

**UNIVERSITY OF THE WESTERN CAPE**  
**Faculty of Community and Health Sciences**

**FACTORS ASSOCIATED WITH EXCLUSIVE BREASTFEEDING**  
**IN KWEKWE DISTRICT, ZIMBABWE**



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A Mini-thesis submitted in partial fulfilment of the requirement for the degree of Master of Public Health, in the Faculty of Community and Health Sciences, University of the Western Cape

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## DECLARATION

I, the undersigned declare that this thesis has been composed by myself and that the research it describes has been done by me. The thesis has not been accepted in any previous application for a degree elsewhere. All quotations have been distinguished by quotation marks and the sources of information clearly acknowledged by means of references.



**Signed:**

**Name: Themba Nduna**

**Date: 31 / 12 / 2011**



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## **ABSTRACT**

Evidence on the benefits of breastfeeding for child survival, growth and development is published extensively. Breastfeeding is an “*unequaled*” way of providing ideal food to infants and young children to promote good health, growth, development and to attainment of their full potential. Despite initiatives and programmes to promote uptake of exclusive breastfeeding, this practice remains sub-optimal in Zimbabwe. This study explored factors that influence breastfeeding decisions and practices based on mothers’ own breastfeeding experiences.

### **Methodology**

This study employed a phenomenological research design. Information collected from mothers using in-depth interviews was triangulated with that from key informants. Interviews were audio-tape recorded and transcribed verbatim in Ndebele and then translated to English. Thematic analysis was used to compare various accounts from study participants to identify similar and related themes.

### **Findings**

Mothers could not differentiate exclusive breastfeeding from predominant and partial breastfeeding. *Barriers to exclusive breastfeeding* were: (i) Poor understanding of exclusive breastfeeding and its benefits; (ii) Use of herbal infusions; (iii) Practice of giving babies water; (iv) Perceived insufficient breastmilk production; (v) Myths and misconceptions; (vi) Breast conditions; (vii) Tradition (viii) the HIV epidemic; and (ix) Employment. *Enabling factors* were: (i) Adequate food for the lactating mother; (ii) Family support; (iii) Support from husband; and (iv) Knowledge of the benefits of exclusive breastfeeding.

## LIST OF ABBREVIATIONS

EBF	Exclusive Breast Feeding
WHO	World Health Organisation
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
MIMS	Multiple Indicator Monitoring Survey
MoHCW	Ministry of Health and Child Welfare
UNICEF	United Nations Children Fund
BFHI	Baby Friendly Hospital Initiative
IYCF	Infant and Young Child Feeding
BMS	Breast Milk Substitute
PMTCT	Prevention of Mother to Child Transmission
AFASS	Acceptable Feasible Affordable Safe and Sustainable
BCC/IEC	Behaviour Change Communication/Information Education and Communication
TBAs	Traditional Birth Attendants
DBS	Dry Blood Smears
MER	More Efficacious Regimen
ARV	Anti-Retro Viral
UWC	University of the Western Cape
MDGs	Millennium Development Goals
VHWs	Village Health Workers
KI	Key Informant
ENA	Essential Nutrition Actions
FGD	Focus Group Discussions
ZCSO	Zimbabwe Central Statistical Office
FNC	Food and Nutrition Council
SIRDC	Scientific & Industrial Research & Development Centre
WABA	World Alliance for Breastfeeding Action
WHA	World Health Assembly
UK	United Kingdom
USA	United States of America
RCT	Randomised Controlled Trial

## **TABLE OF CONTENTS**

### **CHAPTER 1**

<b>INTRODUCTION</b>	<b>1</b>
1.1 DEFINITIONS OF BREASTFEEDING PRACTICES	2
1.2 BENEFITS OF BREASTFEEDING	2
1.3 BREASTFEEDING AND HIV	3
1.4 GLOBAL EFFORTS TO PROTECT PROMOTE AND SUPPORT BREASTFEEDING	4
1.5 BREASTFEEDING IN ZIMBABWE	5
1.6 PROBLEM STATEMENT	7

### **CHAPTER 2**

<b>LITERATURE REVIEW</b>	<b>8</b>
2.1 INTRODUCTION	8
2.2 BARRIERS TO EXCLUSIVE BREASTFEEDING	8
2.3 ENABLING FACTORS	16
2.4 PREDICTORS OF BREASTFEEDING	17
2.4 SUMMARY	18

### **CHAPTER 3**

<b>METHODOLOGY</b>	<b>19</b>
3.1 AIM AND OBJECTIVES	19
3.2 STUDY DESIGN	19
3.3 DESCRIPTION OF STUDY PARTICIPANTS	21
3.4 DATA COLLECTION	22
3.5 DATA ANALYSIS	23
3.6 RIGOUR	24
3.7 STUDY LIMITATIONS	25



3.8 ETHICAL CONSIDERATIONS	26
<b>CHAPTER 4</b>	
<b>RESULTS</b>	28
4.1 INTRODUCTION	28
4.2 MOTHERS' UNDERSTANDING OF EXCLUSIVE BREASTFEEDING	28
4.3. BARRIERS TO EXCLUSIVE BREASTFEEDING	30
4.4 ENABLING FACTORS FOR EXCLUSIVE BREASTFEEDING	46
4.5 OPPORTUNITIES TO INCREASE BREASTFEEDING UPTAKE	52
4.6 SUMMARY	57
<b>CHAPTER 5</b>	
<b>DISCUSSION OF RESULTS</b>	58
5.1 BARRIES TO EXCLUSIVE BREASTFEEDING	58
5.2 ENABLING FACTORS FOR EXCLUSIVE BREASTFEEDING	65
<b>CHAPTER 6</b>	
<b>CONCLUSIONS AND RECOMMENDATIONS</b>	69
6.1 CONCLUSIONS	69
6.2 RECOMMENDATIONS	70
<b>REFERENCES</b>	72



## **APPENDICES**

**Appendix 1.** Consent Form (English Version)

**Appendix 2.** Consent Form (Ndebele Version)

**Appendix 3.** Patient Information Sheet (English Version)

**Appendix 4.** Patient Information Sheet (Ndebele Version)

**Appendix 5.** In-Depth Interview Guide

**Appendix 6.** Semi Structured Questions for Key Informants

**Appendix 7.** Letter of Authorisation to conduct interviews from the Ministry of

Health and Child Welfare





# CHAPTER 1

## 1. INTRODUCTION

Evidence on the benefits of breastfeeding for child survival, growth and development is published extensively (Earle, 2002; Xu, Binns, Zheng, Wang, Zhao, Lee *et al.*, 2007). Breastfeeding is considered an “*unequaled*” way of providing food to infants and children that is ideal for them to grow and develop to their full potential, according to the World Health Organisation [WHO] (WHO, 2003:7). It is estimated that about 1.4 million child deaths, which amounts to 10% of all mortality in children less than five years are as a result of mothers not exclusively breastfeeding their babies in the first 6 months of the baby’s life (Black, Allen, Bhutta, Caulfield, de Onis, Ezzati *et al.*, 2008). Yet optimal breastfeeding practices can prevent up to 13% of the 10.6 million in children under 5 years that occur worldwide every year (Jones, Steketee, Black, Butta & Morris, 2003; WHO, 2008a).

The promotion of exclusive breastfeeding (EBF) is therefore an important public health strategy to prevent morbidity and mortality. Breastfeeding is arguably the single most effective preventive intervention for reducing mortality in children less than five years (Koyanagi *et al.*, 2009; Kuhn, Sinkala, Kankasa, Semrau, Kasonde, Scott *et al.*, 2007). A study conducted in Zimbabwe showed that EBF was significantly associated with fewer clinic visits than early partial breastfeeding (PBF) among non-HIV exposed infants (Koyanagi, Humphery, Moulton, Ntozini, Mutasa, Iliff *et al.*, 2009). Breastfeeding has been proven to be one of the low cost high impact interventions and as such the duration and prevalence of breastfeeding in a country is considered one of the important indicators of effective child survival interventions (Lauer, Betran, Victora, de Onis & Barros, 2004).

