to day basis which was confirmed by their counselors (health workers). These studies were able to sample views from not only the HIV positive mothers but also from their counselors and other health care providers which gives a lot of diversity in their responses.

Findings of some studies suggest that in most societies in Africa where cultural norms are highly upheld, these place a lot of psychological distress on the lives of mothers living with HIV. In most of these cultures, it is a norm and highly acceptable for mothers to breastfeed their children at all corners whether in public or in the comfort of their homes. Therefore, mothers who choose not to breastfeed at all or wean their children early from the breast are scrutinized by members of the society and condemned to be HIV positive. This leads to unnecessary questions and stigmatization which ends up leaving those mothers dejected and isolated (Mickey Chopra & Rollins, 2008; Falnes et al., 2011; Levy et al., 2010).

Some studies reported that, the thought of a surviving child by HIV positive mothers brings a sense of hope and it also gives these mothers a reason to continue living. According to Kanniappan et al. and Sanders in their studies to explore experiences and desires of HIV positive women, the mothers had a real sense of optimism for the future considering the normalcy motherhood brings to most women's lives (Kanniappan et al., 2008; Sanders, 2008).

In summary, the reviewed literature suggested that, breastfeeding HIV positive mothers experience different psychological emotions and fear of transmission emerged as a major worry to them. This was attributed to the possibility of their children facing discrimination and rejection if they contracted HIV. Breastfeeding mothers with HIV rely on social support from health workers, counselors, spouses and the community at large to make decisions regarding breastfeeding. Therefore, the opinions of the above mentioned groups of people may either positively or negatively influence breastfeeding attitudes of HIV positive mothers. Prevention of mother to child interventions had a role to play in decisions concerning breastfeeding in the context of HIV. Different factors also influenced initiation and continuation of breastfeeding in general. Watching other women breastfeed in different circumstances motivated most mothers to also breastfeed.

A lot of studies have been done in the area of breastfeeding in the context of HIV. However, after a vast search was conducted on published studies, there appeared to be no studies on the experiences of breastfeeding HIV positive mothers in Ghana. Therefore, this study was conducted to add to knowledge by exploring the psychosocial experiences of breastfeeding HIV positive mothers in the Tema metropolis of Ghana.

CHAPTER THREE

METHODOLOGY

This chapter describes the methods used to conduct the research which include; the research design, setting, target population, sample size/ sampling technique, inclusion criteria, exclusion criteria, tool for data collection, data collection procedure, data analysis, rigour and ethical considerations.

3.1 Research Design

The research design refers to the overall strategy that the researcher chooses to integrate the different components of the study in a coherent and logical way, thereby ensuring that, the research problem is effectively addressed. It constitutes the blueprint for analysis of data (Labaree, 2007).

This study employed qualitative phenomenological design to explore the psychosocial experiences of breast feeding HIV positive mothers in the Tema Metropolis. A phenomenological study describes the meaning for several individuals of their lived experiences of a concept or a phenomenon (Creswell, Hanson, Plano, & Morales, 2007).

Qualitative phenomenological explorative research design or method was the most appropriate design to use for this study because it generated rich, detailed data that left the participants' perspectives intact and provided multiple contexts for understanding the phenomenon under study. Another reason was the fact that, not much was known about the experiences of breastfeeding HIV positive mothers in Ghana.

3.2 Research Setting

The study was conducted at the Tema General Hospital which is situated within the Tema Municipality. Tema Metropolis constitutes one of the Sub Regions in the Greater Accra Region in Ghana. The greater Accra Region is the capital of Ghana with a total land surface of 3,245 square kilometres or 1.4 per cent of the total land area of Ghana. It is the second most populated region after the Ashanti Region with a population of 4,010,054 in 2010, accounting for 15.4 per cent of Ghana's total population. The greater Accra region is divided into five districts namely; Accra Metropolitan Area, Tema Municipal Area, Ga East District, Ga West District, Dangme West District and Dangme East District (Ghana Government official portal, 2013).

The Tema metropolis is grouped into twenty-six communities. The most popular and busiest communities are: Communities 1, 2, 4, 7, 9, and 13. Tema is a city on the Gulf of Guinea and Atlantic coast of Ghana. It is located 25 kilometres (16 miles) east of the capital city of Ghana; Accra, in the Greater Accra region. It is the capital city of the Tema Metropolis. Tema is the eleventh most populous city in Ghana, with a population of approximately 402,637. Out of this total number of residents, there are 193,334 males and 209,303 females. The total number of adults who are employed in the Tema metropolis are 185,934. The number of people in the Tema metropolis who can speak both English and a local Ghanaian language are 137,311 (Ghana statistical service, 2010). In addition to the numerous primary and junior secondary schools, Tema also has numerous mission schools such as Presbyterian secondary school, Tema, Chemu Senior High, Methodist day Secondary School and Our Lady of Mercy (OLAMS) School. There are numerous clinics and hospitals in the Tema municipality which belong to individuals in the private sector. The main public health facilities in the Tema municipality which provide healthcare services to residents of Tema and its environs are the Tema General Hospital and the Tema Polyclinic.

Tema General Hospital is the largest Hospital in the Tema Metropolis. It receives clients from all the surrounding towns of the Tema metropolis such as Ashaiman, Kpong, Sarkumono, Teshie and Nungua. Residents of the Volta Region of Ghana also use the Tema General Hospital as a referral Hospital. The hospital has a lot of units that cater for both specialist and general conditions. Some of the units include: Medical/Surgical unit, Pediatric unit, Obstetric/Gynecological unit, Antiretroviral/Fevers unit and the Outpatients' department. It has a bed capacity of two hundred and ninety five (295). The Hospital has three hundred and sixty seven (367) nurses, thirty nine (39) house officers, sixteen (16) medical officers and sixteen (16) specialists.

The study recruited participants from the anti retroviral unit of the hospital. The Anti Retroviral Unit of the Tema General Hospital was chosen for this study because it is the main Hospital in the Tema Metropolis that provides special services for people living with HIV/AIDS. Clinics are organized at the ART unit twice a week on Tuesdays and Thursdays between 9 am and 2pm. On those special clinic days, breastfeeding HIV positive mothers and their infants are among the clients who are attended to. At such clinic days, clients are educated on various topics such as: nutrition, hygiene, pregnancy, motherhood, disclosure and route of transmission of the virus.

3.3 Population

The Target population refers to the group of people about whom the researcher is interested (LoBiondo-Wood & Haber, 2013). The target population for this study was breastfeeding HIV positive mothers who receive anti retroviral therapy (ART) at the Tema General Hospital.

3.4 Sample Size and Sampling Technique

Sampling refers to the process of selection of participants that would be included in the study (Padgett, 2008). Purposive sampling method was used to select the participants who were involved in the study. Purposive sampling is done based on the ability of the participants to provide the needed information (Padgett, 2008). Purposive sampling technique is a non probability sampling technique that is involved with the selection of participants for a study. The researcher is judgmental and participants are chosen based on the fact that they have unique characteristics which the researcher is interested in. With purposive sampling, the researcher is guided by the purpose of the study to collect the necessary data. Purposive sampling was the most appropriate method for the study because the researcher had it in mind that, the best people to elicit the needed information from was the breastfeeding HIV positive mothers. Data saturated on the thirteenth participant which means participants were not giving new information.

3.5 Inclusion Criteria

Women who were suitable for the study were breastfeeding (exclusive and complementary) HIV positive mothers who were being managed on anti retroviral therapy at the Tema General Hospital. They were the ones who could speak English or “Twi” and voluntarily willing to participate in the study. The women were eighteen (18) years or above because that constitutes the legal adult age in Ghana.

3.6 Exclusion Criteria

Human immunodeficiency virus (HIV) positive mothers who had chosen not to breastfeed their infants were excluded from the study. Breastfeeding HIV positive mothers who could not communicate in either Twi or English were also excluded because those were the predominant languages which the researcher could speak and understand.

3.7 Tool for Data Collection

A semi structured interview guide was used to collect data for the study. Questions were based on the constructs of the self efficacy theory which guided the study. The instrument was made up of open ended and probing questions to elicit in-depth responses from the women. The questions were framed in such a way that, they were not leading questions that elicited pre conceived answers. This led to collection of rich and detailed data. The interview guide had two main sections which exhibited demographic characteristics of the women and details of each specific objective. Section A was made up of questions which elicited demographic characteristics of the women. Section B asked open ended and probing questions that derived data on the self motivating factors that influenced the women's decision to breastfeed, factors that influenced the initiation of breastfeeding, effects of social persuasions on breastfeeding attitude among HIV positive mothers, psychological reactions of breastfeeding HIV positive mothers and coping strategies employed by breastfeeding HIV positive mothers.

The instrument was piloted or pretested among two participants at the Anti Retroviral Unit of Tema General Hospital. They had similar characteristics with the study participants and they were willing to participate. Supervisors of the researcher were given copies of the instrument for necessary inputs before data was collected. All necessary corrections were made to ensure that the interview guide met the purpose for which it was developed. The data obtained after the pre test were not added to the study.

3.8 Procedure for data Collection

The proposal for the study was submitted to the Noguchi Memorial Institute for Medical Research (IRB-NMIMR) to seek ethical approval. Based on the ethical approval, an introductory letter was taken from the School of Nursing, University of Ghana, Legon and sent to the hospital administration for permission to recruit participants from the hospital. Copies of the letters were sent to the nurse in charge of the Anti Retroviral Therapy Unit of the Tema General Hospital for her approval. After receiving permission from the hospital authorities and fulfilling the requests of the gate keeping systems of the Tema General Hospital, the researcher asked permission to be introduced to all nursing mothers living with HIV. Potential participants who were interested to participate voluntarily in the study were approached individually. Respondents were identified and after explanation of the details of the research, they were given two consent forms (see Appendix B) to sign. An interview guide (see appendix A) was used to conduct an in-depth interview in one of the consulting rooms where privacy was ensured. With the participants' permission, the interviews were audio taped and the responses were transcribed verbatim. Data collection and transcription were done concurrently and reviewed by the researcher and her supervisors.

In depth interview techniques were used to collect data from the participants. Comprehensive field notes were taken in order to document both verbal and non verbal cues from the participants. The field notes also contained notes of any unforeseen occurrences during the interaction between the participants and the researcher. The field notes provided valuable information for the researcher to document especially the non verbal behaviour.

The women were recruited on clinic days. Those who were willing to partake in the study were interviewed in a quiet consulting room on the hospital premises. This ensured privacy and also allowed for recording of the interviews with no other sound interruptions. The open ended nature of the questions allowed the women to freely express themselves. The

interviews were recorded with permission from the participants. Each participant was interviewed for thirty to forty minutes. To avoid preconceived answers, leading questions were avoided. During the interview, one of the participants became emotional and started crying. She was then referred to one of the trained counselors at the centre who had agreed to stand by to help such participants.

3.9 Data Analysis

The collected data was transcribed verbatim from audio to text and analysis was done concurrently. Thematic content analysis was conducted. Thematic analysis of qualitative data is a type of analysis which is directed by preconceived themes based on the theory, concepts or models that guides the study (Padgett, 2008). First of all, the data is coded into bits. Coding is the process whereby data are identified into bits of information and linking these concepts around to form the themes around which the final report is organized (Padgett, 2008). The deductive method of coding whereby the researcher goes over the coded items and places them under preconceived themes was used during the initial phase of the data analysis process. Textural description of the experiences of the persons (what participants experienced), a structural description of their experiences (how they experienced it in terms of the conditions, situations, or context), and a combination of the textural and structural descriptions were used to convey an overall essence of the experience (Creswell et al., 2007).

Practically, this type of analysis was done because the study was guided by the constructs of the self efficacy theory by Albert Bandura and therefore, there were preconceived themes. The researcher analyzed the data by first attaching pseudonyms to the transcripts for easy identification. The pseudonyms used were: Adwo, Kukua, Adobea, Aba, Esi, Baaba, Efua, Besiwa, Araba, Esaaba, Asaabea, Efe and Kakraba. Thematic content analysis was done by identifying common statements from the women that depicted pre existing themes based on the constructs of the self efficacy theory. Such statements were

grouped together under each theme. The rest of the data that did not fall under any of the themes were reduced into bits with codes attached to them. Similar codes were grouped together to form sub themes. The sub themes were also grouped together and major themes emerged.

3.10 Rigour

According to Lincoln and Guba (1985), methodological rigour refers to the trustworthiness of the study as well as the extent to which the interpretation made from it is true. Credibility, dependability, transferability and confirmability of a study are the attributes that ensures methodological rigour in qualitative research (Lincoln & Guba, 1985). The following techniques have been suggested by Lincoln and Guba as the best ways to ensure that all the attributes needed for rigour in qualitative research are met.

Credibility refers to the extent to which the responses given in a qualitative study reflect the true perception of the participants (Krefting, 1991). Credibility was ensured through prolonged interaction with participants, member checking of ambiguous responses, triangulation of data and persistent observation by the researcher. The researcher stayed on the field for as long as three months to ensure prolonged interaction with participants. Member checking was done where necessary. This was done by repeating participants' answers for them to affirm what had been said. This measure cleared all forms of ambiguities in the responses that were provided by the participants. Triangulation of data was ensured through combination of field notes and the transcripts to depict exactly what participants were articulating. Credibility can also be achieved when the findings from the study reflect reality. To ensure this, the researcher only recruited participants who met the inclusion criteria for the study. Data collection and transcription were done concurrently to ensure that both verbal and non verbal cues were captured to ensure reality. The supervisors of the researcher for this study were given copies of data collected to ensure a consensus was met

on the reality of what had been documented. Credibility was also ensured through purposeful selection of participants who provided the necessary data that answered the research questions.

Transferability is the extent to which the study findings can be applied in similar settings and context (Lincoln & Guba, 1985). The researcher ensured transferability through thorough description of the setting that was used to conduct the study. Apart from description of setting, the whole plan of how the research was conducted from the beginning to the end was well described. Therefore, any researcher who would like to replicate the study would have a detailed report on the nature of the setting in order to replicate the study in a similar setting.

Dependability is referred to as the ability of other researchers to repeat the study among the same set of participants (Lincoln & Guba, 1985). Dependability was ensured through external audit of the study by the researcher's supervisors. Since they are experts, their inputs ensured dependability of the study. All participants were interviewed with the same interview guide to ensure consistency. Analysis was also done with the same method or procedure to arrive at significant themes.

