CHALLENGES FACED BY NURSE-COUNSELORS IN THE IMPLEMENTATION OF HIV AND INFANT FEEDING POLICY IN AMATHOLE DISTRICT, EASTERN CAPE

By

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University of the Western Cape

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OF HIV AND INFANT FEEDING POLICY IN AMATHOLE DISTRICT,
EASTERN CAPE

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Key Words
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Breastfeeding
Exclusive Breastfeeding
Exclusive Bottle Feeding
Workload
Nurse-counselors
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<th>Acronyms and Abbreviations</th>
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<tr>
<td>AFASS</td>
<td>Accessible, Feasible, Affordable, Safe, Sustainable</td>
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<tr>
<td>ADM</td>
<td>Amathole District Municipality</td>
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<td>ANC</td>
<td>Antenatal Care</td>
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<td>ART</td>
<td>Antiretroviral Treatment</td>
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<td>ARV</td>
<td>Antiretroviral</td>
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<td>BFHI</td>
<td>Baby Friendly Hospital Initiative</td>
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<td>DOH</td>
<td>Department of Health</td>
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<td>EBF</td>
<td>Exclusive breastfeeding</td>
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<td>FGD</td>
<td>Focus Group Discussion</td>
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<td>HIV</td>
<td>Human Immuno-deficiency Virus</td>
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<td>IYCFP</td>
<td>Infant and Young Child Feeding Policy</td>
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<td>IMR</td>
<td>Infant Mortality Rate</td>
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<td>MTCT</td>
<td>Mother To Child Transmission</td>
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<td>NFGD</td>
<td>Nurses Focus Group Discussion</td>
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<td>PMTCT</td>
<td>Prevention of Mother To Child Transmission</td>
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<td>SADHS</td>
<td>South Africa Demographic and Health Survey</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>U5MR</td>
<td>Under-5 Mortality Rate</td>
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<td>VCT</td>
<td>Voluntary Counseling and Testing</td>
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<td>WAFA</td>
<td>World Alliance For Breastfeeding Actions</td>
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<td>WHA</td>
<td>World Health Assembly</td>
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Abstract

CHALLENGES FACED BY NURSE-COUNSELORS IN THE IMPLEMENTATION OF HIV AND INFANT FEEDING POLICY IN AMATHOLE DISTRICT, EASTERN CAPE

Introduction: Nurse counselors carry a mandate of giving HIV positive mothers safe and appropriate infant feeding advice. To a large degree, the mothers’ decision on the choice of feeding is influenced by nurse counselors. This means that infant feeding counseling has the potential to impact the postnatal transmission of HIV from the mother to the child. An increasing body of research has drawn attention to the poor quality of infant feeding counseling, due to counselors’ insufficient knowledge about HIV and infant feeding and inadequate counseling skills. Despite these findings, very little work has been done in describing the experiences and challenges of nurse counselors as the implementing agents of PMTCT, in particular infant feeding counseling.

Aim: This study explores the challenges faced by nurse counselors in the implementation of HIV and Infant Feeding Policy in Amathole District of the Eastern Cape.

Objectives: (i) To describe the demographic characteristics of the study population; (ii) To explore the challenges faced by nurse counselors in the implementation of current HIV and infant feeding policy and guidelines; (iii) To establish the nurse counselors’ perspectives on the infant feeding policy and guidelines for HIV positive mothers; (iv) To examine the support system available to the nurse counselors who give infant feeding advice to HIV positive mothers.
**Method:** Data was collected through Key Informant Interviews and Focus Group Discussions with nurse counselors. The interviews were audio-taped, and transcribed by the researcher. Analysis was performed using thematic content analysis after manual coding and sorting of data.

**Results:** Health system constraints such as staff shortage and increased workload were found to be key factors hindering provision of quality counseling. Nurse counselors’ perceptions and time constraints were seen to affect the content of the counseling of HIV positive mothers. The results also revealed a high level of emotional stress among nurse counselors and poor support systems. **Conclusion:** This study has identified constraints and challenges which may affect the counseling offered by nurses. It also underpins the complexity of implementing the recommendations on HIV and infant feeding in the local context. The results suggest that the counselors’ ability in communicating the AFASS Criteria need to be assessed. The mothers’ ability to make choices based on the AFASS Criteria require additional thought and consultation, involving all stakeholders, including the communities.

**Recommendations:** The feasibility of implementing the PMTCT programme given the current staffing levels needs to be determined. Information from this study will be used to motivate for the use of IEC material during counseling, to unpack the AFASS Criteria. The use of mass media for community education is vital for rapid dissemination of knowledge about infant feeding in the context of HIV. There is a need to establish support systems such as setting up of weekly meetings where nurse counselors could discuss work-related issues freely with their supervisors.
Declaration

I declare that this mini-thesis, Challenges Faced by Nurse-Counselors in the Implementation of HIV and Infant Feeding Policy in Amathole District, Eastern Cape, is my own work and that all sources used or quoted have been acknowledged by means of complete referencing. I also declare that this work has not been submitted before for any other degree at any other academic institution.

Nonzwakazi Sogaula

November 2008

Signed:......................................................
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I hereby acknowledge the managers of the Department of Health, Amathole District who allowed me to conduct this study in their facilities. A deep sense of gratitude to the nurses who had trustingly shared some intimate details of their work life, speaking about issues that touch at the core of their beings.

I also wish to acknowledge The School of Public Health of the University of the Western Cape, in particular my supervisor Professor Thandi Puoane for her tremendous support and guidance.
Dedications

To my dear mother, family and friends who prayed incessantly. To the One who hears and
answers prayer, my Lord Jesus Christ, my source of strength.
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CHAPTER 1 - Introduction to the Study

1.1 Introduction

This chapter provides an overview of the study by presenting the background to the problem, the problem statement and the purpose of this research. The chapter concludes by stating the aim and the objectives of this research. An outline of subsequent chapters is also given.

1.2 Background to the Problem

South Africa is experiencing an HIV/AIDS epidemic of devastating magnitude. Alongside poverty, unemployment, crime and other social ills, this epidemic continues to be one of the biggest challenges faced by South Africans today. The human devastation caused by the scourge of HIV/AIDS is not a unique South African experience. International evidence exists to demonstrate the extent of the advancement of this disease. In 2004, it was projected that 39.4 million people worldwide were infected with HIV. Of these, 17.6 million were women and 2.2 million were children. It was estimated that almost 12 % of this worldwide total (4.9 million people) became newly infected in 2004 (UNAIDS, 2004).

In South Africa, the magnitude of this disease is illustrated by the results of the national antenatal HIV survey, which is conducted on annual basis. In 1990, 1% of pregnant women attending public antenatal clinics in South Africa were HIV positive. In 1999, this figure increased to 22.4% (DOH, 2002a) and has kept on rising, reaching 30.2% by 2005, and dropping to 29.1% in 2006 (DOH, 2007b). According to the WHO global report on the HIV/AIDS epidemic, 5.3 million adults and children of the South African population were living with HIV/AIDS in 2003 (WHO, 2004). Furthermore, it is estimated that AIDS
accounted for about 25% of all deaths in South Africa in the year 2000 and has become the single largest cause of death in young adults (Dorrington, Bradshaw & Budlender, 2002).

More than two thirds of the under-5 year old deaths in developing countries are a result of parasitic diseases, infectious diseases such as HIV/AIDS, respiratory tract infections and diarrhea (The Commission on the Nutrition Challenges of the 21st Century, 2000). In South Africa, the under-5 mortality rate (U5MR) is 69 per 1 000 live births and the Infant Mortality Rate (IMR) is 56 per 1 000 (UNICEF, 2006). It is also estimated that annually about 38 000 South African children are born infected with Human-Immuno-deficiency Virus, and a further 26 000 children are estimated to be infected through breastfeeding (DOH, 2007b). Bradshaw et al (2004) reported that HIV/AIDS remains the leading cause of deaths amongst children under five years of age across all provinces of South Africa, primarily due to vertical transmission of HIV (from mother to child during pregnancy). In the absence of any interventions, HIV transmission through long-term breastfeeding may be responsible for one-third to half of HIV infections in infants and young children in African countries (DOH 2007a).

To optimize infant feeding, and thus child survival, growth and development, the World Health Assembly (WHA) adopted the Global Strategy for Infant and Young Child Feeding at the 55th WHA in May 2002. The strategy provides a basis for public health initiatives to protect, promote and support appropriate infant and young child nutrition (WHO, 2002).

South Africa has engaged in various processes to address infant feeding in the context of HIV. The Baby Friendly Hospital Initiative (BFHI) which was adopted in South Africa in 1994
(DOH, 2004) has recently been revised to accommodate infant feeding in HIV settings (UNICEF, 2006). BFHI has been shown to be vital in increasing breastfeeding initiation rates within the hospital settings (Braun et al, 2006; Ojeifetime et al, 2000; Lutter et al, 1997; Forster, 2007). Another important internationally acclaimed programme dealing with infant feeding is the Prevention of Mother-To-Child Transmission (PMTCT) programme. In South Africa, concerns about child survival and the avoidance of HIV infection through breastfeeding led to a countrywide prioritization of the (PMTCT) programme (Health Systems Trust (HST), 2003). In South Africa, the PMTCT programme is largely accessible through government health facilities, and is simultaneously offered with antenatal Voluntary Counseling and Testing (VCT) for HIV and peri-partum ARV prophylaxis (HST, 2003).

The PMTCT programme has the potential, not only to protect thousands of babies from becoming infected with HIV, but could also raise the general standard of maternal and child health care (HST, 2003). Although the programme is reported to decrease HIV transmission rates through the administration of antiretroviral (ARV) drugs during labour and delivery, the risk of transmission through mothers’ breastmilk still remains a significant contributor (De Cock et al, 2000). In the PMTCT and BFHI programmatic contexts, the avoidance of transmission through breastmilk involves adequate infant feeding counseling of mothers antenatally, perinatally and postnatally (Chopra, Doherty, Jackson & Ashworth, 2005; Petrie et al, 2007). Haider, Kabir, Huttly and Ashworth (2002) give evidence to the fact that infant feeding counseling and support are needed if feeding practices are to be enhanced. These authors show that when breastfeeding women receive consistent and accurate messages concerning appropriate infant feeding from health care personnel, family members at home,
peer supporters and community members during antenatal, intra-partum, postnatal and follow-up care, they are able to sustain exclusive breastfeeding for the prescribed period of six months (Haider et al, 2002). Essentially, PMTCT and BFHI nurse counselors in health facilities bear a huge task of providing safe and accurate information on the risk and benefits of various feeding options to HIV positive mothers.

Doherty and colleagues also observed that PMTCT gains attained through peripartum ARV prophylaxis are reversed during the postpartum period (Doherty et al, 2006b). They attributed this to the absence of a supportive environment within society which is crucial for the mother to reinforce her infant feeding choice after receiving counseling (Doherty et al, 2006b). According to Chopra et al (2005), the quality of infant feeding counseling in PMTCT programmes, despite training, remained poor even when health workers had good communication skills. These authors further argue that the poor quality of counseling in the PMTCT programme seems to reduce the effectiveness of the programme (Chopra et al, 2005). Similarly, a study done in Swaziland, Namibia and South Africa investigating the quality of counseling, pointed out that nurse counselors were ill-prepared to support mothers to implement specific elements of infant feeding advice (Buskens & Jaffe, 2008). The authors observed a rift between the mothers and nurse counselors, with both parties holding opposing agendas grounded in conflicting realities, expectations, experiences and needs. After the counseling session, the mothers often reported feeling judged, stigmatized and shamed while nurse counselors complained of mothers poor compliance and passive resistance to their advice (Buskens & Jaffe, 2008).
Without a doubt, the poor outcomes experienced by infant feeding counselors - as mentioned above - are an indication that there is a serious challenge faced by nurse counselors which needs to be explored.