The need to continue scaling up efforts to increase exclusive breastfeeding rates as an important means of reducing child mortality, cannot be over emphasized if countries are to attain the nutrition and mortality related Millennium Development Goals [MDGs] (Coutsoudis *et al.*, 2008).

## **1.1 DEFINITIONS OF BREASTFEEDING PRACTICES**

Exclusive breastfeeding (EBF) means an infant receives breastmilk including expressed breastmilk or breastmilk from a wet nurse, allowing the infant to receive oral rehydration solution (ORS), drops, syrups (vitamins, minerals, medicines), and nothing else (WHO, 2008c). Breastfeeding can also be classified as predominant and partial. Predominant breastfeeding is where breastfeeding is the main source of nourishment, but an infant is also given small amounts of non-nutritious drinks such as tea, water and water based drinks, whereas partial breastfeeding means giving a baby some breastfeeds and some artificial feeds, either milk or cereal, or other food (WHO, 2008b). Globally it is generally agreed that optimal breastfeeding for infants and young children consists of exclusive breastfeeding for the first six months of the infant's life, and then after six months, the infant can receive nutritionally adequate complementary foods while breastfeeding is continued up to 2 years and beyond (Lauer *et al.*, 2004; WHO, 2003a).

## **1.2 BENEFITS OF BREASTFEEDING**

### ***1.2.1 Short-term benefits***

Short-term benefits of breastfeeding include facilitation of normal physiological regulation of milk production, allowing a healthy balance between the infant's needs and the amount of milk produced and hence, considered the healthiest practice for both the infant and mother (Kuhn *et al.*, 2007). Breastmilk provides complete nutrition for the infant constituting of optimal amounts and types of proteins, long chain polyunsaturated fatty acids, nucleotides, carbohydrates, vitamins, micronutrients, minerals and hormones and other pharmacologically active components (Weinberg, 2000). Immunological factors that include antibodies, lysozyme, lactoferrin neutrophils, macrophages, and lymphocytes and the humoral and cellular immunoactive substances found in breast milk are associated with great protection against gastrointestinal and lower respiratory infections, otitis media, and meningitis (Weinberg, 2000). Exclusive breastfeeding in particular has been found to be associated with reduced risk of diarrhoea, pneumonia-related infant morbidity and mortality compared to mixed feeding (Kuhn *et al.*, 2007).

### ***1.2.2 Long term benefits***

Breastfeeding has been observed to have a protective effect in the development of conditions such as type 1 diabetes, ulcerative colitis and Crohn's disease. Breastfeeding has been found to be associated with lower mean blood pressure, low total serum cholesterol, lower prevalence of type 2 diabetes, overweight and obesity during adolescence and adulthood. Other benefits of breastfeeding include delayed return of fertility and reduced risk of post-partum haemorrhage, pre-menopausal breast and ovarian cancers. Breastfeeding has been found to be associated with increased cognitive development during younger years in children (WHO, 2008a; WHO, 2007).

### **1.3 BREASTFEEDING AND HIV**

The transmission of HIV through breastfeeding is one of the most challenging public health dilemmas that health care service providers and policy makers face particularly in low income countries (Ogundele & Coulter, 2003; Coutsoydis, Coovadia & Wilfert, 2008). In women who breastfeed, 30-35% of mother to child transmission of HIV occur via breastfeeding (Ogundele & Coulter, 2003). The rate of mother-to-child transmission of HIV ranges between 14-25% in developed countries compared to 13-42% in developing countries. Of those infants born to HIV positive mothers, between 5-20% of infants acquire the virus through breastfeeding and this translates to one third of all HIV infections in infants and young children in Africa (WHO, 2003b).

Whilst risk of infection is much higher during early months of lactation infection through breastfeeding has been observed to occur as late as up to 36 months postpartum and 18 months post maternal sero-conversion (Ogundele & Coulter, 2003). Continued breastfeeding for more than one year has been estimated to carry an HIV transmission risk of between 10 and 20% in children whose mothers are infected (Lauer *et al.*, 2004; WHO, 2003a). In light of this cumulative risk of HIV to the infant through breastfeeding for a prolonged period, there have been earlier assertions that cessation of breastfeeding (early weaning) may reduce HIV transmission by limiting the cumulative time an infant is exposure to infected breastmilk (Weinberg, 2000).

There is evidence however that infants born to HIV infected mothers are at least 50% less likely to acquire HIV infection through breastfeeding when exclusively breastfed for 4 months (Kuhn *et al.*, 2007). The protective effect of EBF against HIV infection remained significant even after adjusting for both maternal CD4 count and viral load. Evidence from the same study suggests that benefits of reducing post natal HIV transmission through early cessation of breastfeeding are so small to outweigh the high competing risk of mortality in those children who do not have breastmilk as part of their diet from birth to their second birth day. The reduced risk of HIV transmission provided by EBF observed in this study offers an additional benefit to the already established benefits of breastfeeding in the absence of HIV infection.

Not breastfeeding during the first two months of life has been found to be associated with a six-fold increase in mortality due to infectious disease in poor countries (WHO, 2003b). Exclusively breastfeeding infants during the first six months remains a public health recommendation and a “gold standard” for feeding infants (Kline, 2009; WHO, 2003b), particularly where (i) safe water and sanitation is not guaranteed, (ii) reliable and sufficient infant formula cannot be assured, (iii) caregiver cannot safely prepare the infant formula, (iv) caregiver/mother cannot exclusively give infant formula for six months (v) family does not support mother’s decision not to breastfeed and (vi) mother/caregiver cannot access health care facilities for medical care if needed (WHO, 2010). The recommendation by WHO underscores the importance of scaling up efforts to increase exclusive breastfeeding rates as a means to reach the Millennium Development Goal (MDG) of reducing mortality in infant and young children (Coutsoudis *et al.*, 2008).

#### **1.4 GLOBAL EFFORTS TO PROTECT, PROMOTE AND SUPPORT BREASTFEEDING**

Globally, infant and young child feeding practices remain sub-optimal. Less than 35% of infants 0-6 months are exclusively breastfed with complementary feeding commenced either too early or too late (WHO, 2003a). In 2004 EBF rates were reported to be as low as 25% in Africa, followed 31% in Latin America and 45% in Asia (Lauer *et al.*, 2004). Global efforts to protect, promote and support breastfeeding started as far back as 1981 when the World Health Assembly (WHA) adopted and endorsed the International Code

of Marketing of Breast-Milk Substitutes (WHO, 1981), the Innocenti Declaration on protection, promotion and support of breastfeeding in 1990 and subsequently the Baby-friendly Hospital Initiative [BFHI] the year that followed (UNICEF, 2005).

These efforts were followed by the adoption of the Global Strategy for Infant and Young Child Feeding (IYCF) in 2003. The IYCF global strategy was developed to revitalize efforts to promote, protect and support appropriate infant and young child feeding, building on the gains accrued through the Innocenti Declaration and the BFHI (WHO 2003a). The IYCF global strategy calls for governments to (i) develop and implement a comprehensive policy on infant and young child feeding, in the context of national policies for nutrition, child and reproductive health, and poverty reduction, (ii) ensure that mothers have access to skilled support to initiate and sustain exclusive breastfeeding for 6 months and ensure the timely introduction of adequate and safe complementary foods as breastfeeding is sustained for up to two years or beyond, (iii) ensure that health workers are empowered to provide effective feeding counselling beyond the walls of health facilities (iv) review progress in national implementation of the International Code of Marketing of Breast-Milk Substitutes and (v) enact legislation that protect breastfeeding rights of working women.