Confirmability is the extent to which the responses of the participants are their true perception without the researcher's biases (Lincoln & Guba, 1985). Confirmability or authenticity was ensured through the use of a field diary and proper record keeping for audit trail. Every step in conducting this research was documented. The researcher kept a field diary during collection of data whereby both verbal and non verbal cues were documented. There was concurrent data collection and transcription. There was also clarification of responses to ensure that the true perceptions of the participants' were depicted. The researcher also read and re-read all transcripts before interpretation to ensure confirmability.

A third party was also asked to pick the transcripts randomly and compare it to the audio tapes to ensure that the transcription was verbatim.

3.11 Ethical Considerations

Ethics refers to a situation whereby participants in a study are protected from harm and the respect of human dignity (Krefting, 1991). Ethical approval was sought from Noguchi Memorial Institute for Medical Research, University of Ghana. The researcher also identified and introduced herself to the authorities of the Tema General Hospital. Permission was sought from the Tema General Hospital with a letter from the School of Nursing, University of Ghana, before the research was conducted. Permission was also sought from the Anti Retroviral Therapy unit of the Hospital where the participants of this study were recruited from. The research participants were made aware that participation in the research was voluntary and that they could withdraw from the study at anytime. Participants were also made aware of the fact that, withdrawal from the study at any point would not attract any withdrawal of services or any form of punishment. A brief description of the study and the procedure for data collection were made known to the participants.

Women who voluntarily opted to be participants of the study were given two consent forms. They were encouraged to consider the content before signing. Participants and the researcher kept copies. The researcher only involved participants who were on medication to prevent mother to child transmission of the HIV through breastfeeding. The fact that participants were on medication may reduce the emotional distress that may be associated with the thought that their children would contract the virus through breastfeeding. The researcher chose a setting which was neutral in the sense that the researcher does not work at the Tema General Hospital or at the anti retro viral therapy unit so participants were not compelled under any circumstance to be part of the study.

With permission from participants, the interview was audio taped. To ensure adequate confidentiality, the researcher did not collect any identifiable information that would link participants to their responses. The researcher also remained non judgmental and did not impose personal moral values on participants to ensure confidentiality.

There were trained counselors at the anti retroviral therapy unit where the data was collected. The researcher liaised with the counselors and ensured that any participant who got emotional and started crying during the data collection period was given a free consultation.

The interview was conducted in a quiet room with only the participant and the researcher thereby ensuring privacy.

The tapes and the transcripts were available to only the researcher and her supervisors. The tapes and the hard copies of the transcripts have been kept under lock and key. Soft copies of the tapes have been kept in a computer that has a password known to only the researcher.

CHAPTER FOUR

FINDINGS

This chapter presents the findings of the study. The self efficacy theory was used as a guide to organize the findings in line with the objectives of the study. Taking the theory into consideration, four (4) main themes were thoroughly explored. The four (4) main themes that were explored included self motivating factors, factors influencing initiation of breastfeeding, role of social persuasion and psychological reactions. From the experiences shared by participants, another theme, which was the coping strategies of breastfeeding HIV positive mothers, emerged. Collectively, five (5) main themes together with twenty three (23) sub themes emerged.

4.1 Demographic Characteristics

In general, thirteen (13) breastfeeding HIV positive mothers participated in the study. The youngest breastfeeding HIV positive mother was twenty nine (29) years old whilst the oldest participant was forty (40) years old. The local languages that could be spoken and understood by all the participants were: Twi, Ewe, Frafra, Guan, Hausa, Baasare, Ga and Krobo. Seven (7) out of the thirteen participants could understand the English language but admitted that they could not communicate with it fluently. The rest of the participants; six (6) could not understand or speak the English language at all. Two (2) of the participants were illiterate and had never had any form of formal education. Only two (2) participants had completed senior High Schools constituting the most highly educated. The majority of the participants; nine (9), had completed various stages of junior high schools. All the thirteen (13) participants were Ghanaians and were from different parts of the country. Two (2) of the participants were unemployed and were totally dependent on their spouses for their daily upkeep. Five (5) of the participants were traders and they were involved in different forms of trading activities. Only one (1) of the participants was a hairdresser. Two (2) of the

participants were caterers and one (1) of them was trained as a peer counselor (model of hope) at the unit. All the thirteen (13) participants had more than one child. Six (6) of them had three children each. Three (3) of the participants had two (2) children each. Another three (3) participants also had four (4) children each. Finally, one (1) of the participants had three (3) children but she lost one to acquired immune deficiency syndrome (AIDS). All the participants were married. Details of the demographic characteristics of all the participants are shown in table 4.1.

Table 4.1: Demographic Characteristics of Participants

Pseudonym	Age (Yrs)	Level of Education	Employment Status	Number of Children
BAABA	34	Illiterate	Hairdresser	3
ADWO	32	SSS	Caterer	3
KUKUA	37	JSS	Trader	4
EFUA	32	JSS	Seamstress	4
BESIWA	30	JSS	Trader	2
ADOBEA	31	JSS	Trader	2
ARABA	35	JSS	Peer counselor	2 living 1 dead
ESAABA	40	JSS	Trader	4
ESI	35	SSS	Seamstress	3
ABA	29	JSS	Trader	3
ASAABEA	39	Illiterate	Unemployed	3
EFE	30	JSS	Caterer	2
KAKRABA	32	JSS	Unemployed	3

Source: Transcribed Data

4.2 Organization of Themes

Five (5) major themes and twenty three (23) sub themes emerged after thematic content analysis was conducted. The first four major themes were predetermined themes from the constructs of the self efficacy theory. The last major theme; coping strategies, emerged after content analysis of the rest of the data. Details of the themes and sub-themes are shown in table 4.2.

Table 4.2: Themes and Sub themes

THEMES	SUB-THEMES
Self motivating factors (mastery experience)	<ul style="list-style-type: none"> • Previous experience • Hope in experts • Hope in ART • Personal beliefs in God
Factors influencing initiation of breastfeeding (vicarious experience)	<ul style="list-style-type: none"> • Avoidance of suspicions • Motivation by other HIV positive mothers • Experts' advice • Poverty
Role of social persuasion	<ul style="list-style-type: none"> • Spouse • Siblings • Counselors • Midwives • The community
Psychological reactions	<ul style="list-style-type: none"> • Fear • Hope • Anxiety • Blame • Guilt
Coping strategies	<ul style="list-style-type: none"> • Support group • Denial • Prayer • Trust in positive situations of life • Hope in ART

Source:

Transcribed

Data

4.3 Self motivating factors

Self motivating factors are situations that encourage the women to have the zeal to continue to breastfeed with the hope that, at the end of the eighteen month period, the child could test HIV negative. Participants gave in-depth insights into their various experiences in terms of their personal motivating factors which led to the emergence of various self motivating factors described below.

4.3.1 Previous experience

Previous experience emerged as one of the factors motivating HIV positive mothers who were breastfeeding their current children. According to participants, previous experience had a lot of influence on their ability to be hopeful about the positive outcome of the HIV statuses of their present children. Aba, Esi and Kukua shared their previous experiences as follows:

“I got to know of my HIV positive status during my second pregnancy. I was very much afraid when I was asked to breastfeed in my condition. But after breastfeeding, the child still came out negative. With this third child, although I was still afraid when I was asked to breastfeed, I continue to encourage myself that, by Gods grace, this child too might come out negative” **Aba**

“My previous experience with breastfeeding in this condition has been very positive and helpful for me to continue breastfeeding this current child. Therefore, I am more than hopeful that, since my other child was breastfed successfully and came out as HIV negative, although I am HIV positive, this one too would have a similar story at the end.” **Esi**

“I have hope that the child will come out HIV negative because I did a similar thing with the third child and he came out HIV negative. From the way it was explained to me by the nurses, and the way it worked for my previous child, that is what I am relying on as a source of motivation.” **Kukua**

4.3.2 Hope in experts

Participants expressed their views in such a way that, it was the counsel that was given to them by the counselors to breastfeed that gave them the hope to continue to breastfeed. As indicated in the quotes below, those participants who motivated themselves

based on the counseling by experts were undoubtedly optimistic about the HIV negative outcome after breastfeeding. Baaba had the following to say about her hope in counselors:

“the nurses (counselors) are the ones who are the experts. Therefore, I have trust in them in such a way that when they asked me to breastfeed with this condition, I trusted their words and I knew that nothing would happen to this child” **Baaba**

Some of the mothers indicated that, they only agreed to breastfeed their infants only after their counselors took time to educate them about the advantages and disadvantages of breastfeeding an infant even when the mother is HIV positive. Adwo and Araba narrated:

“When I came for counseling, the way they spoke to me was what made me agree to the fact that, nothing would happen to this child even if I breastfeed. They also introduced me to other people in similar situations who had safely given birth and breastfed successfully without anything happening to their children. They allowed me to speak to them and that really reassured me. Some of them told me that they have had two children although they had HIV and they are all alive.” **Adwo**

“We have been told through counseling that, nothing would happen to the child if we breastfeed exclusively for six months without adding any other food or water to the child’s diet. I believe in whatever the health workers tell me and because of that, I am more than encouraged to follow those rules and continue breastfeeding having in mind that my child would eventually come out as HIV negative.” **Araba**

4.3.3 Hope in Ante Retroviral Therapy (ART)

According to some of the participants, they have high hopes in the ante retroviral therapy that is given to them and their breastfeeding infants. They believe that, so far as they are on medication with their children, there is no way those children would turn out to contract the virus through breastfeeding. In sharing their experiences about their hope in the medication, the women revealed that, they believed the medication was able to suppress the virus and also prevent it from moving through the breast milk into their children as evidenced by Besiwa’s report.

“... I heard that if you stick to your medication while you breastfeed, the child cannot contract the virus through breastfeeding. So the mother must not allow the medication to get finished before restocking it from the hospital. Under no

circumstances should the medicine be allowed to get finished when one is breastfeeding". **Besiwa**

Kakraba and Araba were very confident that, the anti retroviral medication would serve as a barrier and prevent their children from contracting the virus through breastfeeding.

They reported that:

"What gave me a little bit of reassurance is the fact that the child and myself are on ante retroviral medication and that may prevent the child from contracting the virus through breastfeeding. Because of the medication I am taking, I have a firm belief that the child might not get the infection."

Kakraba

" I was actually diagnosed of being HIV positive ten years ago and I started anti retroviral therapy seven years ago so I have lived with the condition for a long time and I therefore have hope that nothing would happen to me or my child.....Oh I am still on the ART and when I gave birth to this child, the child was also given syrup for the first six weeks. I have also been told that there is an injection that would be given to the child from time to time so I still have courage that he will come out negative because of the medication. (LAUGHING LOUDLY)

... I believe that the medication will protect the child from getting the virus.

Araba

4.3.4 Personal beliefs in God

The belief in God played a paramount role in what kept the breastfeeding HIV positive mothers going. Almost all of the women had a sense of some supernatural intervention on their behalf. They expressed their strong hope in God and the fact that God is their source of encouragement. The belief in God was very strong based on the way in which it was expressed by different participants. From the way participants' experiences were shared, the belief in God intervening on their behalf played a pivotal role in their abilities to motivate themselves and have hope that, the HIV would definitely not be transferred to their children through breastfeeding. Some participants were very optimistic that, God can never disgrace them in their communities. Asaabea had this to say:

"I am a Christian who attends church regularly. So if God knew that I couldn't carry this burden, He wouldn't have allowed it to come my way. He knows that my neck is too small to carry certain burdens in life. God said that

He will not allow anyone who follows Him to be disgraced.....I believe that God cannot glorify me in one moment and replace it with disgrace and embarrassment in another moment. The Lord would lift me up, he will not put such an infection on me, no, no, no, I have faith. So I have faith in the Lord.”
Asaabea

The women also believed that, God would not allow their children to contract the virus from them through breastfeeding. To them, breast milk is the natural food which was created for children by God himself so there is no way He will allow it to be contaminated. Aba and Adobebe shared that:

“As for me, my hope is in God. I know that, God would not allow my child to contract the virus through breastfeeding because of His mercies. I know that God is the one who has arranged it in such a way that when one delivers, breast milk is the newborn’s initial food. That is how they grow and my mother taught me that, as for children, they prefer breast milk to any form of food. So if God is the one who has arranged that breast milk is the child’s main food, then He should have mercy on me.” **Aba**

“Everything is the act of God and I believe that God can prevent the virus from being transmitted from me to my children and that is one of the reasons why I am motivated to breastfeed with this condition.” **Adobebe**

Aside the personal beliefs in God, some of the participants had their own personal convictions which were motivating them in one way or the other. Some of them shared that, they had a supernatural conviction that could allow them to detect if their untested children were HIV positive or not. Others too had their own personal instincts about the fact that they did not even believe that they were HIV positive themselves and therefore, there was no way they could transmit the virus to their children through breastfeeding. All these different instincts and feelings came together for them to reassure themselves that their children would surely come out as HIV negative even if they breastfed them. Esaaba did not believe that she was HIV positive. Therefore, she was not perturbed about the possibility of the virus being transferred to her child through breastfeeding. She had this to say:

“I personally don’t think that I have this virus in me. The only problem I have right now is the fact that, although I feel hungry all the time, I am not able to eat well. Apart from that, nothing is happening to me. So if I don’t believe that

I have the virus, then nothing tells me that I can transmit it to my child through breastfeeding... I don't look like someone who is sick.” **Esaaba**

Efua also reported that, her instinct is such that, she can detect an HIV positive infant at just a glance. Anytime she delivers, she is able to tell whether her child would end up as HIV positive or negative after the stipulated period of breastfeeding. Efua acknowledged that:

“...also I personally believe that, when you give birth to the child and that child is HIV positive, you will know it instantly without any test as a mother. Those children who end up testing positive for the virus look some way right from the beginning and they don't look healthy. They look like sicklers and when you compare them to your child, you are able to know that there is something wrong with those children.” **Efua**

Baaba similarly reported that:

“My instinct tells me that no matter how long I breastfeed this child, he will not contract the HIV through breastfeeding” **Baaba**

4.4 Factors influencing initiation of breastfeeding

A major theme that emerged was factors that influenced the initiation of breastfeeding among HIV positive mothers. Although almost all of the breastfeeding HIV positive mothers who participated in this study were enlightened about the fact that breastfeeding was one of the modes of transmission of HIV from mother to child, they all chose to breastfeed. Different factors contributed to initiation of breastfeeding as their feeding options and the factors included avoidance of suspicion, motivation by other HIV positive mothers, experts' advice and poverty.