1.3. Problem Statement

The different modes of mother to child transmission of Human Immuno-deficiency Virus are well known (DOH, 2007a). The transmission of HIV through breastmilk is also well documented (Deller & DeCamp, 2008). The role of health professionals in counseling the mother on infant feeding has also been extensively covered and the quality of counseling has also been evaluated (Chopra et al, 2005). Challenges faced by mothers in executing infant feeding advice have also been documented (Doherty et al, 2006a; Doherty et al, 2006b; Coovadia et al, 2007; Coutsoudis et al, 2008).

However, very little work has been done in describing the experiences and challenges of nurse counselors as the implementing agents of PMTCT and BFHI programmes, in particular infant feeding counseling. This is a concern because nurse counselors are the primary health care providers for the majority of the population in Sub-Saharan Africa (Raisler & Cohn, 2005). Therefore, it is clear that nurse counselors are the largest group of health workers available to counsel, test, diagnose, and treat mothers and children who access these programmes through the primary health care system and as such, are the backbone of the PMTCT and BFHI programmes.
This research seeks to explore challenges of nurse counselors in executing the infant and young child feeding policy, specifically with regard to PMTCT and BFHI programmes.

1.4 Purpose of the Study

The purpose of the study is to gain insight into the complexity of issues that nurse counselors deal with, as they provide infant feeding counseling in the context of HIV.

1.5 Research Aim and Objectives

The aim of this study is to investigate challenges and experiences of nurse counselors in counseling HIV positive mothers on infant feeding.

The objectives are:

- To describe the demographic characteristics of the sample.
- To explore the challenges faced by nurse counselors in the implementation of current HIV and infant feeding policy and guidelines.
- To establish the nurse counselors’ perspectives concerning the practicability of the infant feeding advise they give to mothers.
- To examine the support system available to the nurse counselors who give infant feeding advice to HIV positive mothers.

1.6 Thesis Outline

This thesis is presented in six chapters. Chapter 1 introduces the topic and the basis of the study. The second chapter is a comprehensive literature review while Chapter 3 deals with the methodology employed in the study. Chapter 4 presents the findings which are discussed in Chapter 5. The conclusion and the recommendations are presented in Chapter 6.
Chapter 2: Literature Review

2.1 Introduction

The main objective of this chapter is to examine the literature on infant feeding in a global context. The review dwells on the magnitude of the impact of HIV/AIDS on infant feeding by focusing on previous studies conducted to determine the dynamics and contextual factors with regard to infant feeding counseling. Special focus is given to infant feeding experiences within PMTCT and BFHI programmes.

2.2 Global Infant Feeding Recommendation

WHO and UNICEF developed the Global Strategy for Infant and Young Child Feeding to revitalize world attention on the impact that feeding practices have on the nutritional status, growth and development, health, and thus the very survival of infants and young children (WHO, 2002). The Global Strategy is based on the evidence of the significance of nutrition in the early months and years of life, and on the crucial role that appropriate feeding practices play in achieving optimal health outcomes (WHO, 2002). Some of the key objectives of the Global Strategy are:

- to raise awareness of the main problems affecting infant and young child feeding, identify approaches to their solution, and provide a framework of essential interventions;
- to create an environment that will enable mothers, families and other caregivers in all circumstances to make – and implement – informed choices about optimal feeding practices for infants and young children.
Lack of breastfeeding and especially lack of exclusive breastfeeding during the first six months of life are important risk factors for infant and childhood morbidity and mortality that are only compounded by inappropriate complementary feeding (UNICEF & WHO, 1993). The life-long impact includes poor school performance, reduced productivity, and impaired intellectual and social development (Marquis, 2005).

Three decades ago (1978), the WHO recommendation for the duration of exclusive breastfeeding was 4-6 months. This recommendation was changed to 6 months in 2001, following a review of more than 3 000 references made by the WHO (2001). As a global public health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health (WHO, 2001). The term *exclusive breastfeeding* refers to the feeding of an infant on breastmilk only, when fluid (water), energy and nutrients are provided by breastmilk, with possible exception of small amounts of medicinal supplements (UNICEF & WHO, 1993). From six months on, the recommendation was that infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond, to ensure that their nutritional requirements are met (WHO, 2001).

Exclusive breastfeeding from birth is possible for the majority of babies except for those with a few medical conditions; furthermore unrestricted exclusive breastfeeding results in ample milk production (UNICEF & WHO, 1993).

With the advent of the HIV epidemic, and the possibility of transmission of HIV from mother to child through breastfeeding, additional feeding options have been introduced. In countries
with fewer resources, where replacement feeding can be much more hazardous, the recommendations for infant feeding usually depend on a mother's individual situation. In this context, the WHO and UNAIDS (2003) recommend that all HIV-infected women should be fully-informed on all choices of infant feeding and should receive the best available information on the benefits and risks of exclusive breastfeeding or replacement feeding, in order for them to select the most suitable option for their situation. Even though exclusive breastfeeding for the first six months is one of the options given to HIV positive mothers, adequate replacement feeding is needed for infants born to HIV-positive mothers who choose not to breastfeed. According to the latest version of these guidelines, “When replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected mothers is recommended. Otherwise, exclusive breastfeeding is recommended during the first months of life” (WHO & UNAIDS, 2003). This means that some mothers should be advised to breastfeed and others should be encouraged to give breastmilk substitutes, depending on personal circumstances. However, the recommendations emphasize that the final decision lies with the mother (WHO & UNAIDS, 2003). The details of infant feeding counseling that should be offered to mothers is discussed in subsequent sections of the guidelines.

2.3 Infant Feeding Choices and Health Outcomes

Breastfeeding is a natural and an ideal way of nourishment for infant survival, growth and development. Breastmilk provides high quality nutrients that are easily digested and efficiently used by the baby’s body and is a dynamic fluid that changes to meet the infant’s needs (WHO, 2002). It is also the catalyst for the stimulation and development of the infant’s immune system. Palmer (2007) describes the make-up of an infant’s immune system as having three
distinctive aspects: her own immature developing immune system, the small component of
immunities that passes through the placenta during natural childbirth, and the most valuable
living portion that is passed on through the mother’s milk on an ongoing basis. The choice of
replacing breastmilk with substitutes may mean that a vital immune support system for the
infant has been taken away.

There is overwhelming evidence showing that infants that are not breastfed - particularly in
places where there is little access to clean water, poor sanitation and health services - can
greatly increase the risks of disease (diarrheal disease, respiratory infections and allergies) and
death (Dewey, Heinig, Nomsen-Rivers, 1995; Popkin et al, 1990; Beaudry et al, 1995). Compared with the use of breast milk substitutes, breastfeeding has been consistently shown to
reduce infant morbidity and mortality associated with infectious diseases in both resource-rich
and resource-poor settings particularly in the first months of life (Duncan & Holberg 1993;
Wright et al, 1998; Bhandari et al, 2003). For example, a Brazilian study reported that newborn
infants who were not receiving breastmilk were 17 times more likely to present with
pneumonia at hospital than those receiving breastmilk and no artificial milk. Furthermore, this
study showed that partially breastfed babies were more likely to have diarrhea than exclusively
breastfed babies, but less likely than babies who received no breastmilk (Cesar et al, 1999).
Another study from Scotland found that breastfed infants had less respiratory illnesses (Howie,
1990). This author found that between 0-13 weeks of age, almost 39% of the bottle-fed infants
had respiratory illnesses compared to only 23% of the breastfed infants. Additionally, the
literature on the benefits of breastfeeding also shows that allergies are less common in
completely breastfed babies (Saarinen & Kajosaari, 1995; Oddy et al, 1999; Kull et al, 2002).
Added benefits of breastfeeding to the baby include lower risk of childhood diabetes, cancer, better response to vaccination, a faster ability to fight diseases and better psychomotor, emotional and social development (UNICEF & WHO, 1993). Documented breastfeeding benefits for the mother include, a reduced the risk of ovarian and breast cancer (Collaborative Group on Hormonal Factors in Breast Cancer, 2002), a reduced risk of hip fracture in elderly women (Cumming & Klineberg, 1993), and a reduction of rheumatoid arthritis (Brun et al, 1995). Exclusivity of breastfeeding also delays the return of menses which is helpful for maternal health and birth spacing (UNICEF & WHO, 1993). Furthermore, breastfeeding also provides a number of social and economic benefits to the mother / infant pair and the family at large.

It is estimated that annually, 1.5 million infant deaths could be prevented if breastfeeding is rigorously promoted and supported (UNICEF, 2006). Although a large percentage (95%) of infants in the African region is being breastfed (UNICEF, 2006), in general, feeding practices are often inadequate. Early mixed feeding (giving breastmilk and other foods and/or drinks) remains a challenge as it is one of the factors responsible for malnutrition, growth faltering and high mortality rate in infants in developing countries (Davies-Adetugbo, 1997). As a result early introduction of other foods and/or drinks, the prevalence of exclusive breastfeeding is low and the duration is short (UNICEF, 2006). Globally, only 35% of infants are exclusively breastfed during their first year of life (WHO & UNIAIDS 2003). Nevertheless, recent trends show an increase in early initiation and in duration of breastfeeding as a result of promotion efforts set up by WHO and UNICEF. For example, in sub-Saharan Africa, exclusive breastfeeding increased from 15% to 32% between 1990 and 2004 (UNICEF, 2006).
2.4 Promotion, Protection and Support of Breastfeeding

The scientific evidence of the benefits of breastfeeding and the dangers of formula feeding especially in resource-poor countries has become a catalyst for breastfeeding advocacy worldwide. In the early eighties, the International Code of Marketing of Breast-milk Substitutes as presented by WHA barred the marketing of infant foods, teats and bottles in ways that could interfere with breastfeeding (WHO, 1981). This was followed by the launch of The Baby Friendly Hospital Initiative (BFHI) in 1991 by the United Nations Children’s Fund (UNICEF) in partnership with WHO (UNICEF & WHO, 1991). BFHI is a worldwide strategy launched in accordance with the recommendations of the Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding (UNICEF & WHO, 1993). By 2006, the Initiative has experienced tremendous growth, with more than 19 600 hospitals in 152 countries around the world declared Baby Friendly (UNICEF & WHO, 2006). The BFHI is based on the Ten Steps to Successful Breastfeeding. These steps are a summary of supportive practices that ensure that babies are born in an environment that protects, supports and promotes breastfeeding (UNICEF & WHO, 2006). The Baby Friendly Hospital Initiative encourages and facilitates the transformation of health facilities which provide maternity services by removing health care practices that hinder breastfeeding. Additionally, this Initiative is expected to enhance breastfeeding practices even beyond the hospital setting. Another goal of the Initiative is to encourage and facilitate the implementation of the Code of Marketing of Breast milk Substitutes (UNICEF & WHO, 1993).

Between 2004 and 2005, UNICEF and WHO undertook the updating of BFHI teaching material. In 2006, a revised BFHI package which included HIV and Infant Feeding was
published (UNICEF & WHO, 2006). The programme has been expanded to include other parts of the health system including maternal care, pediatrics, neonatal unit, clinics and so forth.

2.5 Infant Feeding in Maternity Settings

The introduction of BFHI meant remarkable changes in hospital protocols related to postnatal and infant feeding practices. Numerous studies from developing and developed countries show that a continued application of the BFHI Ten Steps in maternity settings had a positive impact on breastfeeding outcomes. For example, a high prevalence of breastfeeding was noted among infants delivered in BFHI accredited facilities versus non-accredited facilities (Braun et al, 2006; Ojeifezie et al, 2000; Lutter et al, 1997; Forster, 2007).