### **1.5 BREASTFEEDING IN ZIMBABWE**

Zimbabwe has also been active in protecting, promoting and supporting exclusive breastfeeding through implementation of the BFHI, the Code of marketing of breastmilk substitutes and creating an ideal policy environment for implementation of infant and young child feeding programmes. As part of the Innocenti declaration targets, a National Breastfeeding Coordinator was appointed by the Ministry of Health and Child Welfare [MoHCW] in 1993 to spearhead promotion of breastfeeding (MoHCW, 2002). The Minister of Health and Child Welfare commissioned an Infant Nutrition Committee in February 1999, a gesture of a strong political support and commitment towards improving infant feeding practices in Zimbabwe (MoHCW, 2002). Moreover, as part of the BFHI, a BFHI Initiative Task Force is in place in Zimbabwe working with two other committees, namely, the National World Breastfeeding Week Committee, and the Inter-sectoral National Steering Committee for Food and Nutrition (MoHCW, 2002).

### ***1.5.1 The Baby Friendly Hospital Initiative (BFHI)***

The BFHI Task Force is responsible for the certification of hospitals as “baby friendly institutions”. By August 2002, 48 hospitals had been designated as baby friendly in Zimbabwe. Plans have been developed to strengthen the BFHI through training and assessment of more hospitals and reassessment using a locally developed assessment tool (MoHCW, 2002).

### ***1.5.2 The Code of Marketing of Breast-Milk Substitutes (BMS)***

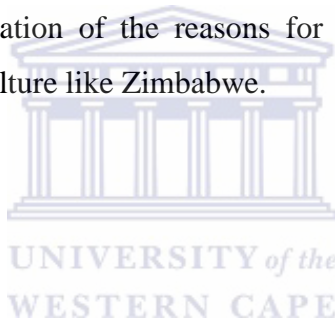
Zimbabwe has a Code of Marketing of Breast-milk Substitutes – Statutory Instrument 46 of 1998 gazetted in May 1998. This statutory instrument is monitored by the Infant Nutrition Committee appointed in February 1999 and enforced by the Port Health Inspectors, Environmental Health officers and Nutritionists. The Infant Nutrition Committee is unique in its composition in that it has representation from local infant formula manufacturing companies and dairy industries. This committee has pioneered work in the establishment of a legal structure for controlling the national and international commercial assault on inappropriate touting of unsuitable foods for infants and young children. The Committee has achieved a lot of progress on the monitoring of Marketing of Breast milk substitutes in the country (MoHCW, 2002).

### ***1.5.3 Breastfeeding and HIV policy in Zimbabwe***

Zimbabwe has a National AIDS Policy that clearly articulates guiding principles on HIV and breastfeeding. The Health worker’s infant feeding and HIV/AIDS guidelines publication was launched in June 2000 (MoHCW, 2002). As part of the infant feeding strategy that was also launched in June 2000, numerous trainings have been conducted for infant feeding and HIV counsellors [the combined breastfeeding counselling/infant feeding and HIV Counselling course for health workers]. Nurses and nutritionists from the different administrative layers of the health care delivery system in Zimbabwe [national, provincial and district] were trained on breastfeeding and HIV counselling (MoHCW, 2002).

#### ***1.5.4 Exclusive breastfeeding in Zimbabwe***

Like many countries around the world (Lauer *et al.*, 2004), uptake of EBF in Zimbabwe remains low amidst efforts described above. The 1999 Demographic and Health Survey (DHS) reported an EBF prevalence rate of 38.9% among children less than four months (ZCSO, 2000). In the 2005/06 DHS the rate decreased to 24.1% in the same age group and 22.2% in children < 6 months (ZCSO, 2007). The 2009 Multiple Indicator Monitoring Survey (MIMS) reported a national EBF rate of 26% among children less than six months [29.3% urban and 24.7% rural] (ZCSO, 2009). Apart from the DHS, sporadic national nutrition surveys (NNS) have been conducted in Zimbabwe. The 2003 NNS reported an EBF prevalence rate of 21% in children < 6 months (MoHCW, 2003) compared to the history low 5.8% reported in the 2010 NNS (FNC, 2010). The 2010 NNS recommends an investigation of the reasons for such a low rate of EBF for a country with a breastfeeding culture like Zimbabwe.



#### **1.6 PROBLEM STATEMENT**

No systematic research has been conducted in Zimbabwe to investigate why exclusive breastfeeding has remained so low amidst programmes and/or interventions by the Ministry of Health and its partners to improve the uptake of this important public health intervention. This study serves as a precursor to a large study to explore exclusive breastfeeding on a larger scale to gain insight on barriers and factors that facilitate EBF including perceptions, meanings, and experiences about breastfeeding from the mothers and those involved in promoting and supporting breastfeeding. Findings from this exploratory study will inform the design and conduct of a large national breastfeeding.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

Some factors have been identified as perceived impediments (barriers) to exclusive breastfeeding (EBF) and others as enabling (facilitatory) factors. An understanding of these factors is an important initial step in designing targeted and context specific interventions to increase the uptake of EBF. This chapter provides an overview of the above mentioned factors.

#### **2.2 BARRIERS TO EXCLUSIVE BREASTFEEDING**

##### ***2.2.1 Perceived insufficient breastmilk production***

Mothers, even when malnourished can produce enough milk for babies aged six months and below provided the mother breastfeeds as often as the baby demands and the baby sucks effectively on the breast (LINKAGES, 2004). However, a large body of literature report that mothers have a general perception that the breastmilk they produce is insufficient for their babies (Cosminsky, Mhloyi & Ewbank, 1993; Kamudoni, Maleta, Shi, de Paoli & Holmboe-Ottesen, 2010; Otoo, Lartey & Perez-Escamilla, 2009). In these studies, baby crying, especially after a breastfeed was the most common sign by which mothers affirm this perception.

In Sub-Saharan Africa, this perception was reported in a study that investigated barriers and factors that enable breastfeeding in Zambia (Fjeld, Siziya, Katepa-Bwalya, Kankasa, Moland & Tylleskar, 2008). Two studies from Zimbabwe, infant feeding practices study conducted in a rural district of Masvingo province (Cosminsky *et al.*, 1993) and another study that investigated reasons for early introduction of complementary foods conducted in Harare City (Nyadzayo, 2007) both found this perception as one of the reasons why mothers introduced other foods to their babies. In their qualitative study that investigated breastfeeding perceptions among mothers in Mangochi district of Malawi, Kamudoni *et al.* (2010) reported similar findings.



In two studies conducted in the Western Cape Province in South Africa, mothers also expressed breastmilk not being enough for the baby as a concern (Murray, Tredoux, Viljoen, Herselman & Marais, 2008; Sibeko, Dhansay, Charlton, Johns & Gray-Donald, 2005), prompting them to introduce other foods to their babies apart from breastmilk. The perception of insufficient milk production by mothers is also not uncommon in East and West Africa.

In West Africa, this has been reported in Ghana and Cameroon (Otoo *et al.*, 2009; Kakute, Ngum, Mitchell, Kroll, Forgwei, Ngwang *et al.*, 2005), while in East Africa, the perception has been reported common in Uganda and Tanzania (Nankunda, Tumwine, Soltvedt, Semiyaga, Ndeezi & Tylleskar, 2006; de Paoli, Manongi, Helsing & Klepp, 2001). Beyond Africa the same finding has been reported in some countries in Asia and the Americas. In a study in Bangladesh that investigated why some women failed to breastfeed following counselling, milk insufficiency as one of the reasons mentioned by mothers who took part in this study (Haider, Birr, Hamdani & Habte, 1997). Similar findings are documented in studies conducted in China (Xu *et al.*, 2007) and India (Sachdev & Mehrtra, 1995). In the Americas, the perception was observed in Jamaica (Chatman, Salihu, Roofe, Wheatle, Henry & Jolly, 2004) and Mexico in South America (Guerrero, Morrow, Calva, Ortega-Gallegos, Weller, Ruiz-Palacios *et al.*, 1999). It is interesting to note that this perception by mothers is common across many countries in Africa and beyond.