4.4.1 Avoidance of suspicions

According to the participants, most people in their communities and around them who are not aware of their HIV positive status begin to gossip and become suspicious when they deliver and refuse to breastfeed their children. This is as a result of the fact that everyone in their communities expects them to breastfeed after delivery. Therefore, participants shared that, to avoid unnecessary scrutiny from their friends and neighbours as to why they are not

breastfeeding their young, they decided to breastfeed right from the first day after delivery.

Baaba shared her story that:

“my husband’s relatives are not aware of my HIV positive status and therefore, if I don’t breastfeed this child, suspicions would arise and they would suspect that I am HIV positive. So that is the main reason why I decided to breastfeed this child although I am HIV positive” **Baaba**

Adwo reported that, her husband was not aware of her status and therefore, she had no excuse but to breastfeed so as to avoid suspicion. She acknowledged that:

“The thing is that, my husband is not aware of my HIV positive status so if I don’t breastfeed the child, my husband would ask me that; why am I not breastfeeding the child? That can expose me.” **Adwo**

Esi’s problem had to do with the general public and their opinions about mothers who refuse to breastfeed young children. She had this to say:

“Imagine if you are in a public transport and carrying a little child like this. When the child starts crying, someone behind you can say that “sister, won’t you give breast milk to your child since the child is crying?” Sometimes, when you bring out artificial milk to give to the child, people retort words like “instead of giving breast milk to the child, you continue to give artificial milk” That is what worries me sometimes because people gossip a lot and therefore makes me want to breastfeed for as long as possible”. **Esi**

4.4.2 Motivation by other HIV positive mothers

The findings of this study indicated that, some of the breastfeeding HIV positive mothers initiated breastfeeding because they had seen and spoken to other HIV positive mothers who had successfully breastfed and their children turned out to be HIV negative at the end. Therefore, an example of a success story meant a lot to them and it boosted their confidence to also take similar actions. Besiwa reported that:

“I then discussed it with a friend about my decision to replace breastfeeding with artificial food. She advised me to rather continue with the breastfeeding and not to be afraid. She even cited an example that; she is also HIV positive and she breastfed her first child who came out negative after the third test.

That urged me to continue breastfeeding..... I have also met a lot of mothers who are HIV positive and breastfed their children but they never transmitted the virus to those children. Because of that, I decided to also try and see if it will work for me.” Besiwa

Similarly, Kukua and Baaba acknowledged that:

“...Oh my friend who is HIV positive and has a child has finished breastfeeding, done the test and the child turned out being HIV negative... Such stories make me happy especially with the fact that after combining breastfeeding with the medication (septrin), a child has successfully come out negative at the end. That also makes me eager to do same since I have hope that my child can also breastfeed and come out as HIV negative.” Kukua

“...I used to collect the anti retroviral medicine from Ridge Hospital and I used to speak to one lady in a similar situation. She used to encourage me so much and was always saying that for her, she will continue to have more children and breastfeed them until she cannot biologically get pregnant any longer. Such stories or conversations really give me the urge to continue having children and breastfeed them” Baaba

4.4.3 Experts' advice

The experts in this context refer to all the health professionals who are at the antiretroviral unit who see to the day to day health needs of the breastfeeding HIV positive mothers. These experts include trained HIV counselors, nurses, doctors and pharmacists who ensure that the health needs of the participants are duly met on time. Many participants decided to initiate breastfeeding because health workers counseled them to follow certain guidelines which may lead to the child coming out as HIV negative even after breastfeeding. From the way those experiences were shared, it was clear that, the participants had a lot of faith in what the experts told them at the clinic. Adobea, Esaaba and Efe had the following to share:

“One thing I know is that, if God is not there, the next group of people who can replace God are doctors. Some people say that the virus is in the breast milk so if you breastfeed, the child would contract the disease. However, the doctors who are taking care of us are saying that we should give the breast milk to the children for at least six months and there is the possibility that the child may get it or may not get it. That instruction by the doctors played a major role in my decision to breastfeed.” Adobea

“...yes I will follow exactly what the health professionals tell me. I was encouraged by the health workers to breastfeed. As for me, I had decided to give replacement food to the child instead of breastfeeding. I even instructed someone to go and buy replacement food for me before the instruction came.”

Esaaba

“The health workers here told me to give breast milk to my child for one year. So my decision to breastfeed was based on what the nurses here told me to do. If the nurses had not instructed me to breastfeed, I would not have breastfed my child since breastfeeding is one of the ways through which HIV can be transmitted from mother to child” **Efe**

4.4.4 Poverty

Some of the women emphasized that, they had no choice but to breastfeed their children. They attributed that reason to the fact that they could not afford the baby food that is required to keep babies healthy at a tender age. Esi and Aba shared that:

“...Also, the NAN (infant formula/milk) is very expensive. The child can consume one tin of the infant milk within one week. So the infant food also takes a lot of my money. Therefore, it would be difficult for me to afford such foods for my child. I virtually have no choice but to breastfeed.” **Esi**

“I didn’t know which other food to give to the children till they were old enough to eat proper food so I had to try and give the breast milk to them like that.....It all boils down to the issue of money. I don’t have money to buy replacement foods. That is why I decided to choose breastfeeding. That is why I am always afraid when I am giving breast milk to the child” **Aba**

Kakraba reported that, she would have secretly gone ahead to breastfeed even if the nurses had stopped her since she had no means whatsoever to afford infant milk to feed her child. She confessed that:

“as for me, I cannot afford artificial food all the time for my child so even if the nurses had asked me not to breastfeed, I would have gone ahead to do so because of poverty. But when I gave birth and decided to breastfeed, the nurses did not stop me which was good for me.” **Kakraba**

4.5 Role of social persuasion

This part of the findings consist of the data that describe the role the society in general played in encouraging or otherwise discouraging breastfeeding HIV positive mothers who took part in the study during the stipulated period for breastfeeding. The women shared their experiences on the way their spouses, counselors, siblings and others reacted to their decision

to breastfeed their children and how it motivated or demotivated them to sustain their interest in continuing to breastfeed. How the spouses, siblings, counselors and the community at large reacted to the women's decision to breastfeed have been narrated below.

4.5.1 Spouses

This part of the findings explains the role spouses of participants played in their decision to initiate, continue or quit breastfeeding. Although the majority of the women had revealed their HIV statuses to their spouses, others had not revealed their HIV positive statuses to their spouses. Fortunately, the men who were aware of their wives' statuses were very supportive and they played a pivotal role in their wives' decision to breastfeed or otherwise. Kukua and Efua had the following to say about their spouses:

“Oh, as for my husband, he would not treat me in that way because on the day of disclosure, my partner was also counseled by the nurses. He is very supportive and he is the one who sometimes reminds me to take my medication and give the septrin to the child. Therefore, I have the confidence to breastfeed knowing that I have my husband's support in terms of my decision to breastfeed. He always reassures me that I should not bother myself and that so far as I am still giving the medication to the child and I am taking mine, I should not worry about anything and I should go ahead and give the breast milk to the child.” **Kukua**

“I decided from the beginning not to breastfeed the twins. But then my husband encouraged me not to be afraid but to go ahead and breastfeed.....my husband has never queried me before about my decision to breastfeed. We have the same ideas and he is very supportive. He is even the one who normally encourages me. He sometimes tells me “love, let's continue to follow the same trend as we did for the first child and I believe that none of the children will be positive judging from the way they look”. That really boosts my confidence and I am able to boldly continue to breastfeed” **Efua**

Esaaba also confirmed with laughter that:

“My husband is the one who has even been urging me to give the breast milk to the child since I was a little hesitant at the beginning as to whether to breastfeed or not. Then I would say “you know I have a disease” then he will respond and say “what disease? You don't have any disease”. He also doesn't believe that I have the virus in me so he keeps on urging me to continue breastfeeding the child. He says that the child looks too healthy and if I was truly HIV positive, he wouldn't be that healthy. (SHE LAUGHS)” **Esaaba**

4.5.2 Siblings

This aspect of the findings represents the role siblings of the women played during the period of breastfeeding and how those roles played affected participants' ability to continue or discontinue breastfeeding. The findings indicated that, most of the siblings, especially sisters of the participants were very supportive when it came to the issue of breastfeeding in the context of HIV. It must be noted that, the women willingly informed those siblings about their HIV positive statuses. Many of the participants had informed their sisters about their HIV positive status and their decision to breastfeed as reported by Baaba and Esi below:

“My younger sister whom I just spoke about is very supportive. We eat together; we converse, laugh and basically do everything together. My sister has been very supportive since she learnt about my status. Up till now, it is my younger sister who calls me frequently to encourage me to continue breastfeeding all the time. She even encourages me that if my husband mistreats me, I should leave him and return home for comfort” **Baaba**

“...At a point, through explanation, my sister told me that, the people who are taking care of me here are experts and therefore they know what they are about. She then encouraged me to rather listen to the counselors here and do as I was told.” **Efe**

Adwo reported that, her sister is also a nurse and therefore, her opinions about her decision to breastfeed were worthwhile. She had this to say about her sister:

“My younger sibling is also a nurse and she also spoke to me and therefore, I was not afraid at all. My sister also told me to breastfeed and that there is a certain strength which the breast milk confers on the child. My sister relates to me in a very positive way. She is the one who even encouraged me to breastfeed. Sometimes, she even goes for my medication for me. She shows me which drugs to buy in order to get enough blood. She calls me and finds out about the way I take my medication. She also encourages me to take my medication and always prompts me to take them judiciously. Oh, as for her, she is really helpful to me.” **Adwo**

4.5.3 Counselors

The findings also indicated that, counselors had a role in socially persuading their clients to continue breastfeeding. All the participants shared that, their different encounters with the trained HIV/AIDS counselors at the unit where data was collected really encouraged

them to continue breastfeeding till the time was due for them to stop and await the last confirmatory test as illustrated below:

“When I come here, it is the counselors who show concern by asking me about the welfare of my family and my children. After asking how I am faring, they take the opportunity to counsel me and encourage me. That really helps me to continue breastfeeding till the stipulated time. Oh it is very helpful. When my husband used to abuse me psychologically, the counselors were the ones who counseled me to be steadfast. I know that, even if my husband would not talk to me at home, when I get to the hospital, I would surely find a counselor who will talk to me” **Aba**

Similarly, Esaaba and Efua said this about the role of the counselors in their abilities to breastfeed.

“HMMMMMMMM. Actually, I had sore nipple after delivery, so I was confused and frustrated when the counselors asked me to breastfeed my child after delivery. So I went back and explained to the counselor that I had sore nipple and whether it was safe for me to breastfeed? The counselor then explained to me that, the child would be given a special medication and I would also continue taking my anti retroviral therapy while I breastfeed. That was what gave me the re assurance to continue breastfeeding.” **Esaaba**

“Apart from my faith, the counselors are also very helpful. They encourage me from time to time in addition to my husband. The counselors have really urged me on to continue breastfeeding.” **Efua**

The women were of the view that, the health professionals who had been trained as HIV/AIDS counselors were very helpful and kind to them. Therefore, anytime the women had the opportunity to interact with counselors, the counselors gave them hope in life. Adwo narrated that:

“I have been making good use of the trained HIV counselors. They talk to us about a host of issues like breastfeeding, how the medication should be taken and how to improve our diets. We are also counseled by the counselors to use condoms and we should take good care of ourselves not to get unnecessary cuts” **Adwo**

Kakraba and Besiwa also reported that:

“The counseling is really helpful. The doctor told me when I got pregnant that, when I am having intercourse with my husband, I should use condom to reduce the chances of the child getting the HIV. I followed that instruction

judiciously and the child came out healthy. So I am following his instruction to breastfeed as well” **kakraba**

“As for me, what can I do? When such thoughts enter my head, I try to discard them. I also think about the fact that I don’t want my child to contract the virus by the time I finish with breastfeeding. This is because I believe in luck and I know that some people are lucky while others are not. Therefore, it is better if I follow strictly what the counselors tell me so that I can be hopeful that my child does not contract the virus by the time I finish breastfeeding”

Besiwa

4.5.4 Midwives

Participants explicitly stated that, midwives who helped them to deliver their babies played both positive and negative roles in their abilities to continue breastfeeding. Some of the participants shared that, their midwives were hostile to them during their various encounters at the maternity unit because of their HIV positive status. Only few participants noted that their midwives were kind to them and showed concern at the time of delivery.

Below are statements indicating hostility from midwives:

“The midwives spoke to me as if I was not a human being. For instance after delivery, they mistakenly brought me someone’s child and I immediately alerted them that, that was not my child. It was later on that they managed to find me my child. Then the nurse who made a mistake and brought me someone’s child came back and retorted “Did you breastfeed the other child which was not yours?” in a very sarcastic tone and manner. The point is, they were very rude towards us which was very bad. They have to be advised to stop treating us that way. It is not as if after assisting an HIV positive woman to deliver, then you also get yourself infected. It is not our fault too that we have this condition. I was discouraged to even continue breastfeeding because of that but I motivated myself since I am a model of hope to other people living with HIV” **Araba**

“It was during delivery that I had a problem with discrimination. After telling the midwife that I was HIV positive, she went and called some of her colleagues to come and see a typical HIV positive mother. I was extremely embarrassed. When her colleagues came, they asked me if I was sure that I was HIV positive and I answered in the affirmative. They even scolded me for breastfeeding. Apart from that which was very embarrassing, no one mistreated me in any way and I went ahead to breastfeed.” **Kakraba**

On the contrary, Adobea had a positive encounter with her midwives at the time of delivery.