In addition, Chien et al (2007), reported increases in breastfeeding rates as the number of BFHI Steps implemented increased. This was congruent with the findings of Merten et al (2005), who reported longer breastfeeding duration among mothers who gave birth in BFHI facilities with high compliance to the Ten Steps than those in non-BFHI facilities. This study also showed that the implementation of BFHI was able to increase breastfeeding rates at a national level.

2.6 Decline in the Promotion, Protection and Support of Breastfeeding

An evaluation of the current status of protection, promotion and support of breastfeeding in four Sub-Saharan African countries revealed that there was a decline in the support for breastfeeding which was found to be related to the HIV/AIDS pandemic (Latham & Kisanga, 2001). One of the contributory factors to this decline in breastfeeding promotion was found to be related to the publicising of scientific evidence, that mothers could infect their infants
through breastmilk. Arising from this knowledge, the authors report a widely held false view (amongst senior Ministry of Health officials, front line health workers, UN agency staff, the public and others) that almost all mothers who are HIV positive will infect their infants through breastfeeding (Latham & Kisanga, 2001). Secondly, the authors reported poor recognition at all levels of the high risks of formula feeding in resource-poor settings (Latham & Kisanga, 2001).

Greiner (2001), in his article titled *Global Overview on the Innocenti Targets*, points out that the cessation of funding by international donors who formerly supported efforts to promote breastfeeding in developing countries has had a crippling effect on activities related to the protection and the promotion of breastfeeding. Moreover, he argues that the advent of HIV has resulted in a change of priorities when it came to funding health promoting activities, with all attention being given to HIV prevention programmes (Latham & Kisanga, 2001).

The report of a meeting of The Working Group on Breastfeeding and Complementary Feeding of 2002 focused on what seemed to be growing concern from some governments, questioning the continued significance of the International Code of Marketing Breastmilk Substitutes, in the context of prevention of mother-to-child transmission of HIV (SCN, 2007). The main objection to the Code was that it prohibits the donation of free and low cost supplies of infant formula to the health care system. This debate in The Working Group, concerning the challenge to the relevance of the Code, might indicate that certain governmental groups have a diminishing interest in promoting and protecting breastfeeding, and favour free formula distribution to HIV positive mothers.
2.7 Factors Influencing Breastfeeding

In spite of the achievements of BFHI reported in hospital settings, numerous studies demonstrate that it is only a few mothers who achieve the international recommendations of exclusive and overall duration of breastfeeding after hospital discharge (Scott et al, 1991; MacIntyre, deVilliers, Baloyi, 2005; Faber & Spinnler Benade, 2007; Chezen, Friesen & Boettcher, 2003).

Determinants of breastfeeding together with other factors that influence infant feeding practices are well documented. Breastfeeding education in both antenatal and postnatal services has been found to play a vital part on breastfeeding outcomes as it increases the mothers’ knowledge (Chezen et al, 2003). Furthermore, individual factors such as education, age, employment status, marital status of the mother, including knowledge and attitude of the mother towards breastfeeding, were found to be predictors of breastfeeding duration (Vogel, Hutchison, Mitchell, 1999; Amadhila, 2005; Butler, Williams, Tukuitonga & Paterson, 2004). In addition, maternal perceptions and experiences of breastfeeding problems were also found to be predictors of breastfeeding duration (McLeod, Pullon & Cookson, 2002; Leshabari, Blystad & Moland, 2007). Some authors found that in the context of HIV, socio-cultural factors, stigma and maternal support on choice of feeding were factors that negatively affected breastfeeding outcomes (Bland et al, 2002; Doherty et al, 2006a).

2.8 HIV and Infant Feeding

In 2003, it was estimated that some 630 000 children worldwide became infected with HIV, of which the vast majority of them were infected during pregnancy, labor, and delivery, or as a
result of breastfeeding (WHO & UNAIDS, 2004). According to Dunn and colleagues (1992), the HIV transmission through breastmilk is exacerbated by maternal factors which include breast pathology such as mastitis and breast abscesses, high plasma viral load, low CD4 count, mode of infant feeding and prolonged duration of breastfeeding for more than 6 months. However, some studies have demonstrated that the risk of Mother-to-Child transmission (MTCT) can be reduced by adherence to exclusive breastfeeding for the first 6 months of life, with abrupt cessation from 6 months onwards (Coutsoudis et al, 2004). Similar findings are reported by Coovadia et al (2007), who found that breastfed infants who also received solids or were mixed fed (receiving breastmilk and formula feeds) were significantly more likely to acquire HIV infection than were exclusively breastfed children.

Recently, there are more studies which attest to the potential benefits of breastfeeding, even in HIV positive mothers. Such was the case in two large cohort studies, which showed that exclusive breastfeeding carried a significantly lower risk of HIV transmission than does mixed breastfeeding (Coutsoudis et al, 1999; Coovadia et al, 2007). Where free infant formula was provided, the combined risk of HIV transmission and death was similar, whether infants were exclusively formula fed or exclusively breastfed from birth (Doherty et al, 2006a).

Coutsoudis et al (2008) report that efforts to reduce MTCT of HIV by using a combination of strategies, namely-ARV drug therapy, caesarean section and formula feeding - have been very successful in developed countries and some middle-income countries. These authors highlight that the record of successes observed in developed and middle income countries has resulted in
the implementation of programmes that promote the use of formula feeds in poor populations (Coutsoudis et al, 2008).

South Africa has engaged in various processes to address infant feeding in the context of HIV. The advent of the national Prevention of Mother-to-child Transmission (PMTCT) programme which goes hand in hand with peri-partum ARV prophylaxis (DOH, 2007a) made support to infant feeding a priority. The South African PMTCT programme was introduced as a pilot to allow for central control and faster implementation (HST, 2003). The researchers who evaluated the South African PMTCT pilot found that the programme did not function integrally with broader maternal and child health services and that many missed opportunities to prevent mother to child transmission were occurring (HST, 2003). Weaknesses in the health system such as the human resource crisis, poor drug supply systems and weak health information systems were found to be hindering factors to PMTCT implementation (HST, 2003).

One of the provisions of the South African PMTCT programme is to provide free commercial formula for six months for HIV infected mothers who opt to replace-feed their infants (DOH, 2007a). In cases where formula feeding is not acceptable, feasible, affordable, sustainable and safe (according to the so-called AFASS Criteria), the recommendation is that HIV positive mothers should breastfeed exclusively for the first six months of life (DOH, 2007a).

Critical research evidence shows that the availability and accessibility of the PMTCT programme by HIV positive mothers, coupled with good quality voluntary counseling and
testing (VCT) for HIV and counseling for infant feeding are critical for the success of PMTCT programme (De Cock et al, 2000; Chopra, 2005).

The PMTCT programme has the potential, not only to protect thousands of babies from becoming infected with the HIV virus, but could also raise the general standard of maternal and child health care (HST, 2003). Although there may be a decrease in transmission rates through administering antiretroviral (ARV) drugs during labour and delivery (De Cock 2000), risk of HIV transmission through mother’s breastmilk remains a significant contributor. Doherty and her team of researchers (2006b) observed that PMTCT gains attained through peripartum ARV prophylaxis are reversed during postpartum period. They conclude that the main problem is the absence of a supportive environment which is so crucial for the mother, in support of her infant feeding choice.

2.9 Infant Feeding in South Africa

South Africa, with an under-5 mortality rate (U5MR) of 69 per 1000 live births (UNICEF, 2006), is one of the countries with low prevalence of exclusive breastfeeding. The South African Demographic and Health Survey (SADHS) of 2003 shows national exclusive breastfeeding rates of 12 % for 0-3 month old infants. A dramatic drop in exclusive breastfeeding rates was reported in the age group 4-6 months, where only 1, 5% of infants were exclusively breastfed (SADHS, 2003). In 1998, as high as 87% of babies received breastmilk (SADHS, 1998), while in 2003, the figure dropped to 82% (SADHS, 2003). SADHS data on infant feeding suggests that mixed feeding begins very early in life (<2 months) in the general South African population (SADHS 1998 & 2003).
2.10 South African Infant and Young Child Feeding Policy

The ultimate goal of the South African Infant and Young Child Feeding Policy is to improve the nutritional status, growth, development and health of infants and young children by protecting, promoting and supporting optimal safe infant feeding practices. Recommendations of the policy document are outlined below:

BOX 1: SOME KEY RECOMMENDATIONS OF THE SOUTH AFRICA INFANT AND YOUNG CHILD FEEDING POLICY

- All pregnant women should be educated on exclusive breastfeeding for six months and continued breastfeeding until two years and beyond, with appropriate complementary feeding.
- All pregnant women should be provided with evidence-based objective and unbiased infant feeding information in order to ensure they make an informed decision (i.e. independent from commercial influence).
- Health care personnel should not recommend formula feeding as an alternative to breastfeeding, unless there are legitimate medical reasons to do so.
- HIV-positive women should receive individual and unbiased counseling on infant feeding options to enable them to make informed choices on the infant feeding option that is most suited for their circumstances.
- Exclusive breastfeeding is recommended for HIV-infected women for the first 6 months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe (AFASS) for them and their infants before that time.
- When replacement feeding is acceptable, feasible, affordable, sustainable and safe, avoidance of all breastfeeding by HIV-infected women is recommended.
2.11 Counseling in Infant Feeding

In brief, both local and international IYCF policies are in accord that HIV-infected women should receive unbiased counseling, which includes provision of information about the risks and benefits of various feeding options, and specific guidance in selecting the option most likely to be suitable for their situation. Adequate replacement feeding is needed for infants born to HIV-positive mothers who choose not to breastfeed. These infants will thus require a suitable breast-milk substitute, or a home-prepared formula with micronutrient supplements (WHO, 2003). For mothers who test negative for HIV, or who are untested, exclusive breastfeeding remains the recommended feeding option (Global IYCF policy, 2002; South African IYCF policy, 2007). The IYCF policies further states that mixed feeding should be discouraged for all women regardless of sero-status.

Because of the risk that breastfeeding poses to the infants of HIV positive mothers, infant feeding counseling remains a vital component of PMTCT and BFHI programmes. Nurse counselors are grappling with the huge responsibility of providing feasible, safe and affordable feeding recommendations that offer protection from HIV, while on the other hand preserving strong cultural support for breastfeeding (Rutenberg et al, 2003).

Various studies show that the common practice of mixed feeding was difficult for most women to forgo (Leshabiri et al, 2007; Bland et al, 2002). These authors demonstrated that the recommended feeding methods are not feasible (Leshabiri et al, 2007) and in some instances not socially acceptable (Bland et al, 2002). Doherty et al (2006a) articulated factors that influence the ultimate infant feeding practice performed by the mothers. These authors pointed
out that in the postpartum period, breastfeeding women face enormous pressure from family members and partners to introduce other fluids and foods from an early age. Fear of disclosure of HIV status and stigma has weakened the ability of HIV positive mothers to resist these entrenched family and community norms that encourage mixed feeding, despite attempts in explaining their “uncustomary” feeding practices. Doherty and her team further report that women who chose to exclusively formula feed had difficulties accessing formula milk and that most mothers (80% of the study group) had run out of formula supplies at least once in the first 12 weeks. Conversely, women who were successful in maintaining exclusive formula feeding were observed to have three defining characteristics: (i) They had a strong belief in the benefits of breastfeeding (ii) They had the ability to resist pressure from family to introduce other fluids (iii) They had a supportive home environment that enabled them to stay with their infants. For women using formula milk, disclosure to a partner or family member reduced fears of stigmatization. Furthermore, having resources such as electricity, a kettle and flask made feeding at night easier. Having money to purchase formula milk when clinic supplies were unavailable was also found to be important for the adherence to exclusive formula feeding (Doherty et al, 2006a).