### **2.2.2 Giving infants water**

As defined by the WHO, EBF means an infant receives breastmilk including expressed breastmilk or breastmilk from a wet nurse, allowing the infant to receive oral rehydration solution (ORS), drops, syrups (vitamins, minerals, medicines), but nothing else (WHO, 2008c). Yet, the practice of giving water to infants appears wide spread in many countries in African and beyond. This practice is reported in some Southern African countries that include Zambia (Fjeld *et al.*, 2008), Zimbabwe (Cosminsky *et al.*, 1993; Orne-Gliemann, Mukotekwa, Miller, Perez, Glenshaw, Nesara *et al.*, 2006, Nyadzayo, 2007), South Africa (Murray *et al.*, 2008; Sibeko *et al.*, 2005) and Malawi (Kerr, Dakishoni, Shumba, Msachi & Chirwa, 2008).

This practice has also been reported in East Africa. In Ethiopia, a study on determinants of EBF practices reported similar findings (Alemayehu, Haider & Habte, 2009) while two studies in Tanzania, one that investigated socio-economic factors associated with early breastfeeding practise. (Shirima, Gebre-Medhin & Greiner, 2001) and another study that looked at exclusive breastfeeding in the era of AIDS (de Paoli, Manongi, Helsing & Klepp, 2001) both found this practice common. Similar findings are documented in studies in China (Xu *et al.*, 2007) and Brazil (Espirito Santo de Olivera & Giuglian, 2007; Giugliani, do Espirito Santo, de Olivera & Aerts, 2008).

### ***2.2.3 Breast conditions***

Breast conditions feature as a barrier to EBF in a number of studies. Sore nipples and sore breast both causing breastfeeding discomfort (Sibeko *et al.*, 2005; Murray *et al.*, 2008) were mentioned by mothers as challenges to breastfeeding in these two South African studies. In another study in South Africa, cracked nipples compounded by breastfeeding technical difficulties was a reason for introducing fluids and other foods to babies (Bland, Rollins, Coutsooudis & Coovadia, 2002). Swollen and painful breasts, breast abscesses and sore nipples were identified as important breastfeeding barriers in a breastfeeding study in Ghana (Otoo *et al.*, 2009). Fjeld *et al.* (2008) in their study that investigated barriers and enabling factors to EBF in Southern Zambia, infections and breast sores emerged as a barrier during focus group discussions. Breastfeeding counsellors in Uganda encountered sore nipples and mastitis as impediments to EBF (Nankunda, Tumwine, Soltvedt, Semiyaga, Ndeezi & Tylleskar, 2006). In an ethnographic study of breastfeeding in a peri-urban of Mexico City, mothers reported painful breast as a challenge to EBF (Guerrero *et al.*, 1999).

### ***2.2.4 Use of traditional herbal infusions***

Breastfeeding can only be exclusive if an infant less than six months receives nothing else except breastmilk for food including ORS, drops, syrups, vitamins, minerals and medicines and nothing else (WHO, 2008c). Yet studies show that infants and young children are given traditional herbal concoctions.

In the Western Cape Province of South Africa, infants drink *umuthi wenyoni* for treatment of colic-like conditions (Sibeko *et al.*, 2005). In Malawi, ‘*mzuwula*’ and ‘*dawale*’ (root infusions) are given to infants less than six months as prophylaxis for ‘*Moto*’ an illness believed to be caused by sexual impropriety within the home or in the community (Kerr *et al.*, 2008). By definition, such babies are no longer exclusively breastfed; thus a possible explanation for low exclusive breastfeeding rates observed in many African countries (Laurer *et al.*, 2004).

### **2.2.5 Influence from family members and important others**

Certain family members, in particular grandmothers and mother-in-laws have a significant influence on mothers’ breastfeeding decisions and choices about infant feeding. In Malawi for instance, grandmothers have been reported to be influential on breastfeeding practices (Kerr *et al.*, 2008; Kamudoni *et al.*, 2010). In the study by Kamudoni *et al.* (2010) elderly women of the community were reported to influence the women in the community in general. It is clear from this finding that grandmothers wield their powerful influence on breastfeeding practices beyond their immediate family circles to other mothers within the community. This finding was echoed by mothers in a study in Ghana by Otoo *et al.* (2009) that investigated mothers’ perceptions of barriers and facilitators of EBF. In a qualitative study that investigated barriers and enabling factors to EBF in Zambia, it emerged from the focus group discussions with mothers that whilst fathers and grandmothers were less knowledgeable about exclusive breastfeeding, they both have a very strong sphere of influence on mothers’ breastfeeding decisions, choices and subsequent practices (Fjeld *et al.*, 2008). However, literature also suggests that best breastfeeding results have been realised in breastfeeding promotion interventions that actively involved men (SCUK, 2009).

The powerful sphere of influence exerted by important others on mothers' breastfeeding practices in Africa is also apparent in some Asian countries. In their study of predictors of EBF in early infants in India (Sachdev & Mehrptra, 1995) found that advice from a relative was one of the reasons why mothers supplemented breastmilk or in some cases complete breastfeeding cessation. In the same study, important others such as mother, mother-in-law, sister, husband and neighbour also influenced mothers' breastfeeding practices. Similar findings have been reported in Bangladesh (Haider, Birr, Hamdani & Habte, 1997), in Brazil (Giugliani *et al.*, 2008) and Mexico (Guerrero *et al.*, 1999). Health professionals have a strong influence on people's health practices and also on mothers' infant feeding choices. In an ethnographic study of breastfeeding practices in a peri-urban of Mexico City, mothers reported having stopped breastfeeding following advice from a doctor or midwife (Guerrero, Morrow, Calva, Ortega-Gallegos, Weller, Ruiz-Palacios *et al.*, 1999).

#### **2.2.6 Poor understanding of 'exclusive breastfeeding'**

There appears to be misunderstanding and misinterpretation of the term EBF by mothers. In a study conducted in the Western Cape Province of South Africa, mothers from rural and informal urban settlements showed poor understanding of the concept of '*exclusive breastfeeding*'. Some mothers understood the term to mean the exact opposite of its technical meaning. Some mothers thought the term EBF meant not to give breastmilk while others thought it meant to give breastmilk with other foods/liquids (Murray *et al.*, 2008).

During the WHO consultative deliberations on indicators for assessing infant and young child feeding practices, the experts panel noted the difficulties and/or challenges with the use of the term '*exclusive breastfeeding*' compared to '*fed exclusively on breastmilk*' that is more precise and perhaps easier to understand and perhaps to translate (WHO, 2008c). However, the same team of experts considered the term '*fed exclusively on breastmilk*' to be cumbersome and to avoid possible further confusion, the term EBF was retained (WHO, 2008c). That the term EBF is poorly understood could be a possible reason why this practice remains sub-optimal.

Mothers with knowledge about breastfeeding have been found to face fewer barriers to breastfeeding. These mothers were also found to be more confident with exclusively breastfeeding (Mitra *et al.*, 2004). A study in Tanzania also found that mothers who had knowledge on some aspects breastfeeding reported to have breastfed longer than those who lacked breastfeeding knowledge (Shirima *et al.*, 2001). On the contrary, a study that investigated the influence of knowledge and attitudes on EBF practices in Jamaica however concluded that psychosocial factors such as mothers' thoughts and perceptions about breastfeeding influenced their breastfeeding practices more than knowledge (Chatman *et al.*, 2004). The authors arrived at this conclusion after they found that there was no difference in knowledge between mothers who exclusively breastfed and those who did not.