Her positive encounter was narrated as:

“With my first child, the midwife who took care of me was the one who encouraged me most. As at that time, I had no hope anywhere. The midwives were the ones who really encouraged me to breastfeed. They were not giving ART over there. That was how come I was referred here. The midwife here too was very good when she saw me, she said “This one is only HIV and not AIDS so don’t worry, it shall be well” **Adobea**

4.5.5 The community

Participants shared that, the people in their communities had negative attitudes towards people living with HIV. They were therefore very convinced that, if people in the community were aware of their HIV positive status, they would have chastised them on their decision to breastfeed their infants. To avoid being discouraged by the negative reactions of members in their various communities, all the participants refused to inform people in their communities about their HIV positive status so that they could have their peace of mind to breastfeed without discrimination, blame or disrespect. Esi had this to say about the probable reaction of the people in her community:

“Yes of course. Should I tell people in the community about my HIV positive status, they will insult me for breastfeeding my child because they would just assume that the child would surely come out as HIV positive. So I only use any opportunity I get to educate people who seem to be uninformed about the condition so that I can continue to breastfeed in peace without criticisms” **Efe**

Esi shared that, her husband was the one who defended her in public. Below is what Esi narrated:

“Sometimes, when we are even in public and people are talking about HIV positive women who breastfeed, my husband covers up for me by shutting them down. So he covers up for me in such a way that people would stop gossiping. If people knew about my HIV positive status and the fact that I am breastfeeding, they would have passed all sorts of comments about me which wouldn’t have been pleasant at all” **Esi**

Kakraba’s concern had to do with the fact that, she might be treated with disrespect and discontent if people in the community became aware of her HIV status and they might not approve of her decision to breastfeed her child. She had this to say:

“As for this infection, I have not told anyone about it apart from my husband. If I go round telling people about it, I may never know when the person may blow my cover. The person might go about telling people about my situation. People may start pointing fingers at me about my HIV positive status and the fact that I am insensitive to breastfeed and transmit the virus to my new born. Since I got to know that my husband is also HIV positive, whenever I want to talk about this condition, I rather talk to him about it” **Kakraba**

4.6 Psychological reactions

One of the major themes in the findings of the study was the psychological reactions of the breastfeeding HIV positive mothers. All the participants shared both positive and negative experiences about their psychological reactions from the time they were asked to breastfeed their children. Some of the participants had already dealt with the psychological burden breastfeeding with HIV brought and were leading normal lives that had a more positive outlook. Others had also not overcome their feelings of fear, blame, anxiety and guilt. The women’s psychological reactions have been categorized into fear, hope, anxiety, blame and guilt.

4.6.1 Fear

Fear was one of the main emotions which was described by the women. Many participants were still afraid of transmitting the virus to their children through breastfeeding. On the contrary, a few participants explicitly stated that, they were not afraid to transmit the virus to their children through breastfeeding since they had dealt with their fears in many forms. The rest of the participants could not describe exactly the way they felt in terms of being afraid and were full of uncertainties. Aba described her fear as:

“fear of transmission to my child after breastfeeding is still there. This is because at birth, when the test is done, the child might be HIV negative but later, after breastfeeding for a while, the child may come out as HIV positive. The dilemma too is that, I know that breast milk is the best food for children so sometimes it feels like I have no choice. So actually, it is the fear of transmission to the child that pushes me to pray to God all the time for intervention” **Aba**

Kakraba's fear was such that, she kept on asking herself questions about the possibility of transmission of the virus anytime she breastfed as evidenced by her quote below:

"I am afraid from time to time concerning the possibility of transmitting the virus to the child through breast milk. I know that the breast milk is made up of blood which is given to the child so I keep on asking myself that, "won't I be transmitting the virus to my child through breastfeeding?" **Kakraba**

4.6.2 Hope

Hope is one psychological reaction which was reported by some participants. Some of the women had overcome their negative psychological burdens and they were very hopeful since they led a normal life like any other human being. The only difference is the fact that because they have a chronic infection, they have to be on daily medication. Some participants were very hopeful. Baaba recounted her hope. She narrated that:

"I have hope. This is because of the fact that, by looking at my son, I have no doubt that he will breastfeed successfully and will be HIV negative. He looks so well although he is being breastfed. Also, he has tested negative the first time so as I continue to breastfeed, I have faith and my instinct tells me that subsequent tests will also come out as negative. I have always believed in my instinct" **Baaba**

Araba similarly acknowledged:

"I have hope, I mean that I am encouraged and hopeful that because of God, nothing bad will happen to my child" **Araba**

Some of the participants superstitiously believed that, since they sinned in the form of fornication to contract the virus, nature will make it in such a way that, their innocent children would be spared. Efua reported that, under no circumstance would her child contract the virus through breastfeeding since to her, to be HIV positive is a form of punishment and a child cannot be punished by God in that way. She indicated that:

"no, no, no, no. I'm not afraid and I have faith and hope. I believe that if one has faith, nothing bad can happen. I believe that I am the one who has sinned and the child is innocent so if there should be any punishment, I should be punished with the disease and not the innocent child. So if I am the one who has sinned, I should carry my own cross so every day, I keep on saying that; as for my children, they are out" **Efua**

4.6.3 Anxiety

Anxiety was expressed by participants in the form of uncertainties. As the breastfeeding HIV positive mothers breastfed their children, they had concerns in the form of anxiety. Many participants were anxious about the eventual outcome of their children after the last confirmatory test at eighteen months. They kept on wondering what the results of the HIV test was going to be after the period of breastfeeding since most of the mothers were aware of the fact that breast milk was one of the modes of transmission for HIV from mother to child. Kukua expressed her anxiety as described below:

“I think about it from time to time. I sometimes ask myself certain questions like; what if this breast milk I am giving to this child predisposes her to the HIV? If the child gets the HIV through the breastfeeding, what would I do? I sometimes think about it in such a way that I even wish that I could stop the breastfeeding before the stipulated one year period which I have been instructed to breastfeed. But when I stop breastfeeding abruptly like that, the baby cries a lot and I am forced to give the breast milk again to her out of sympathy” **Kukua**

Similarly, Adwo’s anxiety was also in the form of uncertainties and that left her asking questions anytime she breastfed her infant. She said that:

“Sometimes, I think about it that; ehh what if at the beginning, although the test said HIV negative, what if at one and a half years we go back and do the final test and it becomes HIV positive?” **Adwo**

Efe’s anxiety also stemmed from the fact that she started taking the anti-retroviral medication late into her pregnancy. That raised her concerns about breastfeeding and the possibility of transmitting the virus from mother to child. She had this to say:

“My worry was about the period with which I was put on the medication. I started taking the medication eight months into my pregnancy. I read too from one of the papers that, one must be put on the medication at least fourteen weeks before delivery to increase the chances of the child coming out as HIV negative. I was wondering if my child was safe to be breastfed. When I am there sometimes, I stare at the face of my child and often ask myself “So is this child not going to contract the HIV?” **Efe**

4.6.4 Blame

Some participants blamed themselves for being HIV positive and felt that, if their children contracted the virus through breastfeeding from them, it would solely be their fault.

“Mine is made up of fear, guilt and blame. I sometimes say to myself “As for this one, if this child contracts the virus, it will surely be my fault” I sometimes become anxious and afraid and when that happens, I sit down quietly” **Besiwa**

“... I blame myself that if the child gets the HIV, it would surely be my fault. Therefore, I always blame myself first. Especially when I got to know that my husband was negative, I give all the blame to myself. I also feel very guilty all the time.” **Aba**

“...but I blame myself all the time. Maybe, if I had not allowed myself to be wedded, I might not have gotten this infection which increases the chances for my child to contract it through breastfeeding. Even yesterday, a friend pointed it out to me that, there were too many people at my wedding and spiritually, people with evil spirits used their evil eyes to watch me and that was why I got infected with the HIV. If I had known, I would not have allowed myself to be wedded. I sometimes ask myself “Is it good to marry or it is not good to marry?” **Asaabea**

On the contrary, Araba had an opposite view in terms of blame. She was of the view that, the mother cannot be blamed even if the child contracts the HIV through breastfeeding since the mother may not even know where she got the infection from. She expressed her views about blame as:

“As for blame, I don’t think anyone should blame herself if the child becomes HIV positive through breastfeeding because, we don’t know where this disease is coming from. And when you meet men, you may never know that this is what will happen when I have sexual intercourse with this person. God says that, in all things, we should give thanks to him” **Araba**

4.6.5 Guilt

Blame was always accompanied with guilt. Almost all the participants who blamed themselves also felt guilty from time to time about their decision to breastfeed. Participants were guilty about the possibility of transmitting the virus from themselves to their children through breastfeeding. Therefore, the psychological burden that followed them from the day they decided to breastfeed always lingered on until the day the laboratory test confirmed the HIV status of their children. Kakraba’s report illustrates this situation:

“I feel guilty. I thought to myself that “Since the virus can be transmitted to the child through breastfeeding, then is it not possible that I may be giving the infection to the child as I breastfeed?” When I was asked to breastfeed after delivery, I was psychologically burdened” **kakraba**

Esaaba described her guilt as:

“I was feeling guilty because I had sore nipple. So I thought that, since I had sore nipple, the virus might be transmitted from me to my baby through the breastfeeding” **Esaaba**

Besiwa shared a similar view as follows:

“... (she frowns) Sometimes, I keep on saying that; “Ei, this breast milk which I am giving to this child, although I have seen other people who have done it and their children never contracted the virus, mine could be a different story”. It makes me feel guilty to breastfeed” **Besiwa**

After thematic analysis was used to categorize the findings according to the constructs of the self efficacy theory which is served as a guide for this study, other relevant findings were categorized based on content analysis. Therefore, this aspect of the findings represents data that have been coded and categorized into sub-themes and one broad theme.

4.7 Coping strategies

The main theme that emerged after the process of content analysis was the coping strategies devised by participants to deal with the negative psychological distress or burden associated with being HIV positive and the possibility of transmitting it to their children through breastfeeding. Strategies such as group support, denial, prayer, trust in positive situations of life and hope in ART were used by the participants to cope with their psychological burdens.

4.7.1 Support group

Joining a support group was one of the ways through which participants dealt with their psychological burdens. Participants pointed out that, they joined support groups at various stages of their lives and the groups were very helpful to them. The counseling and sharing of experiences that went on in those meetings brought them hope and a different stance in life. Some of the participants disclosed that, after they joined the support group, they realized that it was not going to be helpful to them so they stopped attending their

meetings. However, some participants were not interested in joining any of such groups since they did not think that, it was going to be beneficial to them in any way.

Besiwa shared that the support group was very helpful and her decision to conceive another child was based on the education she received from the leaders of the support group.

According to her:

“the support group I joined was very helpful. For instance, when I decided to get pregnant, I came and checked my CD4 count and I decided to go ahead and get pregnant because it was high. Also in my community, I have been able to protect myself against STIs. It also helped me to educate others in my community which I thought were on the rough path in terms of those with multiple partners. I even told some of them to use condoms in order to prevent contracting diseases” **Besiwa**

Similarly, Baaba acknowledged that:

“Support group was helpful because I learnt about how to eat nutritious foods, breastfeed, how to take my medications and how to avoid being moody. They emphasized that if I allowed my status to worry me, I would lose so much weight and that would rather make people suspicious that I might be HIV positive” **Baaba**

Araba mentioned that, she first thought that, only few unfortunate people were infected with the virus until she attended one of such meetings. That was when she realized that she was not alone. According to her, that helped her to cope better. She reported that:

“The support group helps me cope a lot. Someone might share his or her experiences which might go a long way to help all of us. Those teachings and sharing of experiences at such meetings were very helpful. Sometimes too when one is home alone, the person might think that he or she is the only person who is HIV positive. But when we attend such meetings, then we get to know that we are not alone” **Araba**

4.7.2 Denial

This section of the findings emphasizes on the use of denial as a coping mechanism. Participants had found ways and means to push their HIV positive statuses away in their minds so that it was always viewed by them as a distant memory. One of the participants had also dealt with her psychological burden by denying the fact that the infection is a chronic

disease which lives with the individual for life. She had referred to the HIV infection as a passing “wind” which would disappear in no time. She reported that:

“This HIV can be a wind. I heard that one can contract it through urination, the surgery that was done for me, from food or even the salon. My husband is negative. It is only myself and my child who are HIV positive. So it is even possible that I had it through the pregnancy. Then I told my husband that, every disease is like the wind and that this one too shall pass.” **Asaabea**

Some of the women used a mechanism that would help them to push the fact that they were HIV positive into the unconscious mind. Others also denied their HIV positive statuses so that there would be no psychological burden as far as breastfeeding is concerned. According to the women, denying their HIV positive statuses helped them to breastfeed without any anxiety or guilt. Esaaba and Aba had the following to say:

“I don’t believe that I am HIV positive that is why I am able to cope with the psychological burden” **Esaaba**

“I always push it to the back of my brain so that I don’t remember that I have this infection at all when breastfeeding. I believe sometimes that, I don’t have the infection at all” **Aba**

4.7.3 Prayer

This refers to the use of prayer as a coping strategy to deal with negative psychological reactions. Almost all the participants firmly believed that, the act of praying would take away the virus from their children in case they contracted it through breastfeeding. They attributed their previous successes in breastfeeding in the context of HIV to the fact that they had a supreme being who was intervening on their behalf. Prayer ran through all of their shared experiences no matter their religious backgrounds. Aba’s prayer was directed in such a way that, God would spare her children even though she was breastfeeding. She had this to say:

“My hope is totally in God. I have put all my hope in God. He is the only one who can help me. So when I start having psychological distress, I start praying immediately. I tell God to forgive me my sins. Like the way I keep on

blaming myself, I tell God that, even if I am the one to be blamed, and if that was the reason why I brought this infection upon myself, He should forgive me all my sins. I tell God to miraculously prevent my children from getting infected with the virus through me. I know that, if the children would get the virus, it would entirely be my fault” **Aba**

Efe felt that, her children would be discriminated against in the community if they contracted the virus and they might not get any help even if they wanted it. Therefore, she always prayed to God to spare her children. She reported that:

“Prayer is one of my coping strategies. Anytime I pray, I tend to tell God that, my children should always come out HIV negative. Due to the disgraceful nature of this infection, if I happen to travel or die in the future, I cannot tell any family member to watch the children and ensure that they take their medication on time” **Efe**

In the same way, Kakraba always prayed and told God to spare her children from contracting the virus. She shared that:

“I pray to God all the time and I have faith that, so far as the child could not contract the virus in my womb, God would see him through till the last test is done. I pray for the child all the time. I pray for him twice a day. Sometimes too during radio broad cast, when the pastor asks us to pronounce blessing on our families, I take the opportunity and pray for my child. At church too, I tell God that, the child is innocent of every form of sin so He should pardon him” **Kakraba**

One of the women was skeptical about the issue of miracles suddenly occurring to take away her HIV infection. She was of that view since she had seen a lot of people who had been deceived by pastors that, they had been healed so they should stop taking their medication only to return later in a worst state since the HIV infection would have progressed to the disease stage (AIDS). She narrated the following about prayer:

“Oh as for prayers, we all go for prayers. But in going for prayers, one must be vigilant, because a fake pastor can tell you that he has miraculously healed you and the virus is no longer in you. Such people who are tricked mostly decide not to come for their medication. But they are always brought back to the hospital worse than before.” **Araba**