Some researchers highlight the inadequacy of infant feeding counseling and how it does not prepare women for the challenges of adhering to their infant feeding choice (Chopra et al, 2007; Petrie et al, 2007). Muko and colleagues (2004), further stress the inappropriateness of assuming that blanket policies would be effectively implemented and produce expected impact. By and large, these studies are an illustration of the importance of taking account of the complexity of socio-cultural context in which infant feeding decisions are made. These
universal and local investigations show that infant feeding policies with regard to either exclusive breastfeeding or exclusive formula feeding are least feasible especially in socio-cultural environments where breastfeeding is the norm (Kassier, Maunder & Senekal, 2003; MacIntyre et al, 2005).

2.12 Conclusion

Prior to the HIV/AIDS era, breastfeeding has been aggressively advocated as the best alternative of infant feeding with positive health outcomes for the mother and baby pair. Due to HIV/AIDS pandemic, and the knowledge that the human-immuno virus can be transmitted through breastfeeding, global infant feeding recommendations have been altered. The literature shows that the choice of breastfeeding remains the best choice for HIV negative mothers. In HIV positive mothers, the dangers of not breastfeeding must be balanced against the threat of HIV transmission if breastfeeding. This becomes a painful dilemma for millions of women in developing countries, for whom there are no easy options. The literature shows that aggressive counseling and support can effectively minimize suboptimal feeding practices.
Chapter 3: Methodology

3.1 Introduction

The background to this study and literature review have been presented in Chapter 1 and 2 respectively. This chapter provides a description of the methodology and the research design, study population, sampling and sample size.

3.2 Study Design

This is an exploratory descriptive study, employing a qualitative approach. Depoy and Gitlin (1994) state that studies that focus on recounting the nature or the extent of a phenomenon are descriptive in nature. Therefore, an explorative descriptive design was chosen as this study is seeking to explore and describe challenges faced by nurse counselors as they implement the infant feeding policy. Furthermore, the study design was found most suitable as it allowed for direct engagement with study participants through interviews and discussions, making it possible to bring forth a rich description of their perceptions.

3.3 Study Setting

The Amathole District is one of the seven districts of the Eastern Cape. It is composed of the five Local Service Areas (LSAs): Amahlathi, Buffalo City, Mbhashe, Mnquma, and Nkonkobe. The District has an estimated population of 1 657 373

Source: ECSECC, 2002
people, the largest population in the Eastern Cape Province. About a third of its people are younger than 15 years and almost 60% of the population is aged between 15 and 64 years while 5.6% is 65 years or older (Statistics South Africa, 2001). In this area, there is an intrinsic link between HIV and poverty, as breadwinners and families increasingly strive with limited resources to provide medical care whilst at the same time compromising their access to food, shelter and clothing (Sogaula et al, 2002).

In Amathole there are 18 health facilities which facilitate deliveries; two of these are health centers, 14 are district hospitals and two are regional hospitals (DHIS, 2006). Twelve out of eighteen facilities (66%) have received accreditation for Baby Friendly Hospital Initiative (DOH Database, 2006a).

There are six hospitals that offer PMTCT services in Amathole District. These six hospitals have service a total of 19 referral clinics which have been accredited to offer VCT and PMTCT services (DOH, 2006c).

3.4 Study Population

The study population is made up of nurse counselors who work in BFHI accredited maternity facilities and PMTCT accredited clinics in Amathole District, Eastern Cape Province of South Africa. These included nursing staff working in antenatal clinics, VCT units, labour wards, maternity sections, paediatric wards, PMTCT clinics and their supervisors. These units are where pregnant and women with infants or children are taken care of, and also where the Infant Feeding Policy, the PMTCT and BFHI programmes are likely to be implemented.
3.5 Sampling

A purposeful sampling strategy was used. The aim of the sampling was to identify participants who would be able to provide rich content and answers to the study question within the context of the study site. As proposed by Rice & Ezzy (1999), the goal in qualitative research is not to ensure that the sample is statistically representative but that of finding information-rich cases. These authors also advocate for the use of non-probability sampling method in qualitative research. They argue that qualitative research does not try to generalize about the distribution of the phenomenon being studied but to describe in depth the experiences and meanings of an occurrence (Rice & Ezzy, 1999).

A multi stage sampling procedure was used as follows:

**Step 1:** The Amathole District of the Eastern Cape has five Local Service Areas (LSAs). These were stratified to represent the triple socio-demographic typography of Amathole District which includes rural, peri-urban and urban. The LSAs were purposely selected based on the availability of health facilities which met the selection criteria described below.

**Step 2:** Within each selected LSA, one BFHI accredited facility and one PMTCT site was purposively selected, i.e. a total of three of each facility type.

**Inclusion Criteria BFHI Facilities:** The BFHI facilities with 500 or more deliveries per annum were selected in each of the three LSAs. Secondly, these facilities had been running for two years as accredited institutions.
Inclusion Criteria PMTCT Facilities: In each of the three LSAs, the PMTCT sites that were selected were situated within the referral clinics of BFHI facilities selected above. The sites had been in operation for at least two years as accredited PMTCT sites.

Step 3: Nurse counselors who were on duty on the day of data collection were automatically selected as part of the sample, making this a convenience sampling. Nurse supervisors who were in charge during data collection were included for Key Informant Interviews.

3.6 Sample Size

Lincoln and Guba (1985) following grounded theory, advocate sampling to the point of redundancy, that is, when no new information is forthcoming from sampled individuals (Lincoln & Guba 1885 in Rice & Ezzy, 1999). For this study, the researcher did not attempt to reach saturation as it is the norm in qualitative research. The number of Focus Group Discussions (FGDs) and Interviews was purely based on the resources of time and money that were available to do research work. This has been highlighted as one of the shortcomings in this study.

Focus Group Discussions: Three PMTCT sites and three BFHI sites were selected and a total of six sites were included in the study. One FGD was conducted at each of the selected facilities, i.e. a total of six FGDs. The Focus Groups consisted of three to eight nurse counselors who are actively involved in counseling mothers on infant feeding. In order to achieve the study objectives, a homogenous group of nurses was sampled in order to capitalize
on participants’ shared experience. This is in line with what was proposed by Liamputtong and Ezzy (2005) in selecting focus group participants.

**Key Informant Interviews:** Further data was collected through three Key Informant Interviews: two were held in PMTCT sites and one in a BFHI site. The Key Informants were maternity and clinic supervisors who were in charge of infant feeding nurse counselors.

### 3.7 Data Collection Method

Qualitative research methods were used. These included Focus Group Discussions with active nurse counselors in the sampled facilities. The Focus Group method is a well established mainstream technique which is widely used in Social Science research (Finch and Lewis, 2003). The fundamental nature of a Focus Group is that it presents a more natural environment than that of the individual interview because participants are influencing and influenced by others, just as they are in real life (Casey and Kreuger, 2001 in Finch and Lewis, 2003). As such, Focus Group Discussions present an opportunity not only to gather information but also for deliberation among group members. One of the unique features of Focus Groups is that the researcher is able to access attitudes and perceptions which are more likely to surface by virtue of the interaction within the group. Participants do not only have an opportunity to present their own views but also get to hear views of their colleagues. Additional information is therefore easily triggered and communicated in response to what they hear from others (Meyer, 2000).

Secondly, semi-structured Key Informant Interviews were conducted with supervisors. The Key Informant Interviews (face-to-face) were considered a suitable method for collecting data
among supervisors, as they are characterized by accrual of rich data from robust interaction between the researcher and the interviewer (Meyer, 2000). The interview questions were open-ended and began with an initial question to start discussions. This method allowed for the use of probes to achieve depth in every answer given by the interviewee.

3.8 Development of Instruments

A questionnaire was developed to collect demographic information of the participants. Demographic data included age, marital status, duration of employment and professional rank. Interview schedules were used for both Focus Group Discussions and Key Informant Interviews. The guides were formulated based on the key topics outlined below:

(a) The nurses Focus Group guide was developed to explore experiences of health workers regarding infant feeding counseling. This tool covered the following:
    - Experiences of health workers in the implementation of infant feeding policy
    - Challenges in implementing infant feeding policy
    - Support systems.

(b) The Key Informant Interview guide was developed to ascertain the nature of support provided for nursing staff that counsel HIV positive mothers on infant feeding and covered:
    - Communication of new policies
    - Challenges in implementation of infant feeding policy
    - Forms of nurse counselors support systems in place
3.9 Data Collection

Data collection was done between August and September 2008. The interviews were performed by the researcher and a research assistant. The Focus Group Discussions consisted of 3-8 nurses counselors. Three supervisors were individually interviewed. All FGDs and interviews took place within the hospital premises during working hours. The supervisors (facility managers) ensured that the environment was conducive to conducting interviews as requested and were able to book hospital boardrooms for this purpose. At the clinics, the staff lounge was used.

Semi-structured interview guides were prepared and the probing questions technique was used to collect data. The interviews continued for 30-60 minutes while the FGDs took between 1 ½ - 2 hours. All events were recorded using a high quality mini cassette recorder. The interviews were then transcribed by the researcher.

3.10 Validity

Validity, or how closely the account is representative of the participants’ experiences (Creswell and Miller, 2000), was ensured by triangulation of data sources. Information was sought from PMTCT, and BFHI nurse counselors and their supervisors. Validity was also established through triangulating methods of data collection (Focus Group Discussions and Key Informant Interviews). The use of more that one method provided a panoramic picture of the subject under investigation.
To improve validity, interviews were administered in languages understood by both the interviewees and interviewers. All interviews and FGDs were conducted by the same researcher who is conversant with the study setting and who is experienced in conducting qualitative research. The tapes were transcribed within a short space of time of the recording. Lastly, the researcher concentrated on reporting the complexities of situational context by using context-rich descriptions from Focus Group Discussions and Interviews. According to Marshall & Rossman (1995) the use of ‘raw’ data derived from the study setting itself can be helpful in establishing validity in that it gives assurance that the interpretations made by the researcher is trustworthy and reveal some truth external to the researchers’ experience.

Thoroughness in qualitative research also refers to comprehensiveness of approach and analysis Popay et al (1998). In this study, thoroughness in analysis has been established by employing the data analysis technique proposed by Richie et al (2003).

3.11 Analysis

Recorded interviews and discussions were transcribed by the researcher. “Raw” data comprised of verbatim transcripts of interviews and discussions and notes taken by the research assistant during the interviews. Data analysis occurred concomitantly with data collection. This was done in two ways:

(i) After each interview/discussion session, the researcher had debriefing sessions with the research assistant, discussing the content and meaning of the interviews and discussions.

(ii) The principal researcher spent time listening to recordings of the interviews within a short space of the recordings in order to become familiar with the data sets.
The thematic content method was used to analyze the data. This was achieved by applying a step by step coding and categorizing scheme as proposed by Richie et al (2003).

This was done as follows:

(i) Identification of initial themes and concepts: This was done by making a list on a notepad of what appeared to be important themes as the researcher was going through the transcripts.

(ii) Constructing an index: An index was constructed by identifying links between the listed themes, sorting and grouping them under main and sub-themes.

(iii) Sorting and labeling the data: The index allowed for accurate labeling of the data. This was done manually by cutting sentences and phrases within the transcripts and arranging them under a specific sub-theme.

(iv) Thematic charting: Thematic charting is a process which refers to summarizing of the key points of each piece of data. This was done by covering all sub-themes listed under specific themes. The key points under each sub-theme were then typed into a document which eventually became a basic tool which was used for developing the findings.