### ***2.2.7 Employment and/or work away from home***

Working mothers have to leave their babies in the care of another person for extended hours while working away from home. In a study that investigated determinants of mixed feeding practices among mothers who attended family health clinics within Harare City in Zimbabwe, return to work was given as one of the reasons for early supplementation (Nyadzayo, 2007). Employment as a barrier to breastfeeding has also been reported by a number of studies elsewhere outside Zimbabwe (Chatman *et al.*, 2004; Guerrero *et al.*, 1999; Dearden, Altaye, de Maza, de Olivia, Stone-Jimenez, Morrow *et al.*, 2002).

In a study in India, employment was reported as a reason for supplementation of breastmilk and/or cessation of breastfeeding (Sachdev & Mehrptra, 1995). As would be expected from a developed economy, economic pressure to return to work (Scanlon, Grummer-Strawn, Shealy, Jefferds, Cheng, Singleton *et al.*, 2007; Arora, McJunkin, Wehrer & Kuhn, 2000) were reported as barriers to EBF in the United States of America [USA]. This economic pressure to return to work was compounded by employment policies that affect the infant's proximity to the mother and aggressive marketing of breastmilk substitutes (BMS) (Scanlon *et al.*, 2007).

Both in developing and developed countries, lack of time have been reported as a barrier to EBF. This was reported by non-working mothers in a study by Haider *et al.* (1997) in Bangladesh. Working mothers with longer maternity benefits were found to more likely to breastfeed for a longer duration than non-working mothers in Greece (Bakoula, Veltsista, Prezerakkou, Moustaki, Fretzayas & Nicolaidou, 2007). The Bangladesh women, even though not formally employed, are more likely to be involved subsistence agricultural activities as to leave their babies at home for extended hours. Women in a developed country like Greece, leave their babies in the care of others to earn income from salaried or formal employment. Whereas the studies were conducted in different socio-economic settings, lack of time for mothers to care and breastfeed their children remains central in both cases.

### ***2.2.8 Socio-cultural and demographic factors***

Socio-economic and demographic factors [education, parity, and genotype], bio-social factors [breastfeeding support in clinic and attitude towards breastfeeding] and cultural factors [beliefs and norms] have been found to be associated with breastfeeding (Aidam, Perez-Escamilla, Lartey, & Aidam, 2005a). In a USA study, lack of breastfeeding education, supportive social networks and socio-cultural systems that value breastfeeding have also been reported as barriers to EBF (Scanlon *et al.*, 2007). Residential area, ethnic group, maternal education, gestational age, infant birth weight, maternal age, delivery method and use of pacifier were found to be significantly associated with EBF in a study among Chinese women (Xu *et al.*, 2007). A study that investigated factors affecting breastfeeding practices in the United Kingdom (UK) found that while mothers knew breastmilk was best for their babies, they perceived breastfeeding to be embarrassing, disgusting, inconvenient and out of fashion in a contemporary western society (Earle, 2002). That breast milk from a pregnant mother is not good for the baby is reported in studies conducted in some countries in Southern, Eastern and Western parts of the Africa (Shirima *et al.*, 2001; Otoo *et al.*, 2009; Cosminsky *et al.*, 1993; Fjeld *et al.*, 2008). According to the studies, mothers are advised to immediately terminate breastfeeding as soon as they discover that they are pregnant, a belief and practice that interferes with breastfeeding.

### 2.2.9 THE HIV PANDEMIC

Whilst EBF is recommended by the WHO as the most preferred way of feeding infants during the period 0-6 months (WHO, 2003), in the recent years, this recommendation has been complicated by the human immunodeficiency virus (HIV) infection. In women who breastfeed, 30-35% of mother to child transmission of HIV occur via breastfeeding (Ogundele & Coulter, 2003). Yet not breastfeeding during the first two months of life has been found to be associated with a six-fold increase in mortality due to infectious disease in poor countries (WHO, 2003b). There is evidence to suggest that an infant born to HIV infected mother has at least 50% less chance to acquire the HIV through breastfeeding if breastfed exclusively for 4 months (Kuhn *et al.*, 2007). Breastfeeding infants during the first six months remains a public health recommendation particularly where (i) safe water and sanitation is not guaranteed, (ii) reliable and sufficient infant formula cannot be assured, (iii) caregiver cannot safely prepare the infant formula, (iv) caregiver/mother cannot exclusively give infant formula for six months (v) family does not support mother's decision not to breastfeed and (vi) mother/caregiver cannot access health care facilities for medical care if needed (WHO, 2010).

The transmission of HIV through breastfeeding is one of the most challenging public health dilemmas that health care service providers and policy makers face particularly in low income countries (Ogundele & Coulter, 2003; Coutsooudis *et al.*, 2008). An infected mother is confronted by a dilemma of competing risks of possibly transmitting the HIV in their breastmilk to her baby or her baby dying from diseases if she chooses not to breastfeed (WABA, 2007). These choices are even more complex for mothers in poor or developing countries (Coovadia & Bland, 2007) where conditions required for alternative feeding especially use of breast milk substitutes may be difficult to meet. It is no surprise therefore that HIV/AIDS has been identified an important barrier to breastfeeding. In a study that investigated mothers' perceived incentives and barriers to EBF in Ghana, maternal HIV emerged as a barrier to breastfeeding in one of the FGDs (Otoo *et al.*, 2009).

In a study that assessed infant feeding practices as part of the prevention of mother to child transmission (PMTCT) programme in rural Zimbabwe, HIV-negative women reported intentions to breastfeed longer than HIV-infected women (Orne-Gliemann *et al.*, 2006). Fjeld *et al.* (2008 in their study in Zambia, HIV/AIDS was mentioned as one of the reasons that would warrant a child to stop breastfeeding to prevent the infection being passed on from the mother to the baby.

## **2.3 ENABLING FACTORS**

### ***2.3.1 Support from men***

In a study that sought to understand the influence of knowledge and attitudes on EBF practices in Jamaica, a mother in a family where the husband is the breadwinner was more likely to practice EBF than nonexclusive breastfeeding (Chatman *et al.*, 2004). In another study that investigated predictors of breastfeeding intention among low income women in Mississippi, support from spouse was found to be associated with an increase in breastfeeding rates (Mitra, Khoury, Hinton & Carothers, 2004). Inversely, lack of support from spouse has been mentioned by mothers in one study as a barrier to breastfeeding (Otoo *et al.*, 2009).

### ***2.3.2 Support from health professionals***

In a study that investigated factors associated with early breastfeeding practices in Tanzania, support from health workers was found to be associated with an increase in EBF rates (Shirima *et al.*, 2001). A randomised controlled trial (RCT) conducted in Ghana showed that EBF rates increased by 100% among mothers who were supported by breastfeeding counsellors (Aidam *et al.*, 2005b). High uptake of EBF was observed among HIV infected women who received breastfeeding counselling and support in a Zambian study (Kuhn *et al.*, 2007). In this study, women were supported by correct breastfeeding techniques, initiation of breastfeeding immediately after delivery and prompt management of breastfeeding problems.



### **2.3.3 Knowledge of benefits EBF**

In a cross-sectional study in Mississippi, mothers with intentions to breastfeed were found to be more knowledgeable about the benefits of breastfeeding and these mothers also tended to report fewer barriers to breastfeeding (Mitra *et al.*, 2004). In a qualitative study conducted in the United Kingdom among Primagravidae mothers, those mothers who knew the benefits of breastfeeding chose to breastfeed their infants yet those mothers who did not have breastfeeding knowledge, chose otherwise (Earle, 2002).