4.7.4 Trust in Positive Situations of Life

This section describes how some of the women had lifted themselves up personally to look beyond their circumstances and focus on other positive situations in their lives. Some of the women had encouraged themselves and were ready to face any form of circumstance that was bound to surround them at anytime. Their sense of optimism was so high that, they were comfortable with their lives psychologically. Adwo's trust in positive situations of life was expressed as:

"...when such thoughts cross my mind, I quickly reverse it and tell myself that nothing will happen. Also, I have been asking a lot of mothers who have already had children and breastfed in such circumstances. They also tell me that they passed through the same situation and they were given similar instructions. At the end, their children came out negative after they tested their HIV status after one and a half years of age" **Adwo**

Similarly, Efua and Araba had this to say:

"If I allow it to be my burden I will always panic and brood over the fact that this is the disease that would kill me. Now if I panic and eventually die, who will take care of my children? I have to be strong so that I can grow old in order to see my children grow. So if I think about my status and die right now, if my children grow older, who will tell them about this reality" **Efua**

"You know that, we are the ones who can make ourselves happy in this life. If you are there, and you allow yourself to be depressed and psychologically down, for example if you ask yourself questions like "Ei will this HIV kill me?" then you are doing yourself harm than good. I have lived with HIV for the past eleven years. If I don't tell you my status, you will never know. If you allow yourself, the stigma would rather kill you and the disease will be there after you are dead and gone" **Araba**

4.7.5 Hope in ART

Another way through which participants coped with their psychological burdens was the hope they had in ART. Some of the participants shared that, they only became alarmed when there was shortage of the medication. Most of the participants were optimistic about their circumstances because of the availability of ante retroviral medication for themselves and their children whom they were breastfeeding. The women indicated that, the antiretroviral medication has given them a new sense of hope and it has reduced the probability of the

virus being transmitted from mother to child through breastfeeding. Araba described her hope in anti retro viral medication as follows:

“I also believe that, once the mother is on anti retroviral therapy, even if the child does not receive ART at birth and the mother believes herself, the child might not get the virus from the mother” Araba

Esaaba also reported that:

“As for me, my ability to cope is also because of the fact that I am on ART. The moment it is 8:30, the father of this child reminds me by saying “hei, are you not going to give the animals in you food?” Then I would also ask him “which animals?” then he will respond jovially “the animals in your stomach”. Then we would all laugh jovially about it” Esaaba

Kakraba gave a scenario. She narrated that:

“when I get here, I know that, the medication would be given to me. I really enjoy taking the medication because when I take the medication regularly, it brings the intensity of the viral load down. Medicine is like pouring an insecticide onto an insect. The insect might not die but may be weakened so one must continue pouring the medicine to keep the insect down. The moment one stops, the insects might resurrect and regain confidence and might even multiply” Kakraba

In summary, the women motivated themselves to breastfeed knowing that, there is a possibility of transmitting the virus through breast milk. Some of the factors that motivated them to continue breastfeeding till the stipulated time frame included previous personal experience with breastfeeding, personal beliefs in God, hope in experts and anti retroviral therapy.

The women reported that, they had to take the bold initiative to choose breastfeeding as their infant feeding option due to certain considerations. Most of them had to breastfeed to keep curious neighbours out of their way. This is because in Ghana, every mother is expected to breastfeed and those who refuse to breastfeed are automatically branded as HIV positive.

Motivation by other HIV positive mothers, experts' advice and poverty also influenced the women's decisions to breastfeed.

Although spousal support was surprisingly available to most women, one of them reported that there was a lot of hostility she was facing at home. Some also kept their HIV positive status from their partners because of the fear of their reaction to the news. Significantly, siblings, midwives and counselors had influences on the breastfeeding attitudes of the women.

Some of the participants had overcome their psychological burdens to an extent that, they were encouraging other mothers in similar situations to breastfeed with hope. Some of the breastfeeding HIV positive mothers were still sad about their situation because of the anxiety that is associated with the uncertainty of transfer of the virus from mother to child.

Coping strategies such as denial, prayer, support groups and hope in anti retroviral therapy were used to overcome some of the negative psychological reactions faced by the women. The expectation of the women was to be able to breastfeed for the recommended one year period for their children to emerge as HIV negative.

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter discusses the findings based on the available relevant literature on the problem investigated. The demographic characteristics are discussed first, followed by the themes.

5.1 Demographic characteristics

The breastfeeding HIV positive mothers who participated in the study were all middle aged. Their ages automatically put them in the matured group of mothers according to the community's categorization and expectations. Therefore, the society expects mothers at such ages to be more responsible than younger mothers. This may have influenced their decisions to choose exclusive breastfeeding as their infant feeding option for the first six months of their children's lives. This assertion is in contrast with a study which concluded that, maternal age does not have any significant role to play in the infant feeding choices of mothers (Gil et al., 2015).

The women were either unemployed or were self employed which provided a certain sense of flexibility of time. Flexible employment schedules for parents has been found to be a strong determinant in mothers' ability to successfully breastfeed their young to the stipulated time frame (Atabay et al., 2014; Kimani-Murage et al., 2015; Kobayashi & Usui, 2014; Kottwitz et al., 2014; Stewart, 2014). This trend seem to explain the reason why all the mothers were at various stages of their stipulated time period for breastfeeding and were determined to continue till the end. This might not have been the case if the mothers were corporate workers who were into formal jobs that demanded fixed time schedules.

None of the women in this study had any form of tertiary education. Therefore, if the women were all successfully breastfeeding as directed, then it may not be as a result of the influence of high formal education. This is not in consonance with the findings of some

studies that found out that, high formal education had a positive influence on breastfeeding rates (Srivastava & Awasthi, 2014; Veghari et al., 2014). Therefore, other factors could be responsible for the high breastfeeding rates among the women and not high formal education.

Concerning number of children, all the women had more than one child and most of them had previously breastfed a child or two. Could this be the reason why most of the women were eager to breastfeed their current infants? Perhaps, the reason for such eagerness could be attributed to the multiparity of all the women who participated in the study. This is consistent with some studies that reported that, multiparous women were more likely to breastfeed their children due to the fact that, breastfeeding is not viewed as a threat. Such women have also built self confidence in their ability to breastfeed because of their previous experience (Aluş Tokat et al., 2010; Dai & Dennis, 2003; Dennis, 2006; Ip et al., 2012) .

5.2 Self motivating factors

Self motivating factors are factors that encourage an individual to embark on an activity without any external influences. Self motivation has been identified as one of the most powerful ways through which individuals are able to accomplish a task. It has been documented that, exclusive breastfeeding and duration is improved tremendously when mothers motivate themselves (Glassman et al., 2014; Loke & Chan, 2013; Wu et al., 2014; Zhu et al., 2013). In this study, women were self motivated by their previous experiences, belief in God, hope in experts and anti retroviral therapy.

Women with HIV who had previously successfully breastfed their babies to emerge as HIV negative were highly motivated to continue to breastfeed their current children. They were extremely optimistic that, the children they were breastfeeding at the time of the study would also end up as HIV negative because of previous experience with breastfeeding. The women gave different accounts on how uncomfortable and fearful they were when they were

asked to breastfeed their previous children. This was because of the awareness that, HIV could be transmitted through breastfeeding. This current finding endorses the findings many studies done around the globe about self efficacy and breastfeeding (Aluṣ Tokat et al., 2010; Dai & Dennis, 2003; Gerhardsson et al., 2014; Gregory et al., 2008; Loke & Chan, 2013; Noel-Weiss et al., 2006; Otsuka et al., 2008; Wheeler & Dennis, 2013; Zhu et al., 2013). This may be as a result of the fact that, previous experience has been noted to be the highest source of self motivation so far as breastfeeding is concerned. To the women, personal previous experience is much more believable compared to a situation whereby someone describes or narrates her experience. It is therefore necessary that, all HIV positive primips are encouraged to breastfeed according to the WHO guidelines so that in their subsequent deliveries, they will have their previous personal experiences to fall on as a source of motivation.

Experts and other health workers trained to attend to HIV positive mothers have a lot of impact on the HIV positive mothers' infant feeding choices. These experts are professionally trained to handle breastfeeding mothers living with HIV. According to the women, they offer different forms of support for them to be able to cope with the demands of breastfeeding and motherhood in general, in the context of HIV. The women pointed out that, the experts were their source of motivation in the sense that, they regarded every advice given by them as important and true. The women therefore identified the experts as their source of hope and believed their words of encouragement to continue to breastfeed. This finding is consistent with a study conducted in Tehran whereby the participants attributed their inability to exclusively breastfeed their children to the fact that, their physicians advised them not to breastfeed (Dalili et al., 2014). On the other hand, the finding is contrary to the findings of another study conducted at Hong Kong whereby one to one breastfeeding support given to breastfeeding mothers did not increase duration and the rate of exclusive breastfeeding

(Wong et al., 2014). This present finding may be as a result of the way health professionals are regarded in this part of the world. Due to ignorance, low level of formal education and a general disinterest in reading in the Ghanaian society, most people hardly question the words of health professionals and take every direction received at the hospital as the ultimate. Therefore, most people trust all information received at the hospital without questioning. Unfortunately, some health workers at HIV treatment centres who are supposed to be abreast with current information are not able to do so as expected. A study conducted in Papua New Guinea had findings that suggested that, the health workers were not on top of issues when it came to the issue of feeding guidelines (Vallely et al., 2013). This seems to suggest that, health workers must ensure that, most of their counsel and direction are accurate since most people in Ghana take their instructions seriously. Moreover, most of their clients are semi literates and illiterates and therefore, the health workers at the ART centre are their only source of information so far as infant feeding guidelines are concerned.

Anti retroviral therapy has normalized the lives of a lot of people living with HIV. Unlike the dark ages when HIV diagnosis was a death sentence, the women expressed that, their self motivating factor is the presence of anti retroviral therapy. As such, the ART gave the women a new source of hope that, the HIV would not be transmitted to their children through breastfeeding. This finding is similar to that of a study conducted in Uganda about how access to ART has served as a beacon of hope for HIV positive women. Those women in Uganda shared that, they were able to live like all the other women in their society. Therefore, they were able to meet the society's expectation of pregnancy and motherhood (Kastner et al., 2014). The ART has perhaps given the women the physical strength to be able to go about their normal duties as mothers without having to rely on others to attend to their needs. The women were also able to face the challenges of motherhood since it is very demanding in our part of the world where such women cannot afford to hire people to help

with the care of the child. Also, the extended family system has virtually broken down in the cities as society is becoming more modernized and many people are shifting towards the nuclear family system. If the extended family system was still practised in the cities, the women may have had help from other family members till the child became independent thereby relieving the mother of such demands. The women were able to successfully breastfeed till the stipulated time period. Successful breastfeeding by the mother is virtually a survival plan for the child since it has been reported in a number of studies that, cessation of breastfeeding in children born to HIV positive mothers exposed them to diarrheal diseases which led eventually to high mortality among such children (Harris et al., 2009; Kagaayi et al., 2008; Kuhn et al., 2008; Onyango-Makumbi et al., 2010). Therefore, access to ART must be prioritized in all centres where mothers receive services so that, mothers will be motivated to live normal lives.

Religious beliefs involve situations whereby a group of people believe in a supernatural being who can be felt but cannot be seen and yet has a perceived influence in the day to day activities of a group of people. These beliefs are enshrined in the culture of the society in which an individual lives. All the women had a strong conviction that, there was a supernatural power above who motivated them to breastfeed their children. According to the women, this supernatural being was always reassuring them through dreams and other ways for them to be at peace with their decision to breastfeed although they were aware of the possibility of transmitting the virus to their infants. This present finding supports reports across parts of the world where the culture of the people play a major role to determine the infant feeding decisions by mothers (Maharaj & Bandyopadhyay, 2013; Serizawa et al., 2014). This cultural practice whereby religion plays a role in the decision of the mother is also influenced by the place of residence. This present finding had a contrary view to that of a study conducted in Ghana which found that, with the exception of mothers in the Volta

Region of Ghana, most children in other parts of the country which includes the setting of this current study are not likely to be exclusively breastfed due to cultural practices and beliefs (Tampah-Naah & Kumi-Kyereme, 2013). Perhaps, this trend may be due to the fact that, that study was done among mothers in the general population and this study was done among mothers living with HIV. Therefore, their orientation and their perceptions about the intervention of God and their personal beliefs in God may have been different. The cultural and religious backgrounds of the women living with HIV must always be taken into consideration during their care and specific interventions should be tailored to suit their religious perspectives. This would ensure that, the services that are provided to them are successful for both mother and infants to benefit.

5.3 Factors influencing initiation of breastfeeding

Initiation of breastfeeding is a crucial act that can boost the chances of an infant's survival. Early initiation of breastfeeding after delivery is highly recommended for it to achieve the purpose for which it is intended. The women initiated breastfeeding based on a number of different factors. These factors were avoidance of suspicion, motivation by other HIV positive mothers, experts' advice and poverty.

The women reported in this study that, due to the stigmatization they face, they try as much as possible to hide their HIV status from family members, friends and the society at large. Some of the women admitted that, for that same reason, their husbands were not aware of their HIV positive status. Therefore, to avoid suspicions by the people in their lives who were unaware of their HIV positive status and the general public, they try to mingle with everyone and perform all the duties and activities that is expected of a mother in the community. One of the main duties of a mother in the Ghanaian society is to breastfeed her young ones. Failure to breastfeed infants is frowned upon in the Ghanaian society and viewed with lots of suspicions and speculations. The women then had to initiate breastfeeding like

any other mother in the society to avoid suspicions. Similar to studies conducted in Malawi, Kenya, Botswana, Uganda, United States and Bangladesh, women who never breastfed their infants were automatically branded as HIV positive. That notion pushed most of the mothers in those studies to breastfeed their young no matter the consequences in order to avoid suspicions (Chopra & Rollins, 2008; Levison et al., 2014; Sultana, 2014). Protection of identity and avoidance of suspicion seem to prevail over the urge to avoid mother to child transmission of HIV through breastfeeding. This is because women who are found to be HIV positive in the Ghanaian community are automatically branded as sinners, fornicators and society misfits. They are severely stigmatized and the stigmatization is extended to their children and other members of the family partly due to the fact that, the main mode of transmission is through unprotected sexual intercourse with an infected person. Some of the women reported that, they would have gone ahead to breastfeed even if the nurses had told them otherwise due to the above reason. This is consistent with the findings of the study conducted in the United States whereby the women were asked not to breastfeed by their physicians but did contrary to their counsel because of the issue of suspicions and stigmatization (Levison et al., 2014). The whole society must be educated to avoid stigmatization of people living with HIV for them to freely come out and lead normal lives devoid of suspicions. That may encourage candid discussions about the issue of breastfeeding and HIV. It may also curtail the rate of transmission from one person to the other.