### 3.12 Ethical Considerations

The proposal was submitted to the University of the Western Cape Research and Ethical Committee for ethical approval. Permission from the Department of Health Eastern Cape was obtained to conduct the research.
The investigator was mindful of the challenging nature of the study as it dealt with a grotesque epidemic, touching emotional aspects of all human spheres in society. As a result, participation in the study was voluntary for all participants. They were made aware that they could withdraw at any time during the course of the interviews without giving reasons. Participants were also informed of their right to respond to questions with which they were comfortable. An Information Sheet explaining the study was developed for the benefit of the participants. The Information Sheet was written in language that the participants could understand. Confidentiality was assured by using participant codes or pseudonyms during discussions. Written informed consent was obtained from all participants.

Only the researcher and supervisor have access to the audiotapes of interviews. The names of participants and the names of facilities on the transcripts were not revealed.

3.13 Limitations

Due to funding constraints, the sample size could not be increased to a point where saturation was reached (see sampling size).

Furthermore, only the nursing staff that was on duty on the day of the interviews was included in the study. Those who were absent or were on leave were automatically eliminated.
Chapter 4: Results

This chapter presents the study findings using content analysis. The first section of the results is a profile of study participant, followed by the presentation of the results presented as themes. Directs quotes have been extrapolated from the FGDs and Interviews and have been used to exemplify key issues that were raised. For confidentiality purposes, codes have been used to identify the facilities where data was collected.

4.1 Profile of Participants

4.1.1 Nurse Counselors’ Profile

A total of 26 nurse counselors participated in the Focus Group Discussions. The youngest participant was 22 years and the oldest was 59 years of age with the average age of 43 years. All participants were female. Participants were from all nursing categories as tabulated below. A majority of participants had extensive experience in the nursing field judging from the range of active years in the field. The range was 3 – 28 years with an average of 17 years.

Table 1: Demographic Profile of FGD Participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>No. Of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age (Years)</strong></td>
<td></td>
</tr>
<tr>
<td>22 – 40</td>
<td>8</td>
</tr>
<tr>
<td>41 – 50</td>
<td>12</td>
</tr>
<tr>
<td>&gt; 50</td>
<td>6</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>26</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
</tr>
<tr>
<td><strong>Nursing Category</strong></td>
<td></td>
</tr>
<tr>
<td>Chief Professional Nurse</td>
<td>6</td>
</tr>
</tbody>
</table>
### Key Informants Profile

A total of three female supervisors participated in key informant interviews. All were between 40 and 60 year of age. They were all qualified as Chief Professional Nurses. One had 15 years in service while two had 20 years and above in active service.

### Key Informant Interviews and Focus Group Discussion Results

The following themes emerged from the discussions and interviews:

(i) Systemic factors

(ii) HIV and the infant feeding dilemma

(iii) The provision of free formula in clinics

(iv) Support system for nurse counselors

Each theme will be discussed in more detail, including sub-themes.
(i) Systemic Factors

This study identified systemic factors that were a hindrance to the smooth running of PMTCT and BFHI programmes and that were negatively affecting infant feeding counselling. These were staff shortages, increased workload and lack of appropriate infrastructure and equipment for counselling. The VCT policy for training of nurses was also found to be problematic, as it only allowed certain nurse categories to be VCT trained.

Shortage of Staff and Increased Workload

Nurses at both PMTCT sites and BFHI hospitals reported increased workload over the years. The staff at PMTCT sites mentioned HIV/AIDS as a major contributor to increased workload. In the normal hospital setup, nurses were experiencing an added burden of counseling HIV positive mothers on top of their daily routine.

One nurse counsellor spoke about her inability to carry out all of her duties due to a pile of work and competing needs. She said:

> As a PMTCT trained nurse, I find myself having to work extra hard. Because the doctor order counselling for the patient. You have to leave your routine work and go counsel the patient while the routine work is waiting for you. Sometimes you fail to counsel the patient meanwhile they are here in the hospital, because you can’t divide yourself into two. Sometime routine comes first and that’s just the way it is. (Nurse – Hospital B, 2008)
Both groups cited an increase in the number on teenage pregnancies as one of the causal factors for increased workload. The nurses felt that the Child Support Grant provided by the Department of Social Development was to blame for an increase in teenage pregnancy.

*You know today I am a granny because of this teenage pregnancy. The moral values of our children are going down the drain. This child grant has really made the matter worse. It seems as if these children are competing to fall pregnant so that they can get the grant. What scares me is that they are not thinking of HIV because they are engaging in unprotected sex* (Nurse- Hospital C, 2008).

It was mentioned that the rate of staff exodus and lack of replacement resulted in high staff shortages. The following quotations show that nurses who had resigned were taking the skills and training they have accrued with them.

*Even the professional nurses, now there are few who are trained. Others who had received the training have left the institution* (Supervisor- Hospital A, 2008).

One of the supervisors made this comment:

*Unfortunately most people do not want to stay in the rural areas. But we can’t blame them it is their choice because they have got families. So we lose our staff and no one is interested in working here so it is not easy to recruit to our areas* (Supervisor- Hospital B, 2008).

Another systemic problem was identified by supervisors whose supervisory duties include conducting skills audits and ensuring that their staff has the necessary training to implement programmes. All supervisors concurred that the hindrance to conducting training for nurse counselors was the shortage of staff in the wards. The challenge was taking staff out of service,
sending them for training knowing very well that they did not have replacement staff available. The supervisors were aware that they were placing an extra burden on remaining staff by sending some for training while they were not in a position to fill the gaps. One supervisor explained this as a “catch-22” situation as it continued to be irresolvable, containing conflicting and mutually dependent needs, one being the need to send the staff for training, the other being the need to maintain acceptable staff levels for all shifts.

_This brings some form of hardship for us in the wards and you are not sure how to deal with it. You know you prepare your duties and your day-offs a month in advance. You get a call from the Matron’s office informing you about an upcoming workshop for something. You are told to send somebody for that workshop to represent the hospital. The matrons know we are short staffed, we can’t afford to do that and they say we have to send somebody because we need the staff to be current and well skilled - sometimes you do it but sometimes the staff is fighting with you because of workload_ (Supervisor-Hospital A, 2008).

Staff shortage did not just disrupt services but also affected the actual impact of training. Comments were made that both the BFHI and PMTCT programmes have been condensed and made shorter so as to cut the number of days the nurses are away from their actual work. One supervisor commented that the condensed programmes were giving a lot of information in a short space of time hence the training seem not to be adequately preparing the staff to implement the programmes.

_Initially BFHI training was 40 hours and the PMTCT was 5 days but now there is 18-hour BFHI training and PMTCT has been reduced to 3 days. But due to shortage of_
staff you cannot take them for 5 days. It is unfortunate because the information is being rushed now (Supervisor- Hospital C, 2008).

**VCT Training Policy**

The BFHI facility staff felt that the policy of training only registered nurses on VCT and not other ranks compounded the problem as untrained junior nurses remained unskilled to do counseling. This is one of the points which was raised during FGDs where there was a strong consensus among the group. The VCT training policy was seen to be indirectly putting more workload on trained staff.

_I think everybody should be VCT trained and not only certain categories. Because when you are a sister working in the ward you have to leave your work and go counsel for VCT. With the new protocol, enrolled nurses are not allowed to administer drips or take blood. All of this is done by registered nurses. So I am saying it creates more work for us and if all nurses can train on VCT we can assist one another with the workload_ (Nurse- Hospital B, 2008).

In another FGD, this is how the VCT training challenge was raised:

*What really puzzles me is that you do get lay counselors who are VCT trained but other categories in nurses like nursing assistants, staff nurses who are not being trained because of their qualifications. It is really putting extra load to the professional nurses* (Nurse- Hospital A, 2008).

On further exploration of the abovementioned problem, it was mentioned that the situation was exacerbated by the fact that according to policy, VCT training could only be executed by the Provincial VCT trainers and that it was not done internally.
What is worse is that with the training of VCT it is not done by us but it is done by the province. So our cry is that more people should be trained. In the past I would say almost 80% of the staff were trained but due to staff turnover they left the hospital so there are fewer VCT trained (Nurse- Hospital A, 2008).

**Time Constraints for Counseling**

An additional factor that was posed as a challenge in implementing infant feeding policy emanates from the fact the staff had insufficient time to counsel their clients. This was attributed to the shortage of staff and increased workload by all groups. In BFHI facilities they also ascribed this to the shortage of trained PMTCT nurse counselors.

The trained senior nurses carried more responsibilities including attending meetings with management or attending workshops. This is illustrated by the following quotation:

> And also about time - we never have enough time and inside you, you feel that you did not have enough time for that client. It may happen that during that session you are called by the supervisor or matron or it may happen that you go into the counselling session knowing very well that you have got maybe 30 minutes with the client and after that you have to rush and attending a meeting or workshop. So sometimes you end up rushing the patient which is wrong, and inside of you, you feel it. Even although the patient has agreed or made a choice on infant feeding but you are never happy because you know you did not give your best (Nurse- Hospital A, 2008).
Infrastructure (Appropriate space for counselling)

The availability of appropriate space was highlighted as one of the challenges that made infant feeding counselling difficult. Two facilities reported lack of adequate space for counselling. The challenge was associated with lack of privacy which was described as a crucial element when dealing with HIV positive mothers. One participant said:

*In this clinic space is a problem. If you look over there, that is the cubicle where we do our counselling and you can see there is a curtain instead of a door. Sometimes people just come in and disturb because they can’t knock you see* (Nurse- Clinic B, 2008).

One of the important findings was lack of appropriate equipment for demonstrating formula preparation for mothers who choose to formula feed. This is how the nurse counselors put it:

*So we use a bottle because it has got measurements but then we tell the mother to put it in a cup after measuring because we are trying to discourage using a bottle to the extent that UNICEF has devised a cup for this, but we have found that the measurements fade away, so we use a bottle at the mean time* (Nurse- Clinic A, 2008).

Use of Antenatal Care

In certain cases, mothers by-pass the prenatal clinics visits altogether. This may mean that they have not received a test for HIV, and therefore do not know their status. This, in turn, puts pressure on hospital staff to provide counselling on VCT, PMTCT and infant feeding, should the mother test positive. It is evident how the problem of mothers by-passing the clinic negatively affects the quality of counselling they receive in hospital by putting an extra burden on hospital staff.
In the real situation, there are deviations from what we have just talk about, because you will find out that there is not enough people, I mean not enough nurses in the ward; so you have to counsel in the ward because you are not able to take the patient to the counselling room. You have to keep an eye on other women that are there and this patient is also in labour, you have to do VCT so that you know the status of the patient and if you need to administer Nevarapine and you also talk about feeding. And I promise you there are people going up and down but there is nothing you can do this is a real life situation and you only do what is practical (Nurse- Hospital C, 2008).

Another participant put it this way:

The mothers are not coming early in their booking visits; sometimes they are undecided about taking VCT. So it becomes difficult to advise about infant feeding; especially with us working in maternity ward, it is very difficult because you are meeting this mother now and she is going to deliver and you have to counsel now and take blood now, get results and she has to say what she is going to feed the baby (Nurse - Clinic C, 2008).

(ii) HIV and the Infant Feeding Dilemma

The Integration of Infant Feeding Policies

During the time of data collection, it was observed that at implementation level, the infant feeding guidelines promoted by BFHI and PMTCT were different when it came to dealing with infants who are HIV-exposed. It was also noted that most of this sample of nurse counselors had not heard about the new national infant feeding policy.