### **2.3.4 Support from family members**

Support from grandmother was found to be associated with an increase in breastfeeding rates in a study conducted in Mississippi (Mitra *et al.*, 2004). In another American study, mothers who practiced bottle feeding reported that support from infant's grandmother or any other family member would have been important in encouraging them to breastfeed successfully (Arora *et al.*, 2000)

## **2.4 PREDICTORS OF BREASTFEEDING**

Perceptions about something appear to play a role in influencing decisions taken for or against it, such as whether or not to breastfeed. In a qualitative study that explored women's personal experiences and perceptions about breastfeeding in the UK decisions about the choice of feeding were made quite early in life, more importantly, even before the prospective mother had had contact with health professionals (Earle, 2002). Bakoula *et al.* (2007) found that maternal infant feeding intention was positively associated with duration of breastfeeding, indicating the importance of mothers establishing an intention to breastfeed in order to successfully breastfeed. In this same study, previous breastfeeding experience was positively associated with the mother's intention to breastfeed. Those mothers who have breastfed in the past are more likely to breastfeed in their subsequent children. Findings from this study highlight the importance of previous breastfeeding experience as an important predictor to be factored in interventions aimed at promoting breastfeeding.

A cohort study in South Africa that investigated operational effectiveness of guidelines on complete breastfeeding cessation to reduce mother to child transmission of HIV found that place of birth, health staff suggesting formula use and infant hospitalisation as independent predictors of complete breastfeeding cessation (Goga, Van Wyk, Doherty, Colvin, Jackson & Chopra, 2009). A Chinese study reported that women whose own mother breastfed and decided on how they would breastfeed well before delivery were more likely to exclusively breastfeed longer (Xu *et al.*,2007). In a Ghanaian study, planned exclusive breastfeeding, attitude towards breastfeeding and place of delivery were found associated with EBF (Aidam *et al.*, 2005a).

## 2.5 SUMMARY

*Barriers to EBF:* mothers' perceived breastmilk production, employment of women not supported by breastfeeding friendly policies, the practice of giving infants water, the HIV epidemic, grandmothers' influence and that of significant others, breast conditions, use of traditional herbal concoctions, poor understanding of EBF and various socio-cultural and demographic factors.

*Factors enabling EBF:* Support from men and other family members, support from health professionals, and mothers' knowledge of EBF.

*Predictors of EBF:* mothers' intention to breastfeed, place of delivery, advice from health professionals, and infant hospitalisation.

Other than concentrating on barriers and enabling factors, this review brings to light the need for programme designers and implementers to understand predictors in order to design successful breastfeeding promotion messages, interventions and/or programmes that will produce the desired outcomes. It can be seen that there is some similarities in findings from different parts of the world even though studies followed different designs ranging from mixed methods, cross sectional and longitudinal study designs.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Aim and objectives**

This study aimed to explore factors associated with exclusively breastfeeding in KweKwe District of Zimbabwe.

The study objectives were:

- (i) To describe mothers' understanding of exclusive breastfeeding.
- (ii) To describe factors that enable exclusive breastfeeding as experienced by mothers
- (iii) To document barriers to exclusive breastfeeding as experienced by mothers.
- (iv) To formulate recommendations to increase uptake of exclusive breastfeeding based on the findings.

#### **3.2 STUDY DESIGN**

The study followed a qualitative approach, employing a phenomenology study design. By employing this design, important information was elicited to gain insight on mothers' experiences and understanding of exclusive breastfeeding. Information collected by employing this study design answered typical qualitative research questions such as 'what' is happening and, 'why' it is happening, and 'how' it happens as experienced by mothers and observed by key informants in their interaction with breastfeeding mothers. Moreover, by employing this study approach, I had the opportunity to explore and understand in detail interpretations and meanings attached to (exclusive breastfeeding) the phenomenon of interest based on mothers' lived testimonies (Malterud, 2001; Pope & Mays, 1995).

##### **3.2.1 Study population**

The study was conducted in KweKwe District of Midlands province. Study participants were recruited from the catchment areas of Dendera Health Centre, Zhombe Mission Rural Hospital and KweKwe General Hospital. Six participants were recruited from Dendera Rural Health Centre catchment area, a primary level of care about 100km west of the district capital; KweKwe.

Four participants were recruited from around Zhombe Mission Rural Hospital, a level of care higher than a health centre situated about 60km from KweKwe town. The remaining five participants were recruited from Sunnymid farm 40 km from KweKwe General Hospital, a secondary level of care providing more specialised care.

### ***3.2.2 Sampling procedure***

The study population comprised of women of reproductive age who had breastfeeding experience. For a mother to participate in the study, she should have breastfed at least two children. Where a mother was breastfeeding at the time of the interview, the child should have been at least six months old and the second child to the mother. Key informants were health workers directly involved in breastfeeding counselling or breastfeeding promotion programmes and Grandmothers (women over 60 years) who had breastfed at least two children and have had at least two breastfed grandchildren.

The selection of study participants was purposive, based on their known or perceived experiences and knowledge of the subject matter (Coyne, 1997) in this case breastfeeding. Those women known to have breastfeeding experience were considered information rich cases (Devers & Franke, 2000). For the purposes of this study, women who had breastfed at least two children were considered information rich cases. Health workers involved in breastfeeding counselling and/or promotion activities, thus those involved with the issue under enquiry (Groenewald, 2004), referred to as “...*subjects with special expertise*” (Marshall, 1996:532) were interviewed as key informants, thus considered “...*the most productive sample*” to answer the research question in phenomenological research (Marshall, 1996). Literature indicates that grandmothers have influence on breastfeeding decisions (Guerrero *et al.*, 1999; Haider *et al.*, 1997). Grandmothers were therefore considered key informants in this study. For purposes of this study, women over 60 years of age who had breastfed at least two children and had observed at least two grandchildren being breastfed were regarded a “*productive sample*” and therefore considered as key informants.

### ***3.2.3 Sample size***

This study focused on in-depth understanding of breastfeeding as a phenomenon, and hence targeted a relatively small and purposefully selected sample. Literature suggests that between two and ten study participants have shown to be sufficient to reach saturation (Boyd, 2001). For long in-depth one-to-one interviews, ten participants suffice to provide thick data and to reach saturation in a phenomenological investigation (Creswell, 1998). As such, ten in-depth face to face interviews were conducted with women who had breastfeeding experience.

## **3.3 DESCRIPTION OF STUDY PARTICIPANTS**

### ***3.3.1 Mothers***

Ten mothers, ranging from 25 to 43 years, participated in this study. All the mothers were married. All the mothers had breastfeeding experience; having breastfed at least two children. Two of mothers were Village Health Workers (VHWs), one was a Home Based Care giver and the rest housewives. At the time of the interviews, only one mother, the youngest of them was breastfeeding a six months old baby. Four mothers were recruited from around Dendera Rural Health Centre/Clinic catchment area, the first level of care in the Zimbabwe's health care delivery system. Rural Health Centre staff assisted the researcher to identify mothers who met the inclusion criteria for participating in the study. Three mothers were recruited from the next higher level of care (a mission hospital with maternity facilities). Here the Community Nurse assisted with identification of participants who met the inclusion criteria. In the KweKwe district hospital catchment area, community members at Sunnymid farm assisted in identifying mothers who met the criteria for participation. Five mothers were interviewed from the comfort of their homes while the other five were interviewed from private and interview friendly rooms within the health facilities.

### **3.3.2 Key Informants**

Five key informants participated in this study: three were health professionals and two grandmothers (hereafter referred to as Grannies). One of the key informants, a 60 year old woman breastfed five children of her own and had several grandchildren. She was a pre-school teacher and a sub-chief of one of the villages. The other Granny was a 64 year old woman who breastfed eight children of her own and had several grandchildren. The three other key informants were health professionals: two female nurses, a state registered Midwife Nurse and a state certified Midwife Nurse both aged 56 years. Both nurses had experience in bed side as well as community nursing. The other key informant was a male Nutritionist. Of the two nurses, one was working a rural health centre and the other a Mission Hospital. The Nutritionist was working at a district hospital. The health key informants were thus recruited from the three above mentioned levels of the health care delivery system as per the protocol. Like health key informants, the two Grannies were recruited from two different levels of care, a rural health centre and district hospital catchment areas as provided for in the study protocol.