Concerning motivation by other HIV positive mothers, the women emphasized that, watching other women breastfeed their infants for them to emerge as HIV negative was a positive source of motivation to them. Sometimes, other mothers shared their experiences with breastfeeding in the context of HIV to boost their self confidence in the act of breastfeeding. Some counselors also showed them pictures of healthy children who were HIV negative although their HIV positive mothers breastfed them. This approach reassured the

women and gave them hope. Other studies also found that, vicarious experience whereby others in similar situations share their thoughts is the second highest source of encouragement to people who are about to perform similar tasks. The sharing of such success stories enlightened mothers in the current study on how to go about the process of breastfeeding. Such studies have also reported a positive relationship between breastfeeding and vicarious experience (Dai & Dennis, 2003; Entwistle et al., 2010; Gerhardsson et al., 2014; Glassman et al., 2014; Hoddinott et al., 2010; Ip et al., 2012; Leahy-Warren et al., 2012; McCarter-Spaulding & Gore, 2012; McQueen et al., 2011; Street & Lewallen, 2013; Wu et al., 2014). This assertion may be due to the fact that, the human senses are powerful tools that help individuals in decision making. Those senses may also determine whether a person is at peace with an activity being performed or otherwise. Therefore, watching other HIV positive mothers breastfeed and hearing from other HIV positive mothers about their previous positive experiences may help new HIV positive mothers decide on their infant feeding options with an optimistic approach. Therefore, the “model of hope” approach adopted by the centre whereby other HIV positive mothers are trained as counselors to counsel others must be improved to boost the self motivation of new HIV positive mothers.

Experts’ education and advice on breastfeeding is geared towards getting the mothers to appreciate the importance of breastfeeding in the lives of HIV exposed infants. The many benefits of breastfeeding are emphasized to the women during such educational sessions. Some women initiated breastfeeding due to experts’ advice. The women were initially unwilling to breastfeed their infants due to various unfounded reasons with no basis. As such, replacement foods were bought before delivery. But for the timely intervention of the health counselors who emphasized on the need for HIV exposed infants to be breastfed, the replacement foods would have been the infant feeding choices of the women. This present finding corroborates that of a study conducted in the United States by Odom et al who

reported that, women were more likely to initiate breastfeeding if their health care providers preferred breastfeeding as an infant feeding option (Odom et al., 2014). Also, in Southern Ethiopia, women narrated that, an educational intervention by their health personnel positively informed their decision on breastfeeding initiation, exclusivity and duration (Adugna, 2014). The women may have taken heed to the advice of the health counselors due to the reverence they attached to them and the 'weight' that is put on their words. Most people in the Ghanaian society revere health workers and therefore take them seriously. Some of them hardly crosscheck information given at the hospital by health personnel. Also, these women were either semi illiterates or illiterates. Therefore access to other sources of seeking information such as internet may be unfamiliar. Information seeking may be limited to the ones verbally given by health personnel at the hospital thereby limiting access to information. Health personnel at such specialized units must be up to the task and abreast with the latest scientifically approved information on infant feeding choices for HIV exposed infants.

Breastfeeding is a cost effective measure that reduces the economic burden of the mother and the family at large. The women chose to breastfeed due to harsh economic barriers. Due to the possibility of change in test results of infants after breastfeeding, the women would have avoided breastfeeding to maintain an HIV negative test results at birth. This is in line with findings of a study by Vanderlinden et al. (2014) in which poor immigrant mothers had higher chances of breastfeeding due to their economic statuses. The authors went on to report that, middle income earners and rich mothers were likely to choose replacement or complementary feeding options. This indicates that, affordability and purchasing power allow people to have alternatives. More often than not, the easiest option is chosen. The inconveniences associated with exclusive breastfeeding whereby the mother solely becomes responsible for the feeding of the infant and which is repeated two hourly on the average may have been exchanged with the more relaxed feeding choice whereby anyone can be delegated

to feed the infant with or without the mother. Apart from the above possible reason, the HIV positive mother is also confronted with the possibility of transmitting the virus to the infant through breastfeeding. The fear of transmission of the infection, coupled with the inconveniences that may be involved in the practice of exclusive breastfeeding could have informed the mothers to choose other feeding options apart from breastfeeding. However, the cost of artificial infant food may have urged the women to possibly consider breastfeeding as their infant feeding option. Poverty seemed to be working in favour of these infants in terms of the feeding option chosen by their mothers. The women would have given artificial infant foods if they could afford it. Nonetheless, this is not to suggest that, poverty is an advantage to such infants since it has other negative impacts in the lives of such infants. It is imperative that, health workers intensify the education on the benefits of breastfeeding to get the mothers to appreciate breastfeeding as a life saving measure for infants exposed to HIV.

5.4 Role of social persuasion

Most individuals live to please significant others and to be accepted by the general population at large. The women narrated how the opinions of their spouses, siblings, counselors, midwives and members in the community affected their willingness to breastfeed for the recommended time frame.

About spouses, most of the women had a lot of support from their partners and that played a major role in the decision to breastfeed. With permission, the men were counseled alongside their partners to understand the dynamics of breastfeeding in the context of HIV and how important their support was needed for successful lactation and infant survival. Some of the men were so enthused to ensure successful breastfeeding to an extent that, they set out to remind their partners to take their ART when the time was due. At certain times, when the mothers were helpless and afraid of transmitting the virus to their infants, it was their men who encouraged them to continue to the end. On the other hand, there was a

peculiar case whereby one woman reported hostility from her husband on her decision to breastfeed. However, he also cooperated after he had been counseled by the nurses at the centre. It is necessary to note that, some of the women had not disclosed their HIV statuses to their partners for fear of rejection. This current finding is consistent with Morfaw et al's (2013) systematic review on the role male partners played in prevention of mother to child transmission of HIV. In that review, most of the women had not revealed their HIV status to their partners for fear of stigmatization. Others admitted facing either rejection or support from their partners (Morfaw et al., 2013). Similarly, on the issue of refusal to disclose HIV status to male partners, other studies have reported similar findings whereby such women hid their HIV positive statuses from their partners (Kanniappan et al., 2008; Leshabari, Blystad, Paoli, & Moland, 2007). The women who enjoyed total support from their male partners expressed that, they experienced little or no stress and that helped them to breastfeed successfully. This is also consistent with the findings of Chinkonde et al (Chinkonde et al., 2012). The support given to the women in this present study may be due to the changing roles of men in the society due to modernization and culture infiltration. In the past, typical Ghanaian men were considered weak if they showed any form of concern and affection for their children openly. Child care was the sole responsibility of the woman and the men pretended to be unconcerned and unsupportive. Without modernization, it may have been difficult to get these men to go to the hospital with their wives for them to be counseled on the importance of being supportive of the health needs of mother and child. This seems to suggest that, although modernization has its own negative consequences, it has brought a lot of positive dividends.

The women were more comfortable disclosing their HIV positive statuses and their decision to breastfeed to their female siblings than male siblings. All the participants had disclosed their statuses to their sisters including those who refused to inform their male

partners about the situation. Those sisters were highly supportive of their infant feeding choice of breastfeeding. The sisters kept in touch with them very often and sometimes went to the extent of reminding them to take their medication regularly. This may perhaps be due to the understanding nature of females towards feminist roles like motherhood. Women may also have the listening ear for their siblings in such situations than their male counterparts. The closely knit nature of the African society may have influenced the women's decision to inform their female siblings since that system makes people obliged in one way or the other to inform at least one close relative as found in Visser et al.'s findings. In that study, it was disclosed that, the mothers deemed it as a sense of responsibility to inform close family members about their HIV positive statuses (Visser et al., 2008). The women may perhaps be afraid of stigmatization and discrimination by other extended family members. That seems to be the reason why they limited disclosure to only female siblings and a few other people in some cases. Studies have reported discrimination and rejection by family members whom HIV positive mothers had confided in (Chinkonde et al., 2012; Kanniappan et al., 2008; Rahangdale et al., 2010). This feminine support brought a lot of comfort and reassurance to the breastfeeding mothers. Such mothers can therefore be encouraged to willingly disclose their status to their sisters if they feel that, such individuals would provide the much needed support for successful breastfeeding and weaning.

This contemporary study found that, the trained HIV/AIDS counselors at the hospital were the main people who persuaded the HIV positive mothers to breastfeed successfully. The women praised the efforts of the counselors in making them understand the whole concept of breastfeeding with a chronic infection such as HIV which could be transmitted through breastfeeding. The counselors took time to explain the reasons why it was necessary for them to breastfeed for one year according to the World Health Organization's feeding guidelines. According to the women whose main source of information about their condition

was from those health workers, the counselors were professional and knowledgeable in their work to encourage them to breastfeed successfully. This is in contrast to a study conducted in New York by Sanders who found out that, the general attitude of health workers towards HIV positive mothers was negative and discriminatory in nature (Sanders, 2008). Other studies with findings that confirmed hostilities also stated that, the health workers who were supposed to be the beacon of hope for HIV positive mothers ended up maltreating them (Leshabari et al., 2007; Levy et al., 2010; Piwoz et al., 2006). In this present study, the counselors, being knowledgeable and skilful was not in line with studies that reported that, health workers were not abreast with current feeding guidelines by the World Health Organization. Those health workers were always giving conflicting information about the rate of transmission of HIV from mother to child (Leshabari et al., 2007; Levy et al., 2010; Piwoz et al., 2006). The possible explanation to the attitude of health workers towards HIV positive mothers may be due to the training that had been given to them on how to handle HIV positive mothers. The situation may have been different if those health workers had not been specially trained to handle HIV positive mothers. Therefore, all health workers must be trained on ways of handling people living with HIV. There are also specially trained health workers on the field who attend to the welfare of people living with HIV. Their knowledge, skill, understanding and attitude towards people living with HIV are different due to the special skills acquired through training. The women's encounters with counselors were positive. The counselors were deemed as the source of hope who answered their nagging questions and brought immense hope into their lives. Counselors in a study conducted to find out the experiences of HIV positive mothers during testing of the status of their children were similarly commended by the mothers (Shannon, 2015). The mothers in that study pointed out that, the support received from their counselors was what kept them going and helped them to cope with the numerous psychological distresses they had to endure (Shannon, 2015). That

finding was in line with the current study's findings. On the contrary, the findings of a study from four African countries which included Botswana, Malawi, Uganda and Kenya revealed that, the counselors at the HIV units were not abreast with current information about infant feeding guidelines for HIV exposed infants. Moreover, the counseling and support that were given to the mothers in that study was shallow and full of wrong information (Chopra & Rollins, 2008). Perhaps, the counselors in this contemporary study were more experienced and up to the task that has been allocated to them. The sense of urgency attached to the needs of people with HIV must be the focus of training for most HIV counselors to serve as a reminder consistently for them to maintain the positive support being given to people living with HIV. This is because they are the focal point of contact for mothers and pregnant women living with the virus and their receptive nature would be sent back into the community. The word of the mothers may influence many others in similar situations to access healthcare which may help reduce the spread of the virus from mother to child and help Ghana draw closer to the aim of achieving the millennium development goal which is meant to prevent new infection among children.

As stated above, early initiation of breastfeeding is key to the survival of HIV exposed infants. The first point of contact with a health worker after delivery is with a midwife. Therefore, the opinions of midwives may play a significant role in the initiation and duration of breastfeeding. A study conducted in Malawi found that, all the participants acknowledged the immense impact of support and education from health professionals on successful breastfeeding (Levy et al., 2010). Unfortunately, most of the women reported negative encounters with their midwives during delivery. The midwives were extremely hostile to the women and they were not supportive of their decision to breastfeed. The women felt rejected and judged during their stay at the hospital after delivery by those midwives. The midwives also made derogatory remarks that were suggestive of their disapproved position in

terms of their decision to choose breastfeeding as the infant feeding option. Similar findings also affirmed the above facts about the hostilities of health workers who are supposed to have known better and given comfort to such vulnerable group of mothers (Chinkonde et al., 2012; Rahangdale et al., 2010; Sanders, 2008; Yeap et al., 2010). Nonetheless, a few women reported otherwise. To those women, their midwives were more understanding and supportive of their decision to breastfeed. A study by Sanders in the United States singled nurses out as the most caring group of health workers who understood the plight and dilemmas of breastfeeding HIV positive mothers (Sanders, 2008). That study also reported a high rate of hostility among other health workers with the exception of nurses. The current finding about hostile midwives may be attributed to lack of training on how to care for mothers living with HIV. Such midwives may have been misinformed and not up to date on issues relating to HIV infection and breastfeeding. Also, the cultural background of such midwives may have played a role because prejudice and stigmatization are very prominent in the Ghanaian society about HIV and breastfeeding. The society believes that, every HIV positive mother who breastfeeds her infant automatically transmits the virus to the infant. Therefore, breastfeeding of an infant by an HIV positive mother is viewed as an act of cruelty and insensitivity. Public education on breastfeeding in the context of HIV must be initiated and intensified on the mass media because such issues are largely ignored by the main stream media organizations. All health workers, especially midwives must be trained periodically on breastfeeding and HIV to ensure that, they are abreast with the most current empirical information about the condition. That would go a long way to prevent situations whereby HIV positive clients would feel intimidated to approach their midwives for certain clarifications.

The community has its traditions, norms, customs and mores. Anyone who does not conform to those traditions is considered a social misfit. Such an individual is shunned and

judged severely by the so called 'righteous' ones. Although there are other ways through which a person may acquire HIV, members of the community focus on the unprotected sex route through which the infection is transmitted. Therefore, individuals who are found to be HIV positive are stigmatized by virtually all members of the society. Due to this reason, the women refused to inform the larger community about their HIV statuses to avoid being condemned for breastfeeding their infants. This saved them from being chastised for their decision to breastfeed. Members of the community are fond of rebuking breastfeeding HIV positive mothers because of the general notion that, breast milk automatically transmits the virus to all infants who are breastfed. This conforms with the findings of a study in Iran where members in the community stigmatized people living with HIV because such people were deemed unclean and shameful (Karamouzian et al., 2015). Currently, HIV is hardly discussed in the public domain because other dreadful and more infectious conditions such as Ebola have been deemed more important. Furthermore, people living with HIV are currently living normal lives like any other individual living with a chronic infection. Therefore, HIV may not be attracting the attention of the media presently. As a result, stigmatization may still be a major negative issue associated with HIV infection in Ghana. That may explain why most of the women restricted the news of their HIV positive status to themselves and a few members of their families.