In the Eastern Cape exclusive breastfeeding is for 3 months and then 3 months exclusive formula feeding where there is going to be no water nothing for another 3
months. That was the policy at first. And then for the woman that is negative, it’s exclusive breastfeeding for 6 months. The new policy says 6 months exclusive breastfeeding for all mothers and for the one who is positive she stops at 6 months and if she still wants to continue she can express and heat treat the milk. The new policy is still with the provincial office. We have not been formally introduced to it yet but we have heard its there. So for now we still continue with the old one (Nurse- Clinic A, 2008).

In another focus group this is how one nurse counsellor puts it:

*Let me say something about the 3 months, 6 months business. Here in this province we were told because of poverty we must promote exclusive breastfeeding for 3 months in HIV positive women. But there were people who came from national; they talked about exclusive breastfeeding for 6 months. It gives us a problem because they are not saying the same thing. We say the mothers must breastfeed exclusively for six months here in the hospital and in PMTCT they talk 3 months, now maybe I tell them about 6 months, tomorrow they meet the sister who has done PMTCT, she tells her 3 months. Now we are making patients confused* (Nurse- Hospital A, 2008).

**The Attitude of Nursing Counselors:**

A striking finding was the differences in individual perceptions of nurse counselors when it came to the appropriateness of infant feeding advice for HIV positive mothers. These contrasting opinions emanated even within groups working in the same facilities. What was verbalized during discussions testifies to the fact that there might be serious difficulties with implementing what the infant feeding policy stipulates. One group of nurse counselors were
convinced that breastfeeding was still the best advice to give even in areas of high HIV prevalence while others struggle with the issue of HIV transmission through breastmilk. Although others were scared of the idea of breastfeeding HIV positive mothers, some were observing a decrease in morbidity due to their efforts of promoting breastfeeding:

One of the clinic supervisors said,

With breastfeeding there are lots of strengths even with impact of HIV. In our area we see great improvement when it comes to diarrhea amongst children. We have a Master Chart where we plot gastro stats and malnutrition cases on monthly bases. We can see from it that we do not see much gastro cases as before (Supervisor- Clinic B, 2008).

Her observations were confirmed in a different discussion:

I think BFHI is helping a lot because with breastfeeding we are getting less of malnutrition, those nutrition conditions we used to see and there’s improvement in the general child health. I tell the mother to give breastmilk and you tell her about the benefits and you know it is cheap and she is able to get it easily and it is nutritious. To me that is very important (Nurse – Hospital B, 2008).

After such accomplishments in promoting breastfeeding, nurse counselors express their frustration in seeing more HIV positive mothers choosing formula versus breastfeeding. Their concerns on this matter are put across as follows:

The policy says give them information about the benefits of breastfeeding, if she opt for formula we have to make sure that this woman is not going to struggle to get milk. We ask can this woman really sustain to give this baby formula. If one of these points is no, we concentrate in teaching this woman about breastfeeding but the mother is just opting for formula (Supervisor- Hospital B, 2008).
As much as nurse counselors were impressed with the results of promoting breastfeeding, some were harbouring fears that they were putting the lives of babies of HIV positive mothers in danger if they told them about breastfeeding. As health professionals they have always had confidence in the soundness of infant feeding advice they gave to mothers. Due to HIV/AIDS epidemic, that confidence is slowly being replaced by fear and doubt.

*You know if it was for me, I would advise all HIV positive mothers not to breastfeed because as we have mentioned we are not 100% sure that these mothers are able to exclusively breastfeed at home. Because of the environment we are serving in and because of the reality of the mothers.* (Nurse - Hospital C, 2008).

*It is frustrating even from the counselling part of it because when you are doing counselling there is always that uncertainty. Even if the client opted for exclusive breastfeeding or formula feeding. The mere fact that you as a professional cannot say if you opt for breastfeeding then you are safe from the transmission or if you opt for bottle you are safe. We can’t guarantee safety to the mothers, the frustration starts there. You as a professional nurse you are in-between* (Nurse - Hospital C, 2008).

As the discussions were flowing it became apparent that most of the staff were clearly biased in their definition of sound infant feeding choices. A “good choice” was defined as a mother who had chosen to breastfeed and formula feeding was defined as “a bad choice”. The next statement captures the essence of nurse counselors’ attitude with regards to breastfeeding and formula feeding:
I was going to say that they (mothers) used to choose the correct one that is breastfeeding. But now they are scared because of the virus and they are choosing formula (Nurse - Hospital B, 2008).

One of the nurse counselors had a contrasting opinion on the matter and said:

*I think the child will be at a risk of contracting HIV if they are breastfed. That’s the truth. If anyone in my family were to be HIV positive, I will tell them not to consider breastfeeding straightaway. I will tell her to use formula. If the child received Neverapine at 7 months and at birth; then if that child is breastfed after birth she might get the virus* (Nurse - Hospital B, 2008).

One nurse counsellor expressed her frustration about allowing mothers to make choices about how they wanted to feed their babies:

*Please take the choice out of PMTCT. I want you to include this on your report. Because you see that this thing is working against breastfeeding; they are all choosing formula* (Nurse - Clinic A, 2008).

The Complexities of Applying the AFASS Criteria

There was a general feeling among the nurse counselors that the AFASS Criteria were simply not working. This realization was said to be difficult because the infant feeding policy requires that the nurse counselors continue to apply the AFASS criteria whereas they have seen that it was not producing the intended results.

*I don’t think they understand because they will choose formula and when you ask them how far it is from the clinic you find out that this client has to use money to go fetch the*
milk and she has to wait for grant money, on the 3rd day of the month, before she has cash on her hands for transport and you feel frustrated because no matter how much you try to explain, they choose formula anyway (Nurse - Clinic A, 2008).

One nurse counsellor pointed out that the concepts that are entailed within the AFASS Criteria were too complex for the illiterate.

AFASS is not easy to understand especially those mothers that are not educated. To tell you the truth even the educated staff sometimes does not understand it. It is not easy to communicate it, you need a lot of time to grasp it (Nurse - Hospital C, 2008).

Some were of the opinion that the mothers understood but were just failing to apply the advice they have been given.

Me myself I am confident that I can advise mothers to exclusively breastfeed even when HIV positive. You just have to be patient and take your time to explain the results of every choice that a mother can make. In that way mothers can make good choices, they choose to breastfeed but later on they mix feed, give water, within one month, they are adding baby cereal to the milk and so on (Nurse - Hospital C, 2008).

The discussions suggested that nurse counselors were aware of the fact that some of the mothers were basing their infant feeding choices on fear of transmitting the virus to their infants and not on the AFASS Criteria.

Socio- economically I don’t think mothers are making good choices because in front of us the nurses they say yes they can afford but you just know that is not true. We try to show them that they can still breastfeed for up to 6 months and not affect their babies
but people are afraid to kill their babies; that is what they say. This is why I say I am nursing fears about giving the mother these choices because of affordability issues.

(Nurse - Hospital A, 2008).

Some of the fundamental concerns about the AFASS Criteria were based on the fact that it appeared not to sufficiently accommodate the socio-cultural context of infant feeding in certain communities. The following quotes give a hint of the ultimate outcome of infant feeding counselling where the AFASS Criteria was applied.

*Health workers often forget about community influences such as mother in laws, husbands and other cultural beliefs such as the belief that when a baby cries it means that it does not have enough food therefore solids should be given. This leads to mixed feeding. Unless there are messages aimed at assisting behaviour change among communities, this policy will never completely achieve its goal* (Nurse - Hospital B, 2008).

**Challenges in Implementing Infant Feeding Advice at Home**

Nurse counselors were fully aware of the challenges faced by mothers in implementing the infant feeding advice they received from health services. The HIV context was blamed for complicating the situation. The following points reflect the nurse counselors’ despondency about their advice.

*What I have experienced with breastfeeding mothers is that they breastfeed but they cannot stop at 3 months as we advise. You know some of these mothers have experience so they will tell you once a child starts breastfeeding they do not want to stop. Our
advice is not do-able. With the formula, others (mothers) take it and some don’t because they say there is stigma in that formula (Nurse - Hospital A, 2008).

Nurse counselors continued to share their experience, providing examples of their conversations with the mothers. Here is another example illustrating the challenges within the home environment:

HIV positive mother who have opted for breastfeeding for 6 months usually say I will not be able to stop at 6 months because my in-laws will surely ask why I stopped. Even those who would have chosen formula are afraid to do so because of family and husband (Nurse – Clinic C, 2008).

The nurse counselors were fully aware that the main challenge in the home environment was because of the fact that mothers were not keen to disclose their HIV status. These remarks were made from two different focus group discussions:

The main challenge is disclosure. When the mothers are tested they are afraid to tell their husbands of their HIV status. Now the problems come because most of them have chosen to formula feed and the husband wants her to breastfeed (Nurse – Clinic C, 2008).

I can simply say my feelings about advising HIV positive mothers to breastfeed is 50/50 because we can counsel these people but the problem we have which is worldwide is disclosure. We can counsel and do whatever but when they go home we are not there. There is one case I remember; this mother was just a teenager, she had opted for
formula feeding when she got home the granny asked why she was not breastfeeding. She said it was the advice she got from the hospital. The granny said she was lying because nurses always preach breastfeeding. The adolescent ended up breastfeeding the child because she did not divulge her status to the granny (Nurse – Hospital B, 2008).

Furthermore gender dynamics were repeatedly mentioned. It was interesting to see how it was affecting infant feeding and yet nurse counselors felt ill-equipped to deal with such aspects:

What I know about husbands is that they are so reluctant to testing. There is one that I talked to yesterday. The husband refused to come and test. He was demanding to sleep with the wife and she kept on refusing because the husband does not want to condomize. The husband is saying there is nothing wrong with him. The husband was also withholding money to buy formula since the wife was refusing to have sex with him. And now we had a problem because this mother had run out of formula and there was nothing to give to the baby. (Supervisor – Clinic B, 2008).

Another thing that affects us is the anger of the client especially married women. Because it is during the counselling that their status is revealed. So now she starts talking about how faithful she has been in the marriage. She talks about how she cannot bear to stay with a partner who has done this to her. Now you are first a marriage counsellor before you are an infant feeding counsellor and yet I am not married myself (Nurse – Hospital C, 2008).
(iii) Inconsistent Supply of Formula Milk

Inconsistent supply of formula milk to HIV-positive mothers, who choose to use formula, appeared to undermine the authority of the health education given by nurse counselors. The following quotes were captured in two different contexts:

*The Department of Health committed itself to supplying formula to the mothers if they choose to formula feed. But the reality is that we often run out of formula. Sometimes you feel guilty because the mother is here to collect milk and you don’t have milk.*

(Nurse – Clinic B, 2008).

During key informant interviews, one supervisor testified how she had to give a desperate client money for buying formula as the clinic had ran out of supplies. She said:

*The situation is worrying and at the same time embarrassing. One time I gave the mother money to go buy formula. What could I have done, the situation is really bad, but I can’t do that for all the clients.* (Supervisor – Clinic A, 2008).

One of the supervisors recommended that all HIV positive babies should receive assistance to access a Disability Grant which is paid out by the Department of Social Development in cases of chronic illnesses:

*From my side, I think that those mothers that are positive must be given Grants as well just like the money that is given to HIV patients who are on Disability Grant, because they need financial support to buy milk for their children. If they can get some money every month, I think things can be better.* (Supervisor – Clinic B, 2008).
(iv) Support System for Nurse Counselors

Stressful Working Conditions

Nurse counselors portrayed their working environment as highly stressful due to high levels of workload as quoted above. The discussions confirmed that the nurse counselors were struggling with accumulating emotional baggage due to the problems they were dealing with during counselling. One participant said:

"You get affected during counselling, as a counsellor you have to hold those feelings back. I remember one time when I got home, I couldn’t do the supper at home, I just wanted to lie down after work. At times I would be very stressed, I would shout all the time, shouting at children, it was just tense at my house and you do not have a shoulder to cry on. So you find yourself taking these problems home. The following morning you start all over again as if there was nothing bothering you. For the sake of the client you just have to continue" (Nurse – Clinic B, 2008).