### **3.4 DATA COLLECTION**

Face-to-face in-depth interviews were employed to allow collection of information that reflected mothers' perceptions about the phenomenon of interest [breastfeeding] (Family Health International, 2005). In-depth interviews with mothers allowed exploration of complex and in-process nature of meanings that mothers attached to breastfeeding to include how they interpreted EBF. Such experiential information would otherwise be impossible to access by employing other data collection techniques (Liamputtong & Ezzy, 2005). In-depth interviews enabled the researcher to learn about each mother's individual perspective about breastfeeding as opposed to how a group of mothers would perceive this phenomenon (Family Health International, 2005). An in-depth interview guide (appendix 5) was used to ensure the interview explored all the important themes so as to answer all the study questions.

The question on understanding of breastfeeding was modified during data collection. An equivalent translation of ‘exclusive breastfeeding’ to isiNdebele presented challenges for older semi-illiterate mothers. The question on the understanding of EBF was therefore not asked as would be the case were interviews conducted in English, in which case, the question would have been; *what do you understand by exclusive breastfeeding?* Instead the question was then asked as; *when it is said that infants should not be given anything else as food apart from breast milk from birth to six month, what do you understand by that?*

Information from in-depth interviews was triangulated by information collected from key informants using semi structured questionnaires (appendix 6). The original design was to conduct all interviews in Ndebele. However, two of key informants were Shona speaking and did not speak or understand isiNdebele, necessitating a slight modification. Two key informant interviews were therefore conducted in English. All interviews were audio-tape recorded using a digital voice recorder. Interviews were conducted between the 8<sup>th</sup> and 14<sup>th</sup> of November 2010. Time permitting; participants were given an opportunity to listen to their interview from the voice recorder, albeit for only a short part of the interview. Whereas participants were not promised anything prior to the interview, all those who voluntarily participated were given a bar of washing soap as a token of appreciation for their time and contribution to the study.

### **3.5 DATA ANALYSIS**

All interviews were transcribed verbatim in Ndebele by a professional transcriber. Ten of the fifteen Ndebele transcripts were then translated to English by a professional interpreter and the remaining five by a former English teacher with Bachelor’s degree proficient in Ndebele as her first and/or mother tongue. Thematic analysis was used to check for emerging themes from the respondents’ accounts of breastfeeding experiences. Using thematic analysis, all the transcripts were thoroughly read line by line to identify meanings and accounts and these were compared with one another to identify agreement or commonalities among them (Green & Thorogood, 2004).

Transcripts were coded line by line as well as in excerpts and paragraphs with same or similar expressions and/or meaning. Various accounts and meanings were identified from the transcripts and these were eventually grouped together into major themes that related to the study objectives and these are (i) barriers to EBF (ii) enabling factors to EBF and (iii) mothers understanding of EBF. Any interesting themes that emerged [those that were not originally conceived] but considered relevant and/or added more insight into understanding why the uptake of exclusive breastfeeding has remained sub-optimal were weaved into the main themes. The analysis in this study did not attempt to be interpretive but rather to describe and narrate participants own experiences regarding the phenomenon under enquiry. As such, this report is essentially explorative and descriptive in nature.

### 3.6 RIGOUR

Rigour in this study was achieved by ensuring adequate (i) triangulation of information and sources of information, (ii) by providing a detailed study audit trail and (iii) thorough discussion of reflexivity. Triangulation, i.e. data source, researcher, methods and theory triangulation (Gifford, 1996) are important to achieve credibility and fittingness of research findings (Sandelowski, 1986). For this study, data source and methods triangulation were applied to ensure rigour. (a) *Data source triangulation*: Different sources of information were used to understand the subject matter. Information on exclusive breastfeeding was obtained from mothers with breastfeeding experience as primary respondents as well as from key informants. While most key informants were female, one of the three health professional key informants was male, providing another variation in the nature of information sources. These different sources of information strengthened *confirmability* of the findings when compared with wider literature (Gifford, 1998) (b) *Methods triangulation*: Two data collection methods were employed, namely in-depth interviews with mothers and semi-structured interviews with key informants (health workers and grandmothers).



A detailed account of the research setting, problems encountered during the research process, design and data collection methods, as well as description of data analysis is articulated to strengthen the *dependability* of this study (Gifford, 1998). The whole research or enquiry process was well documented through journalising, memo-ing including a research log of all activities and research decisions to include the chronology of data collection and modification done throughout the research process. A research audit trail is also detailed to allow the readers to have an opportunity to track the research process and make some judgement regarding the trustworthiness of the findings of this study (Creswell & Miller, 2000; Sandelowski, 1986).

Characteristics of the researcher such as age, sex, social class and professional status, prior assumptions and experiences can interfere with the research process and outcomes (Mays & Pope, 2000). Therefore, while the researcher (male and a nutritionist) was part of the research process as a research instrument, the researcher made all efforts to “*bracket*” out as much as possible, but also being transparent in reflecting his potential and actual influence through a process of reflexivity. The researcher was in regular contact with his supervisor during the data collection process, sharing interview summaries and receiving feedback accordingly.

### **3.7 STUDY LIMITATIONS**

This study was conducted in the Midlands province that has a hybrid society with an influence of both Ndebele and Shona culture and tradition. This will somewhat limit the transferability of findings to other regions of the country that are still either predominantly of Ndebele or Shona ethnicity. Moreover, since interviews were facilitated and lead by a man, women may have been uncomfortable sharing personal and gender sensitive practices such as breastfeeding and this could have resulted in important information clues being withheld or unreliable data being given. This was however not apparent in any of the interviews. This study was also constrained by time and hence the researcher was not able to undertake member checking to validate the findings.

The information that was elicited and the type of respondents who could best provide the type of information necessitated the choice of language that was used i.e. isiNdebele which is one of the native languages in Zimbabwe spoken by some people in the chosen study sites. While this was necessary, the use of IsiNdebele did not come without challenges. There was no equivalent translation of EBF in isiNdebele and as such, the concept of exclusive breastfeeding had to be described for the participants and some meaning could have been lost in the process. This could have had a bearing on the type and quality of responses. Participants' educational level was not collected and this is a missed opportunity as such information would provide the researcher an opportunity to assess and compare responses to see if those with higher level of education understood things in a systematically different way compared to those with lower educational attainment.

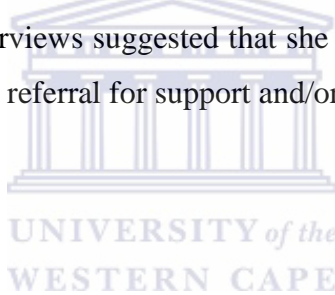
### **3.8 ETHICAL CONSIDERATIONS**

Ethics approval was obtained from the University of the Western Cape (UWC) Ethics Committee. Participation to this study was purely voluntary. Before the interview, the researcher as part of the introduction briefly explained the purpose of the study. Participants were then provided with a participant information sheet (English and the version in isiNdebele [appendices 3 and 4]) that provided details about the study including benefits, the voluntary nature of participation, withdrawal by the participant any time and assurance that information provided by participants was going to be kept anonymous and confidential.

All participants were asked to provide pseudo names that were used for the purpose of the interviews and as such all recorded interviews do not bear participants real names. Unique participant identifiers were used instead of real names of participants to maintain anonymity. All study transcripts and tapes were kept securely to prevent access by anyone outside the study team. The participant information was translated into Ndebele for ease of comprehension by participants as the interviews were conducted in isiNdebele. After participants had read the participant information sheet they were given an opportunity to ask questions about anything they did not quite understand.

Once they had fully understood the study, those willing to participate were asked to sign an informed consent form (in English and Ndebele versions [appendices 1 and 2]) as an expression of their voluntary participation. All the identified participants provided informed consent and there was no refusal or withdrawal.