5.5 Psychological reactions

There is an array of emotions that linger in the minds and hearts of breastfeeding HIV positive mothers. Some are positive emotions that promote breastfeeding. On the other hand, others are negative and may suppress the flow of milk and dampen the spirit of the breastfeeding mothers. The women reported fear, hope, anxiety, blame and guilt.

Although the chances of transmitting the HIV to infants through breastfeeding reduces drastically when a mother is given anti retroviral prophylaxis, (Kagaayi et al., 2008;

Kuhn et al., 2008; Leroy et al., 2008; Onyango-Makumbi et al., 2010; Peltier et al., 2009; Shapiro et al., 2010) the women expressed fear. The fear of transmission was so high in some women to an extent that, they ever considered terminating the act of breastfeeding. The findings are similar to that of studies conducted by Kanniappan et al (2008) in India, Visser et al (2008) in South Africa and Levy et al (2010) in Malawi. In those studies, fear of transmission to infants through pregnancy and breastfeeding was a matter of concern to most of the mothers (Kanniappan et al., 2008; Levy et al., 2010; Visser et al., 2008). The inconveniences involved in living with a chronic infection such as HIV may have been the possible reason why most mothers were afraid of transmitting the virus to their infants. Contracting the virus means that, the child would have to be given anti retroviral prophylaxis for a period of time before a possible cure is found to treat the infection in the future. This may also predispose the child to stigmatization (Simbayi et al., 2007) in a conservative culture such as Ghana where people living with HIV are highly discriminated against. Perhaps, the possibility of side effects after prolonged exposure of their children to the anti retroviral medication if they contract HIV may also be causing the fear in the mothers. Systems must therefore be put in place to ensure that prevention of mother to child intervention programmes reach the masses in all health facilities, especially private hospitals where a lot of the women may resist the HIV testing during pregnancy.

Anxiety was also mentioned as one of the emotions the women experienced which always led to persistent frustration. The women were anxious to hurriedly finish breastfeeding and get their children tested. The women were uncertain about the future prediction of their children's HIV status. They expressed this emotion through questioning the act of breastfeeding instead of choosing other food supplements. This resulted in frustration anytime their children breastfed. Some imagined the virus passing through the breast milk into their children's mouths thereby increasing their sense of frustration.

Frustration in HIV positive mothers has been reported in some studies (Rahangdale et al., 2010, Levy et al., 2010) which is consistent with the current findings. The anxiety may be heightened in the women because of the waiting period involved in confirming the HIV positive status of their infants. The infants go through a series of tests from birth till eighteen months when the final confirmatory test is done. So it is only at eighteen months when the mother can ascertain the HIV status of her infant. A study conducted in the United States found that, mothers went through trauma and stress during each test until the results of the test was released (Shannon, 2015). This therefore has culminated in the state of uncertainty anxiety and frustration in the women. The anxiety often reduces the moment the test results are disclosed. It may be less stressful for the women if technology is improved in such a way that, the waiting period for the last confirmatory test that determines the HIV status of infants is shortened.

The infant is widely considered as innocent and blameless. Therefore, any mishap that occurs to infants as a result of transmission through body fluids from mother to child is vehemently scrutinized with all hands pointing to the mother. Blame was always an antecedent to guilt among most of the women. Blame was a deep seated feeling that emanated anytime thoughts of possibility of their infants contracting the virus flashed through the women's minds. Blame was a catalyst for psychological distress that left the women wondering how their children's future would eventually unfold. The women reported that, inwardly, they felt a sense of responsibility to protect their children as every normal parent does. Therefore, in a situation whereby their actions put their own children in jeopardy was psychologically burdening not to talk of thoughts of harming them indirectly. This contemporary finding is like that of other studies whereby the mothers always blamed themselves for being responsible for whatever their infants were going through (Doherty et al., 2006; Moland, Paoli, et al., 2010; Sanders, 2008). Contrary to such views, one woman

had a different perspective so far as blame was the subject matter for discussion. She was of the view that, the mother can never be held responsible if the child contracted the virus through breastfeeding. Could it be that, the woman had overcome her psychological burden of blame and was leading a more positive lifestyle? The blame could be as a result of the fact that, the rate of HIV transmission through accidental means is minimal. A lot of the women may have felt that, having unprotected sex may have predisposed them to the virus thereby making them feel responsible for their HIV positive statuses. The women may have concluded that, the act of engaging in unprotected sex that led to contraction of the virus could have been avoided. HIV counselors must place emphasis on psychological reactions of clients and focus on activities that can reduce the burden of blame on breastfeeding HIV positive mothers.

Guilt always resulted in blame. The moment blame took centre stage, it was quickly followed by guilt. The women reported that, their guilt knew no bounds anytime their children breastfed and also during testing to find out whether the virus was present in the blood of their infants. This finding is consistent with other studies that reported guilt as one of the psychological burdens that afflict most breastfeeding HIV positive mothers (Doherty et al., 2006; Moland, Paoli, et al., 2010; Sanders, 2008). Comparing this present finding with a study conducted in the United States, the guilt of the mothers increased dramatically anytime phlebotomy had to be performed on their children to determine whether they were infected or otherwise with HIV (Shannon, 2015). The desire for every mother is for her children to live normal lives free from discrimination, isolation and dejection from other people in the society. When this normalcy is seemingly threatened, the impact on the mother physically, socially and psychologically can be devastating. That desire may have increased the women's guilt. The thought of a surviving child growing up to ask questions about how he or she contracted a chronic infection puts a burden of guilt on the mother. Counselors must always

assess breastfeeding HIV positive mothers for guilt so that the much needed help can be offered. The counselors must adopt a non judgmental approach that encourages such conversations without rebuke. This may be life saving and essential since fear of disclosure makes it impossible for most of the women to express their frustrations to others in the community.

In the midst of all the negative psychological reaction to the act of breastfeeding in the context of HIV is hope. Some of the women had a glimmer of hope that at the end of the one year breastfeeding period, their children would be uninfected with HIV. This is similar to a study by Sanders who reported that, in the midst of the frustration, guilt and fear was hope. The thought of children by the mothers represented continuity and that brought a sense of hope in the future and normalcy (Sanders, 2008). On the contrary, other studies reported fear and frustration without any hope in sight (Rahangdale et al., 2010, Levy et al., 2010). This could probably be due to positive previous experience with breastfeeding. It was noted that, women with positive previous experience with breastfeeding whereby their children emerged as HIV negative were more hopeful for similar occurrence with current children. Another possible reason could be the improvement in the quality of anti retroviral medication which has turned HIV infection from a death sentence into a chronic infection which can be managed for the individual to lead a normal lifestyle. Better improvement in the medication regimen which may possibly change the daily medication intake into one tablet per week can further normalize the lives of people living with HIV especially the breastfeeding mothers and give them hope to face motherhood.

5.6 Coping Strategies

The women had to find different ways to mitigate the psychological reactions they encountered on daily basis. Among the coping strategies adopted by the women to counteract

the emotions were joining support groups, denial, prayer, trust in positive situations of life and hope in anti retroviral therapy.

Support group is one of the mechanisms or avenues that have been put in place to address the plight of people living with HIV. Such groups are managed by individuals with non-governmental organizations. The broad objective of such groups is to bring together people living with HIV under one roof for them to share their experiences. Such groups are very supportive if efforts are made to address problems as a group. The women reported that, the various support groups they joined were extremely helpful. Some recalled how such meetings helped them to take critical decisions such as when to get pregnant. It has been observed that, in the multitude of counselors, there is comfort. Maybe, that may explain why most of the women reported positively about the concept of support group as a coping strategy. Perhaps, the way such groups are organized to outsource professionals to educate members on the infection and the disease process may also contribute to the high rating it received from the women. It is imperative that, such groups are regulated by the Ministry of Health so that it would not turn into a venture whereby vulnerable people would be taken advantage of. The support groups must be registered under one umbrella and the mothers with HIV should be encouraged to join such groups in order to enjoy the full benefits of what is offered. Also, when such groups are well organized and monitored, the kind of information given to the mothers may be scrutinized to avoid the spread of wrong information among the general population.

Denial is the brain's way of dealing with stress which involves mentally refusing to accept the truth (Mazzoni, Clark, & Nash, 2014). This mechanism has both advantages and disadvantages. The advantage could be that, it helps individuals to deal with stress in a positive manner. On the other hand, it may lead to a situation whereby an individual accepts truth as false and therefore refuse to get help. Some women reported that, since they were

told of their HIV positive status, they have purposefully pushed such information out of their minds and pretended to be HIV negative. To them, that helps in alleviating the psychological distress which they face on daily basis. Denying their HIV status was a way of dealing with the news in such a way that, they could lead normal lives like any ordinary mother in the community. The women reported that, the long waiting period of eighteen months to confirm the HIV status of their children increases their psychological burden as they breastfeed. Therefore, one of the ways to ignore the brain's response to such stress is to deny the existence of HIV in their blood or body fluids like breast milk. Every mother wants to have a normal healthy child without any blemish. Therefore, the thought of possibly transmitting a deadly virus to a child through breast milk may be thought provoking and stressful. Therefore, the women may deny the existence of the virus in order to feel good about the act of breastfeeding. That may boost their confidence and prevent unnecessary psychological torture. However, counselors must probe deeply during questioning to find out mothers with such coping strategies and encourage them to start taking anti retroviral medication. This is because of the possibility of denying to a certain level whereby the medication may be ignored. This may trigger a series of viral activities in the body that may endanger the lives of both mother and child.

Prayer is a means of communicating to God in both the spiritual and physical realms. Prayer as a coping strategy was adopted by almost all the women with the exception of one. To the majority of the women, they serve a supreme being who does not forsake them. That supreme God is the one that consoles them through the words in either the Bible or Quran. Therefore, their thoughts, worries and feelings were channeled towards this God who was mightier than anyone on earth. Such hope and proclamations allowed the women to pour out their hearts' desires which is healing in itself. The women were therefore optimistic that, once they had channeled their worries to their God through prayer, their God would console them

in all ways. The typical Ghanaian society is made up of people who believe in the spirit of God and His existence. Most of them worship God with the hope that, all their problems would be solved eventually. Therefore, it may not be surprising to find most of the women admitting to the fact that, God was their source of inspiration.

On the other hand, modernization and acculturation may have influenced the only woman who believed in practicality rather than supernatural beings. To her, believing in God alone was not enough to solve her problems. She was more practical and open to the fact that, praying and not taking medication would cause disease or infection relapse which may put the lives of the mother and child in jeopardy. Therefore, she had more faith in the medication than prayer. Due to the influence of culture on the lives of individuals, counselors must always make it a priority to direct their clients to cope with psychological burdens by believing in the God they serve. On the other hand, counselors must conscientize the mothers not to neglect the physical aspect which involves the intake of anti retroviral medication to keep the viral load at controllable levels.

Some of the women had accepted the fact that, they were the best persons to encourage themselves since they were the ones experiencing the psychological burden. They had resolved to trust in positive situations of life as a self motivating technique notwithstanding the fact that there was a chance of transmitting the virus through breast milk. The above finding about trust in positive situations of life is consistent with a lot of findings from different parts of the globe. Those studies reported that, self motivation is the highest form of motivation that encourages mothers to breastfeed (Aghdas et al., 2014; Aluř Tokat et al., 2010; Creedy et al., 2003; Dai & Dennis, 2003; Gerhardsson et al., 2014; Gregory et al., 2008; Ip et al., 2012; Loke & Chan, 2013; Noel-Weiss et al., 2006; Otsuka et al., 2008; Wheeler & Dennis, 2013; Wu et al., 2014; Zhu et al., 2013). The women felt that, once they had given birth, burdening themselves psychologically may lead to disease deterioration.

Meanwhile, every mother would like to see her children grow, so a sense of survival was key to realizing that dream. Therefore, they ensured that, their line of negative thoughts was reversed. Perhaps, a child brought some normalcy to the lives of these women. Some years ago, living with HIV and having normal healthy children was impossible. Self motivation can therefore be adopted to restore confidence in the lives of mothers living with HIV.

The presence of effective anti retroviral medication is what has made it possible for people living with HIV to have a family with children who have a chance to live normal lives without stigmatization. Anti retroviral therapy was also mentioned as a coping strategy by the women. According to these women, the effect of the medication reduced the chances of transmission of the virus from mother to child through breastfeeding. The women became alarmed only when the medication was in short supply. Similar findings were reported in a study that, the mothers attributed their confidence and sense of hope to the presence of the anti retro viral therapy (Kastner et al., 2014). The women may have listed the presence of anti retro viral therapy as a coping strategy because of the fact that, women who took the medication during breastfeeding mostly had their children emerging as HIV negative. The women kept referring to other women on anti retroviral therapy who had breastfed successfully for their children to come out as HIV negative. It could also be attributed to the previous experience of the women. Most of the women with positive previous experience of breastfeeding and anti retroviral medication were still hopeful that, current children would similarly breastfeed and come out as HIV negative so far as they continue taking the medication. Due to the immense hope anti retroviral therapy has brought into the lives of breastfeeding HIV positive mothers, the government must always ensure availability of the medication. Shortage of the medication may cause relapse and cause panic among the mothers thereby increasing the chance of transmission of the virus from mother to child through breastfeeding.

In summary, the mothers were determined to breastfeed their children against all odds with the hope that, the children would eventually emerge as HIV negative. Therefore, they motivated themselves through various means. The opinions of experts, family members and the community as a whole had a role to play in the women's decision to choose breastfeeding as an infant feeding option as well as the duration. Some were forced to breastfeed due to difficult economic constraints that were beyond their control.

Although all the women were determined to breastfeed for one year, there were occasions when they were psychologically burdened. This was due to their knowledge on the fact that, there was still a chance of transmitting the virus to their infants through breastfeeding although that chance reduced drastically as long as they continued ingesting anti retroviral medication. Their burdens were fear, anxiety, blame and guilt. However, there were glimpses of hope on some days and a positive outlook on the outcome of the HIV status of their infants. Different mechanisms were devised by the women to cope with the negative psychological reactions in order to look at the brighter side of life.