The discussions confirmed that there was not sufficient support in place which nurse counselors can access when in distress. Some tend to personalize work-related issues, which in most cases troubled their home environment.

"We discuss the problems among ourselves. If I can make an example; I had a problem where I splashed myself with a blood from an HIV positive patient. I was conducting vacuum extraction and the goggles I was wearing became loose and her blood splashed into my eye and I was just stressing and there was no counseling which was offered but I just put myself into a PEP (Post Exposure Prophylaxis) programme for the month and..."
then I checked myself. Luckily I was fine. My colleagues were very supportive even when I got my results they were very supportive (Nurse – Hospital A, 2008).

You know even when you are off duty you think about this client that you have met that day. You sometimes forget about your own kids because you just think about the clients. You cannot even eat. Onetime my husband asks why are you not eating. I just slashed at him because I was frustrated. It is really frustrating. (Nurse – Clinic C, 2008).

The following quote highlights that in some experiences, nurse counselors experience lack of support and even some level of hostility from other nurses who are not involved in counselling.

I think there should definitely be serious support for counselors especially those that are VCT trained. Sometimes you find that the work that you do is undermined by other nurses who are not doing counselling. They think that it is child’s play, that it is easy; and that you don’t have much work to do. They think I am just sitting in that office (Nurse– Clinic A, 2008).

Nurse supervisors were fully aware of the stressful experiences of nurse counselors. They also understood that there was a need for professional support for nurses who were dealing with HIV positive patients on daily bases. All the supervisors commended their staff on the satisfactory work they were doing. They said:

You know the nurses are working very hard; they are dedicated in what they are doing. It is not easy for them at times because there is too much work. These people
are dealing with clients with serious problems and they have problems of their own and so it’s a pile up, but we talk about these things we always share. When they are too stressed they come to my office and we talk (Supervisor – Clinic A, 2008).

I know…I know when they are stressed even if they don’t tell me. You see Nomi (Pseudonym) when she has counselled 3 – 4 clients, she just changes, you see it on her face, she is not that happy person anymore. So I call her and we talk. Sometimes you feel like sending them away just to cool down but the problem again is shortage of staff (Supervisor – Clinic B, 2008).

In this chapter theme emerging for the findings have been presented. In the next chapter, conclusions will be drawn from these findings.
Chapter 5: Discussion

This chapter covers the interpretation of the findings set out on Chapter 4. The discussion will follow a thematic pattern similar to that used in the presentation of the findings covering systemic constraints and issues related to HIV and infant feeding as well as the complexities of implementing the AFASS Criteria. Challenges in implementing the infant feeding guidelines will then be discussed followed by the discussion of support systems for nurse counselors.

5.1 Constraints in the Health Service

HIV has undeniably changed infant and young child feeding practices in many parts of the world (Bland et al, 2002) such that there has been a high demand for updated knowledge and skills for nursing staff. The findings show that one hindrance in conducting training for nurse counselors was the shortage of staff in the wards. Similar findings were reported by Penn-Kekana et al (2005) who examined nursing staff dynamics in maternal health services in three provinces of South Africa. They found that staff shortages affected attendances of key training opportunities (Penn-Kekana et al, 2005).

These findings have implications for the implementation of BFHI and PMTCT programmes in South Africa because of the high nurse vacancy rate in the country (Penn-Kekana et al, 2005). Furthermore, staff shortages appear to directly affect the quality of counselling, as time constraints were reported by the nurses to affect counselling duration. In the South African PMTCT programme, trained lay counsellors are employed to ease the problem of shortage of staff (HST, 2003). However, a national evaluation of the PMTCT Initiative in South Africa
revealed several difficulties which included low counselor salaries, as well as training and supervision of lay counselors (HST, 2003). These challenges have resulted in high lay counselor turnover and increased training needs as new lay counselors are employed.

Lack of suitable facility infrastructure was found to be one of challenges to effective counselling services. One of the requirements of the PMTCT sites is the provision of adequate space for education and counselling of clients (Rutenberg et al, 2003). This suggests that that during the accreditation process, the facilities were able to demonstrate that they had appropriate space for counselling, otherwise they would not have been accredited as a PMTCT facility. For this reason, it appears that this challenge might have been created by lack of monitoring of PMTCT sites within Amathole district.

Another infrastructural shortage was noted as the lack of calibrated cups for demonstrating the preparation of formula feeds to the mothers. The use of uncalibrated feeding cups made it difficult to teach the mother safe preparation of formula. These findings suggest that there are shortcomings in the counselling of HIV positive mothers who have chosen to formula-feed. In the hospital situation, a contributory factor could be that in most facilities, formula milk preparation is done centrally (in the milk kitchen) and thereafter distributed to the wards. Structural designs of most old hospitals do not cater for milk preparation rooms within the maternity unit. Hospital policy on Infection Control could be violated if formula feeds were prepared in an inappropriate environment. Contamination of infant feeds within hospitals has been documented in several sites in South Africa (Gupta, Khanna, Chattree, 1999; Marino et al, 2007). These findings may mean that a majority of formula feeding mothers are going home
without being properly trained on how to safely prepare formula. This is of concern as over-dilution and unhygienic preparation of infant formula are contributory factors to under-nutrition in infants, especially in the developing world (Andresen et al, 2003).

One of the concerns of the nurse counselors was lack of attendance of antenatal care (ANC) by some expectant mothers. Bypassing antenatal care is a significant problem for the mother as they miss the opportunity of receiving critical standard health care (such as VCT) which is rendered during clinic visits. In this study, maternity staff reported dealing with cases where they were obliged to perform HIV testing and counselling during early labour. Fortunately, national figures show that the use of antenatal services in South Africa was generally good (SADHS, 2003). Ijumba and Barron (2005) report over 95% of pregnant women attending antenatal care with an average of four visits per pregnancy. However, HIV testing of pregnant women at the clinics remained low - at 50% (Barron, Day, Loveday and Monticelli, 2005).

Shortage of staff and time constraints were blamed for poor infant feeding counselling offered to pregnant women during ANC. Rutenberg et al (2003) conducted a study which looked at the integration of PMTCT services with existing maternal and child health programs in low-resource settings. One of their findings - that the single most important hurdle to providing good quality counselling was shortage of staff - is congruent with the findings of this study.
5.2 HIV and Infant Feeding Advice

The provision of free formula within PMTCT programmes has been shown to conflict with the message of exclusive breastfeeding (Kassier et al, 2003). The present study confirms the lack of consistency in infant feeding advice given to HIV mothers, including varying opinions amongst nurse counselors. Some were advocating the promotion of exclusive breastfeeding while others were promoting exclusive formula feeding. This confusion caused by mixed messages may be due to a poor fundamental understanding of the risk of MTCT of HIV by health workers. For example, on assessing recall rates of infant feeding messages in nurses who had attended refresher courses on infant feeding, Kassier et al (2003) found that only a few PMTCT clinic staff could recall exclusive breastfeeding as an important infant feeding message for mothers of infants younger than six months of age. This confusion has also been reported elsewhere. In Kuwait, a change in the trend of infant feeding, which is characterized by a decrease in breastfeeding in favour of formula feeding has been reported (Al-Fadhil et al, 2006). The findings of this research showed that there was a spillover effect of feeding advice for HIV positive mothers into the general population which affected the practice of either HIV negative mothers or mothers of unknown status (Al-Fadhil et al, 2006).

Even though some nurse counselors were passionate about promoting exclusive breastfeeding in HIV cases, they were fully aware of the difficulties faced by mothers in implementing their advice. This puts nurses in a difficult situation as they appeared to fully understand the socio-cultural dynamics mothers were facing in implementing infant feeding advice. Leshabari et al (2007) attest that in many societies, especially in sub-Saharan Africa, it is normal for a baby to be given water, teas, porridge or other foods as well as breast milk, even during the first few weeks of life. Several studies have found that many mothers who choose exclusive
breastfeeding have difficulty complying, especially when there is pressure from partners and relatives to follow traditional practices (Busken et al, 2007; Doherty et al, 2006a; Bland et al, 2002).

5.3 Complexities of the AFASS Criteria

The South African Infant and Young Child Feeding Policy (IYCFP) recommends exclusive breastfeeding during the first months of life unless replacement feeding is acceptable, feasible, affordable, sustainable and safe (known as AFASS Criteria). These criteria are used by nurse counselors in determining the appropriateness of individual choice to formula feed. Furthermore, the IYCFP states that all HIV-infected mothers should receive counseling, which includes provision of general information about the risks and benefits of various infant feeding options, and specific guidance in selecting the option most likely to be suitable for their situation. Whatever a mother decides, she should be supported in her choice (DOH, 2007a).

The problem of mothers who were choosing formula even though they did not meet all the elements of the AFASS criteria (Accessibility, Feasibility, Affordability, Sustainability and Safe) was reported as one of nurse counselors experiences. Discussions revealed that even though there was free supply of formula in government PMTCT clinics for HIV positive mothers who choose to formula feed, it was not always easy for the mothers to access the clinic supply due to lack of transport fees to go to the clinic to collect the milk. When the clinics ran out of supply, some of the mothers were not able to purchase their own milk supply placing in question its affordability and sustainability. The evaluation of the PMTCT programme in South Africa underscored operational problems with the distribution of free formula at clinic facilities such as supplies running out, supplies provided not lasting until
mothers’ scheduled return date to the clinic, and concerns amongst health workers regarding how to counsel mothers on infant feeding from six months, when the free supply of formula ends (HST, 2003).

Nurse counselors were specifically concerned about HIV positive mothers who chose to formula feed. They feared that the mothers were not able to withstand the enormous pressure they received from family members and partners to breastfeed or to introduce other fluids and foods from an early age. In other words, nurse counselors were quite aware that choices made by mothers to formula feed were not feasible and sustainable, given the socio-cultural context. Nurse counselors were aware that fear of disclosure of HIV status and stigma was weakening the ability of HIV positive mothers to resist these entrenched family and community norms that encourage mixed feeding. A cohort South African study confirmed that such practice were not safe, as mixed feeding carried a higher risk of HIV infection than exclusive breastfeeding (Coutsoudis et al, 1999).

5.4 Support System for Nurse Counselors

Study participant repeatedly expressed high levels of stress and experience of lack of supportive supervision. The psychosocial study conducted by Horstman quoted in Pendukeni (2004), shows that this is not a new finding. This study demonstrated that health workers who were dealing with HIV/AIDS patients frequently experienced depression, anxiety, overwork, stress and fear of contracting HIV/AIDS (Pendukeni, 2004). Azwihangwisi et al (2007) conducted a study in Limpopo which aimed to describe the experiences of nurse-counselors in order to better understand why they were quitting the service. They found that stress was the
major cause of nurse shortage in HIV care. The foregoing might suggests that lack of supportive supervision might be a serious issue among health workers in some parts of South Africa. Ledgister speculates that the enormous pressure of practicing in a stressful and constantly changing health environment may increase the prevalence of job-burnout among nurses (Ledgister in Hall, 2001). A review done by Hall (2001) shows that burnout was associated with lower morale, reduced job performance, increased tardiness, job turnover, loss of productivity, high rates of absenteeism, and poor physical, mental and emotional health for individual workers.