The constructs of the self efficacy theory which includes self motivating experiences, vicarious experiences, psychological reactions and social persuasion influence the efficacy expectations of an individual. In these current findings, the women were influenced by their previous experiences in breastfeeding and the encouragement of other breastfeeding HIV positive mothers to motivate themselves. That encouraged them to breastfeed their infants although there was a chance of transmitting the virus through breastfeeding. On the contrary, although there were negative psychological reactions, they were overcome by episodes of hope. Social persuasions also had influence on the actions of the breastfeeding HIV positive mothers. The efficacy expectations of the women had to do with their ability to breastfeed exclusively for six months, followed by complementary breastfeeding till the children were one year old despite the possibility of transmission of HIV during the process.

CHAPTER SIX

SUMMARY, IMPLICATIONS, LIMITATIONS, CONCLUSION AND RECOMMENDATIONS

This chapter provides the summary, implications of the findings, limitations, conclusion and recommendations.

6.1 Summary of Study

This study used the self efficacy theory as an organizing framework to explore the psychosocial experiences of breastfeeding HIV positive women in the Tema Metropolis of Ghana. Data was collected from the women after both ethical and site approvals were obtained from Noguchi Institutional Review Board and Tema General Hospital respectively. After obtaining both oral and written consent from thirteen participants, the participants were recruited into the study. The interviews were audio taped and transcribed verbatim between November 2014 and February 2015. Thematic content analysis was used to analyze the data.

The women found inner strength to breastfeed through self motivation due to their previous personal experiences with breastfeeding (mastery experience). Optimism in experts' advice, trust in anti retroviral medication and belief in God also motivated the women to breastfeed although they were aware of the possibility of transmitting the virus to their infants through breastfeeding.

It became obligatory for the women to breastfeed in order to avoid suspicions, stigmatization and therefore protect their identity. Poverty also pushed some of them to breastfeed because they could not afford artificial baby food. Furthermore, other breastfeeding HIV positive mothers (vicarious experiences) and HIV counselors encouraged some of the women to breastfeed.

The women took the decision to breastfeed based on the verbal opinions (verbal persuasions) of significant others such as spouses, siblings, counselors, midwives and members of the community at large.

Nevertheless, although the women had different means to encourage themselves, there were moments when negative psychological reactions flooded their thoughts. There were moments of fear, guilt, blame and anxiety. On the other hand, motherhood brought some hope into their lives.

Finally, different coping strategies were adopted by the women to help them cope with anxiety, blame, guilt and fear. These strategies included denial, prayer, joining support groups, trust in positive situations of life and hope in anti retroviral medication.

6.2 Implications

The findings of this study have implications for nursing education, practice and research.

6.2.1 For Nursing Education

The majority of the women encountered rude midwives who mistreated them due to their HIV positive status. Although the nursing curriculum has an aspect that covers communication skills theoretically, it must be added to practical studies as well. Nursing Practical tutors must ensure that, trainees put what they are taught about good communication skills into constant practice. Therefore, the curriculum should be shaped in such a way that, good appraisals are given to nursing trainees during practical exams for good communication skills and attitudes towards clients. This may help trainees to adopt good communication skills and notice its importance in the care of clients.

6.2.2 For Nursing Practice

It became imminent from the findings of this study that, the women accepted what health professionals told them without any verification. This is due to the fact that, most of the women were either illiterates or semi literates. Therefore, although modern gadgets like phones are practically available to the majority of the members of the society, most of them are used for only verbal communication. As a result, a few people access the internet for information verification. Moreover, internet coverage is very poor in most parts of the country, thereby leaving most of the health professionals as the only source of information. Nurses must therefore update themselves with current empirical facts on disease process and progression since science is dynamic. This would ensure that nurses always give the facts and not information based on cultural or religious biases. Inability of the nurses to equip themselves with current information may give room to speculations and that could be detrimental to the lives of clients, especially the uneducated.

6.2.3 For Nursing Research

Further research is necessary to find out the experiences of breastfeeding HIV positive mothers who are not seeking anti retroviral therapy or any form of clinical intervention in various communities in Ghana. This is because, this current research focused on the experiences of breastfeeding HIV positive mothers who were receiving treatment.

6.3 Limitations

This research was conducted on only breastfeeding HIV positive women and not breastfeeding women in general.

All the participants were HIV positive mothers who received their anti retroviral medication at the Tema General Hospital. Therefore, other breastfeeding HIV positive mothers who accessed other Hospitals were not included in the study.

The sample size was thirteen due to the qualitative nature of the study which means that, the findings cannot be a fair representation of the general population.

6.4 Conclusion

Constructs of the self efficacy theory such as self motivation factors, vicarious experience, social persuasion and psychological reaction became eminent in the findings of the study. Another finding that emerged but was not part of constructs of the self efficacy theory was the coping strategies of the breastfeeding HIV positive mothers. It was observed from the findings that, there were challenges faced by HIV positive breastfeeding mothers. This was worsened by the knowledge that, there was a slight chance for their children to contract the virus through breast milk. Some of the women were afraid and anxious. Others blamed themselves and were also guilty for potentially putting their children at risk of contracting HIV through breastfeeding. However previous experience with breastfeeding coupled with other factors such as avoidance of suspicion, poverty, counseling, support groups, denial, hope in anti retroviral medication and encouragement from other mothers motivated the mothers to continue breastfeeding till the stipulated time frame. The findings also reinforced the religious nature of the Ghanaian society since almost all the women attributed their existence to the presence of God. The women also placed a lot of emphasis on the advice given to them by their health professionals and automatically took what was said to them as the truth. They therefore acted on the direction given to them on infant feeding choices by their health professionals without verification or questioning. Generally, the efficacy expectation was tied to hopes of HIV negative results in their infants at the end. Therefore, the experiences of these HIV positive breastfeeding mothers were consistent with the constructs of the self efficacy theory.

6.5 Recommendations

Based on the findings of the study, recommendations are made to the following bodies and institutions.

6.5.1 To Ministry of Health

The Ministry of Health should:

- Amend the practical component of the nursing training curriculum in such a way that, emphasis would be placed on attitude and communication skills of nurses.
- Train nurses in such a way that, the practical component would highlight on discipline and professionalism.

6.5.2 To Ghana Health Service

The Ghana Health Service should:

- Institute an award scheme to honour and award nurses and midwives who evidently exhibit good behaviour and professionalism.
- Provide the necessary resources that would reduce the burden of nurses and midwives to enable them to give out their best.
- Organize frequent in-service training programmes on professionalism and good communication skills.

6.5.3 To Nursing/Midwifery Council of Ghana

The Nursing and Midwifery Council of Ghana should:

- Implement activities to investigate and sanction rude/unprofessional nurses and midwives.

6.5.4 To Tema General Hospital

Management of Tema General Hospital should:

- Integrate anti retroviral therapy services into regular hospital activities. The current location for ART services give room to suspicions and stigmatization.
- Give opportunity to all health workers, especially nurses to constantly attend workshops on HIV and infant feeding policies for the nurses to be abreast with current empirical information.
- Make arrangements in such a way that, one client would be attended to at a time to allow the clients to voice out their worries and uncertainties in private.

6.5.5 To breastfeeding HIV positive mothers

- HIV positive mothers who choose to breastfeed must constantly combine it with anti retroviral therapy so that the probability of transmission through breast milk will drastically reduce.

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APPENDICES

APPENDIX A

Interview Guide

You are being invited to part take in a study to explore the experiences of breastfeeding HIV positive mothers. You are assured of anonymity and the data collected would only be available to the researcher and her supervisor. You are not required to provide your name and there will be no way responses would be linked to any you in any way. The interview is expected to last for about forty five (45) minutes and it would be recorded.

Thank you.

SECTION A: Demographic Information

1. Can you please tell me your age?
2. May I know your level of education?
3. May I know your employment details?
4. Which languages do you speak?
5. May I know your nationality?
6. How long have you breastfed?
7. How many children do you have?
8. Are you married?

SECTION B: Guiding Questions

Self motivating factors that influence HIV positive mothers to breastfeed (mastery experience)

1. What are your sources of encouragement to breastfeed?

2. How does previous experience in breastfeeding affect your ability to breastfeed this recent child?

Factors that influence initiation of breastfeeding among HIV positive mothers (vicarious experience)

1. What informed your decision to choose to breastfeed?
2. What are the factors that urge you on to breastfeed?
3. How do the experiences of other mothers in similar situations affect your ability to initiate and continue breastfeeding?

Probes: Positive (what gives you hope to breastfeed?) and negative (what discourages you not to breastfeed).

Effect of social persuasion on breastfeeding attitudes among breastfeeding HIV positive mothers

1. Who are the people in your life who are aware of your HIV status?

Probes: Nuclear Family, extended family or friends

2. How do those people relate to you because you are breastfeeding in your condition?
3. How do the people who know that you have HIV feel towards you because of your decision to breastfeed?

Probe: disrespect; rejection; avoidance; intimidation

Psychological reaction of breastfeeding HIV positive mothers

1. What are your thoughts about your decision to breastfeed?

Probes: fear, blame, guilt or hope

2. How satisfied are you with your breastfeeding experience?

Coping with psychological reaction

1. How do you manage to keep up with the breastfeeding demands of your baby?
2. What are some of the strategies you use to cope with your challenges to breastfeed?

Probes: Prayer, meditation, support groups, counseling

Thank you

APPENDIX B

Consent Form

Title: Psychosocial experiences of breastfeeding HIV positive mothers in the Tema Metropolis

Principal Investigator: Angela Kwartemaa Acheampong

Address: School of Nursing, College of Health Sciences, University of Ghana

General Information about Research

Breastfeeding is one of the ways through which HIV is transmitted to the infant. This study will find out the experiences of breastfeeding mothers known to be living with HIV. You are invited to part take in a study to share your experiences about breastfeeding your child. If you agree to participate, you will be invited for a face to face interview with the researcher at your own convenience. This interview is estimated to last 45 minutes. You are assured that the information you will provide will be available to only the researcher and supervisors. Therefore, you are not required to provide your name and there will be no way the responses will be linked to you in any way. If you mistakenly mention names during the interview, these names will be replaced with false names to protect your privacy. The information you will provide will help others to understand the attitudes, challenges and motivating factors that are faced by breastfeeding mothers with HIV. Thank you.

Possible Risks and Discomforts

There are no known physical risks involved with your participation. However, in case you become uncomfortable as a result of this interview, there are trained counselors who are willing to give you assistance at no cost to you. You have the right to refuse to answer any question that makes you uncomfortable.

Possible Benefits

You may not benefit directly by participating in this study. But the responses you provide may inform counselors and nurses to design counseling guidelines that are specific to the needs of breastfeeding mothers with HIV.

Confidentiality

I will ensure that your identity would be strictly protected. Therefore, information such as your name and address will not be collected during the interview. If you mistakenly mention names during the interview, they will be replaced with false names. Your responses will only be available to the researcher and supervisors.

Privacy

The interview would be conducted in a secluded room with only the participant and the researcher thereby ensuring privacy.

Compensation

You will be provided with a pen and handkerchief to compensate you for the time spent.

Voluntary Participation and Right to Leave the Research

Your participation in this study is voluntary and you can withdraw from the study at any point in time at no cost. Your withdrawal from the study will not affect the treatment you receive.

Contacts for Additional Information

For further information or enquiries, please contact the following individuals:

Angela Kwartemaa Acheampong

School of Nursing,

University of Ghana, Legon, Accra

Phone number: 0265220141

Email: angela_acheampong@yahoo.com

Dr Florence Naab

School of Nursing,

University of Ghana, Legon, Accra

Phone number: 0204522332

Email: fnaab@ug.edu.gh

Your rights as a Participant

This research has been reviewed and approved by the Institutional Review Board of Noguchi Memorial Institute for Medical Research (NMIMR-IRB). If you have any questions about your rights as a research participant you can contact the IRB Office between the hours of 8am-5pm through the landline 0302916438 or email addresses: nirb@noguchi.mimcom.org

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title (*Psychosocial experiences of breastfeeding HIV positive mothers in the Tema Metropolis*) has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date

Name and signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date

Name and signature of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date

Name/signature of person who obtained consent

APPENDIX C

NOGUCHI MEMORIAL INSTITUTE FOR MEDICAL RESEARCH
Established 1979 *A Constituent of the College of Health Sciences*
University of Ghana

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INSTITUTIONAL REVIEW BOARD



Post Office Box LG 581
 Legon, Accra
 Ghana

My Ref. No: DF.22
 Your Ref. No:

5th September, 2014

ETHICAL CLEARANCE

FEDERALWIDE ASSURANCE FWA 00001824

IRB 00001276

NMIMR-IRB CPN 005/14-15

IORG 0000908

On 5th September, 2014, the Noguchi Memorial Institute for Medical Research (NMIMR) Institutional Review Board (IRB) conducted expedited review and approved your protocol titled:

TITLE OF PROTOCOL : **Psychosocial experiences of breastfeeding HIV positive mothers in the Tema Metropolis**

PRINCIPAL INVESTIGATOR : **Angela Kwartemaa Acheampong, MPhil Cand.**

Please note that a final review report must be submitted to the Board at the completion of the study. Your research records may be audited at any time during or after the implementation.

Any modification of this research project must be submitted to the IRB for review and approval prior to implementation.

Please report all serious adverse events related to this study to NMIMR-IRB within seven days verbally and fourteen days in writing.

This certificate is valid till 4th September, 2015. You are to submit annual reports for continuing review.

Signature of Chair:
 Mrs. Chris Dadzie
 (NMIMR – IRB, Chair)

cc: Professor Kwadwo Koram
 Director, Noguchi Memorial Institute
 for Medical Research, University of Ghana, Legon

APPENDIX D

**SCHOOL OF NURSING
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA
LEGON**

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028 9531213 }

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E-mail: nursing@ug.edu.gh

Our Ref:..... SON /F11
Your Ref:.....



P. O. Box LG 43
LEGON, GHANA

September 5, 2014

The Medical Director
Tema General Hospital
Tema

Dear Sir/Madam,

INTRODUCTORY LETTER

I write to introduce to you Angela Kwartemaa Acheampong, an M'Phil student of the University of Ghana, School of Nursing. She is seeking your permission to collect data for her research on the topic **"Psychosocial Experiences of Breastfeeding HIV Positive Mothers in the Tema Metropolis"**

I would be grateful if you could kindly assist her with the information that she may require for her thesis.

Thank you.

Yours faithfully,


Dr. Florence Naab
LECTURER