The findings have identified numerous challenges faced by nurse counselors in implementing the infant feeding policy. There is much concurrence with the literature about understanding how the nurse counsellor themselves experience their situation. Recommendations for improvement are presented in the next Chapter.
Chapter 6: Conclusions and Recommendations

6.1 Conclusions

This study reveals that nurse counselors are faced with enormous challenges in executing infant feeding counseling based on policy. The findings discussed in this study provide insight into some of the experiences and perceptions of nurses involved in infant feeding counseling. This study attempts to contribute to the gap in knowledge that existed in the South African literature on experiences of nurse counselors. As South Africa strives for the improvement of breastfeeding rates (DOH, 2004) through BFHI programme and as the up-scaling of PMTCT programme continues, this knowledge should become useful in the improvement of programme design where necessary.

The introduction of HIV/AIDS prevention and care into antenatal care and maternal and child health settings has meant that health workers have been asked to greatly expand their responsibilities and tasks. This study gives insight into the reasons for the reported poor quality of infant feeding counseling given by nurses (Chopra, 2005). The findings highlight that the reported shortcomings are not just lack of skills or knowledge but also that factors beyond the nurse counselors’ control are at play. Health system constraints, socio-cultural factors affecting infant feeding and lack of support systems are key factors that have been identified as challenges affecting the counseling outcome with respect to nurse counselors’ experiences. However, additional training is necessary to ensure that nurse counselors are armed with updated information and that they are better skilled to execute their jobs.
Most importantly, this study has clearly demonstrated that nurse counselors have conflicting perceptions and opinion on appropriate infant feeding advice for HIV positive mothers. Changing scientific understandings as well as individual perceptions make it difficult for nurses to adhere to infant feeding policies. The experiences of nurse counselors illustrate the complexity of implementing infant feeding policy recommendations and demonstrate that counselors are ill-prepared to support mothers to accomplish safe infant feeding.

This study also underscores what has already been reported in other local and international studies (Davies-Adetugbo et al, 1999; Muko, 2004) that women who test positive face a very difficult decision about how to feed their babies. What they need is accurate information, clear unambiguous guidance and ongoing support to succeed with their chosen strategies.

### 6.2 Recommendations

From the conclusions of this study, it is suggested that infant feeding counselling could be improved if chronic systemic constraints such as the human resource shortages mentioned above were improved. This might require a substantial increase in the health budget to cater for human resource increases, coupled with improvements in workforce planning, recruitment and retention strategies, as well as improving staff performance through capacity development and supportive supervision.

Based on the knowledge that HIV can be transmitted through breastfeeding and the option of replacement feeding advocated by the PMTCT programme, more rigorous measures are needed to ensure that mothers understand the various modes of transmission and options for
prevention of transmission. To increase understanding, messages should be designed and be communicated in such a manner that they are relevant and comprehensible to the target audience.

The use of IEC material during counseling can greatly assist in helping mothers to understand the concepts which make up the AFASS Criteria. The mothers’ ability to make choices based on the AFASS Criteria require additional thought and consultation, involving all stakeholders, including the communities. The Department of Health should consider acquiring locally developed IEC material for this purpose.

The use of mass media for community education is vital for rapid dissemination of knowledge about infant feeding. This mode of communication can contribute to dealing with socio-cultural dynamics that affect infant feeding.

There is also a need to establish a support system such as setting up weekly meetings where nurses could freely discuss on work related issues with their supervisors. In addition, it is necessary to establish professional counselling services which nurse counselors can easily access in time of need. Churches that provide spiritual counselling should be approached to give emotional and spiritual support to nurse counselors to avoid further emotional drain.
References


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Appendix 1

**Research Title: The Challenges Faced By Nurse Counselors in the Implementation of Infant Feeding Policy**

**Socio-demographic Information**

1.1 Age (age in completed years):

1.2 Gender
   1= Male       2= Female

1.3 What is your marital status?
   1= Single       2= Married       3= Divorced
   4= Separated   5 = Widowed       6 = Cohabiting

1.4 For how many years have you been practicing as a nurse?

1.5 Which nursing category do you fall under?
   1= Chief Professional Nurse       2 = Senior Professional Nurse
   3 = Professional Nurse            4 = Registered Nurse
   5 = Enrolled Nursing Assistant    6 = Lay Counselors
   7 = Other
Appendix 2

Nurses Focus Group (Guide)

<table>
<thead>
<tr>
<th>Training</th>
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<tbody>
<tr>
<td>Can we talk about the training you received for PMTCT / BFHI? How did you experience the training?</td>
</tr>
<tr>
<td>How has the training helped you in the execution of your duties as nurse counselors?</td>
</tr>
<tr>
<td>How important has been your training on (BFHI/PMTCT) programme?</td>
</tr>
<tr>
<td>In your view is there a need for refresher cause?</td>
</tr>
<tr>
<td>Are there areas of the training that are not relevant in your situation?</td>
</tr>
<tr>
<td>Are there areas in your day to day job that you feel were not covered by the training?</td>
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<tr>
<th>Policy &amp; Programme</th>
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<tr>
<td>What is the institution policy in giving infant feeding advice to pregnant mothers? (Also ask for new mothers, HIV positive mothers, HIV Negative, Unknown Status)</td>
</tr>
<tr>
<td>How was the current infant feeding policy formulated?</td>
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<tr>
<td>How often has the policy been reviewed since implementation?</td>
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<td>Are you aware of the national infant feeding policy?</td>
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<table>
<thead>
<tr>
<th>Counseling</th>
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</thead>
<tbody>
<tr>
<td>Preparatory Stage:</td>
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<tr>
<td>What things do you need in preparation for counseling? What kind of environment do counselors need in order to do their job?</td>
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<tr>
<td>Do you experience any challenges in terms of having a conducive environment for counseling?</td>
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<table>
<thead>
<tr>
<th>During counseling:</th>
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<tbody>
<tr>
<td>Lets talk about your experiences in implementing your infant feeding policy or guidelines. Lets talk about the practical side of policy implementation.</td>
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<tr>
<td>In your view, which aspects of counseling are good or satisfactory and why?</td>
</tr>
<tr>
<td>Which aspects of counseling are poor or dissatisfactory and why?</td>
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<tr>
<td>What are the most common concerns of the mothers they talk about during counseling (Give time for the group to give more. Ask the group if they can think of more concerns)</td>
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</table>
**shared by mothers)**

How do you address these concerns?  
*(Ask what advise do nurses give to try and alleviate ……… Go through the concerns list one by one as mentioned above)*

**Post counseling:** What do you believe is the overall impact of your counseling?  

Do you feel that HIV positive mothers are ready to follow their choices when they leave the counseling room?  

What do you think should be done to **maximize** the support the infant feeding choice of mothers when they go home?  

Finally, are there any other concerns about your day to day work experience you would want to talk about?

**Support & Supervision**

Where do you get help if you need technical support?  
Please explain how often you require this and how this support helps you.  

*(Technical support means support with difficult counseling cases in the area of MTCT)*

Where do you get help if you need emotional support?  
Please explain how often you require this and how this support helps you.  

*(Emotional support is support for the nurse when having emotional draining counseling cases)*

Where do you get administrative support and supervision as nurse counselors?  
How regularly do you meet with your designated counseling supervisor?
Appendix 3:

Key Informant Interview Guide for Supervisor

<table>
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<tr>
<th>Policy &amp; Programme question</th>
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<tbody>
<tr>
<td>How was the current infant feeding policy formulated?</td>
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<td>How often has the policy been reviewed since implementation?</td>
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<tr>
<td>What in your view poses as a challenge towards meeting programme objectives?</td>
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<tr>
<td>How is BFHI policy integrated with PMTCT policy or guidelines?</td>
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<table>
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<tr>
<th>Supervision duties</th>
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<tr>
<td>Please briefly describe your role as a supervisor.</td>
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<tr>
<td>Please describe the working environment in relation to infant feeding counseling.</td>
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<tr>
<td>What are the challenges in carrying out the task describe above?</td>
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<tr>
<td>What are the most difficult problems you encounter in performing your job in providing PMTCT related service?</td>
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*(Probe for staffing if not mentioned)*

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<tr>
<th>How would you describe the communication between you and your staff.</th>
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<td>Are there any incentives prepared for providing PMTCT service?</td>
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Appendix 4: Participant information sheet

The Participant,

Thank you for taking time to read this information sheet. It gives a succinct explanation of what the research entails and how you could become involved. As part of my Masters in Public Health, I am required to conduct research on any topic of my own choice. I have chosen to focus on the implementation of HIV & Infant Feeding policy in Amathole District. My Supervisor is Prof. Puoane of the University of the Western Cape, School of Public Health. I am accountable to her during the course of my research period. She is contactable at 021 9593084 or c/o SOPH Fax: 021 959 2872 or by e-mail at tpuoane@uwc.ac.za.

Title of the Research
Challenges faced by nurse-counselors in the implementation of HIV and Infant Feeding Policy in Amathole District, Eastern Cape.

Purpose of the Study
This investigation is aiming to describe challenges and experiences of nurse counselors in counseling HIV positive mothers on infant feeding. I hope that by your participation, a better understanding will be gained of the challenges and experiences nurse counselors' experience. This knowledge could be used for the fortification and contextualization of the current infant feeding guidelines

Description of your study and how can your involvement
The study will include focus group discussions with nurse counselors and in-depth interviews with facility supervisors. Questions about your work experience as a counselor/supervisor will guide the discussion and/or the interview that I have with you.
Confidentiality
It is guaranteed that should you wish to participate in this research, the information you might give during data collection will never be used against you in any way. Your name will be kept confidential and any information you give will not be directly referenced to your name. I will also require you to sign a consent form for procedural purposes and that this form will NOT be used as part of data. The forms will immediately be destroyed after the completion of the research.

Voluntary Participation and Withdrawal
Your participation in this research is entirely voluntary. If you choose to participate, you may stop at any time. You may also choose not to answer particular questions that are asked during this enquiry.

You may not get any direct benefits from this study. However, the information we learn may help in improving infant feeding policy. There are no costs for you to incur should you wish to participate. However, we will require that you spent some time in group discussions/interviews.

Informed Consent
Your signed consent to participate in this research study is required before I proceed to interview you. The consent form is attached to this Information Sheet so that you will be able to review the consent form and then decide whether you would like to participate in this study or not.

Hereunder are my contact details should you have further questions or wish to know more:
Nonzwakazi Sogaula
Mobile: 083 432 0037
Email: sogaula@gmail.com
Telefax: 040 654 3389
Appendix 5

CONSENT FORM

Title of the Research
Challenges faced by nurse-counselors in the implementation of HIV and Infant Feeding Policy in Amathole District, Eastern Cape.

To The Participant:
You are kindly requested to take your time and read through this document. This is a consent form which you must sign should you agree to participate in this research you have been informed about. Once again, I want to stress that you are under no obligation to participate in this research. By signing this form, you are not just agreeing to participate, but you are also acknowledging that you have been fully informed about the purpose of the research and your role as a participant. Furthermore, by signing this form you will also be acknowledging that your participation is entirely voluntary and that your refusal to participate or withdrawal from the study will not result in penalty nor loss of benefits to which you are otherwise entitled. If you choose to participate, you may stop at any time. You may also choose not to answer particular questions that are asked in the study. If there is anything that you prefer not to discuss, please feel free to say so.

Once more, please bare in mind that the information collected in this interview will be kept strictly confidential.

From the Participant:
I have read the information about this research on the participation information sheet. I was also given the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction.

My signature below, testifies to my consent and voluntarily participation in this research.

<table>
<thead>
<tr>
<th>Name of Participant</th>
<th>Signature of Participant</th>
<th>Date</th>
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<table>
<thead>
<tr>
<th>Name of Researcher</th>
<th>Signature of Researcher</th>
<th>Date</th>
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