The Permanent Secretary for Health and Child Welfare in the Zimbabwe Ministry of Health and Child Welfare granted permission for the conduct of this study on the 12<sup>th</sup> of September 2010 (appendix 7). Subsequent approvals were granted by relevant departmental heads at provincial and district level health offices respectively. No possible harm or risk was anticipated to arise from this study. However measures were put in place in case some breastfeeding mothers were found to require breastfeeding support and counselling. Such women if identified would have been referred accordingly. At the time of the interviews, only one participant mother was breastfeeding a six months old baby and nothing from the interviews suggested that she had challenges and/or problems with breastfeeding as to require referral for support and/or counselling.



## CHAPTER 4

### RESULTS

#### 4.1 INTRODUCTION

The results are organized into five sub-headings (i) mothers' understanding of exclusive breastfeeding (EBF) and breastfeeding practices (iii) barriers to EBF (iv) factors enabling EBF.

#### 4.2 MOTHERS' UNDERSTANDING OF EXCLUSIVE BREASTFEEDING

The majority of mothers who participated in this study showed some knowledge of the importance of breastfeeding for the general health and growth of their babies. However, they did not seem to quite understand the concept of EBF *per se*. The notion of 'exclusivity' as it relates to breastfeeding is poorly understood by mothers and this is evident from some practices by mothers that by definition render breastfeeding not to be considered exclusive.

*You could give the baby Cerelac but this is not allowed within 1,2,3,4 approaching to the 6<sup>th</sup> month. That is what I would favour but you see we go on to improvise cerelac with mealie-meal porridge- DIIM3<sup>1</sup>*

*What I understand is that a baby must breastfeed from its mother up to one year six months. This baby will be able to quickly walk, and grow up active, but a baby who at nine months stop breastfeeding ah, takes time to work, he or she delays- DIIM4*

*I have heard about it (meaning EBF) that in the six months, they say a baby must be given only the breast milk, they do it may be the mother will be HIV positive, and she will have delivered this baby as such they then say the baby should only feed on breast milk so that he or she does not develop sores in the mouth-DIIM4*

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<sup>1</sup> DIIM3 denotes a respondent code. The first letter, in this case D represents the study site/location while IIM3 stands for In-depth Interview Mother #3 in a particular study site. All codes with an M are codes for mothers as respondents/participants.

*I understand that health professional know why they emphasize on this, a child who is breastfed from the mother until 6 months has good health. The baby is not easily attacked by diseases...might give bananas, things that build the body...yes you can give the baby water- KIIM2*

*There is nothing that I understand...no, I have never heard that-KIIM1*

*Yes you can give the baby water-KIIM2*

Mothers gave their babies water and other foods such as fruits, commercial baby foods and meal-meal porridge well before the recommended six months. This is an indication of their poor understanding of the concept and/or meaning of EBF.

*She (the baby) started with that one day when she drank water and then I started breastfeeding her for six months and then started giving her other foods thereafter...because I was staying with grannies, they were checking on me for they said if you give the baby food before six months, it may cause the baby to eventually suffer from piles- KIIM2*

*But before eating solids I would prepare for them some water. If the baby cries, the person minding him gives him that water to drink, with a bit of sugar and just a pinch of salt...apart from water, with me there was no other food apart from water and breast milk. Looking at the baby that I would have brought up with breast milk and water, you would see that the one on breast milk and water is far much better than the one who gets food on top of breast milk- DIIM1*

Whilst most mothers showed knowledge of the importance of breastmilk for the general health and growth of their babies and were motivated to continue breastfeeding for as long as it was possible, exclusive breastfeeding was rarely practised during the first 6 months of the child's life as recommended. Health key informants attributed this to mothers' lack of knowledge and understanding of EBF.

*The barriers to exclusive breastfeeding are like, I have said before that eh, could be eh,...lack of knowledge...so that they can do this eh, Exclusive Breast feeding some they have no knowledge eh, so they need health education now and then...Lack of knowledge on positioning, lack knowledge on milk production and the reflexes involved, yah, I would say...and lack of knowledge is quite a challenge... For the ones who don't even go to work again in the rural areas, some may exclusively breastfeed may be for about 3, 4 months...I think it can also be an issue of knowledge in general, that may be there is not enough knowledge on benefits of exclusive breastfeeding especially for 6 months - KHKI<sup>2</sup>*

*Yah (clears voice) even though we have been giving health education as you say, but still I think we still have to emphasize on that...giving this information to the VHWs who actually stay with the mothers in the villages you see, they understand better than us, I think the only thing is to give more information, to equip these people with knowledge so that they can discuss with the mothers at home - ZHKI*

#### **4.3 BARRIERS TO EXCLUSIVE BREASTFEEDING**

In addition to having a poor understanding of exclusive breastfeeding, mothers reported a number of barriers to EBF. These included use of traditional herbal concoctions as medicine, the practice of giving water to babies, the unpleasant feeling of breastfeeding when hungry, insufficient production of breastmilk, misinformation from peers, breast conditions, traditional, cultural norms and belief systems, the effect of the HIV/AIDS pandemic, and lack of time due to formal employment as barriers to practicing EBF.

##### ***4.3.1 Use of traditional herbal concoctions as medicine***

Giving babies 'umuthi' [traditional herbal concoctions] to drink as treatment for 'inkanda' (sunken fontanel) and 'amaketane' (colic-like baby condition) was reported by some participants and key informants alike.

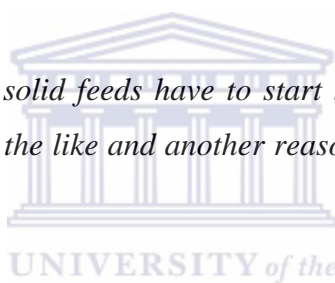
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<sup>2</sup> KHKI. This is code for Health key Informants. The first letter in this case K represent the study site/location. HKI stands for Health Key Informant.

*Yes, if it is a root, let's say it is a root or bark, I put it in a cup, I put a little so that it sort of soaks in and then give this to the baby to drink in the morning, afternoon and evening...I would need to break one bark and put it in a cup and make him/her drink, I put another bark on the fire and smear it on the baby...They are almost the same because if we are in hospital, the baby will be taking gripe water, while at home, they will be the traditional gripe water for amaketane (infant colic-like problems)- DIIM3*

*They give traditional herbs (Laughs) traditional herbs, they give him for drinking and applying on the baby's body as treatment for inkanda (sunken fontanel) - KIIM1*

*Or maybe at 3 months solid feeds have to start to be given sometimes even the herbal concoctions and the like and another reason that usually arises is the lack of knowledge-KHKI*



*They (mothers) are given concoction that is alleged to be for the treatment inkanda (sunken fontanel) and yet when we say, "Exclusive Breastfeeding" we mean breast milk only without muthi (traditional concoction) but traditional healers, they will tell them that the baby must drink this muthi at such a time up to such a time to treat or prevent 'inkanda' - DHKI*

*Some look for things to prevent inkanda (sunken fontanel); so that when the baby meets other children, the baby will not suffer from inkanda. This is something you can drink...they give the baby to drink and I don't see anything wrong for I see them (babies) growing strong; as they are protected - KGKI<sup>3</sup>*

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<sup>3</sup> This is a code for Granny Key informants and like other codes, the first letter represents the study site/location and GKI stands for Granny Key Informant

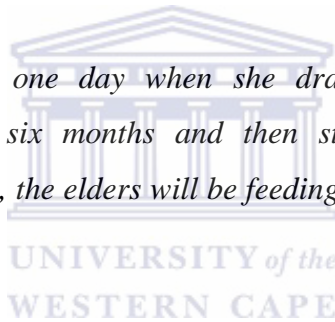
#### **4.3.2 The practice of giving babies water**

The practice of giving water to babies was reported extensively in this study. It appears to be a very common practice. Babies are given water as early as a few hours after birth. For some mothers it took a while after delivery before they could start producing breastmilk. During that time, babies are given water especially when they (babies) started crying.

*Yes I would do, I would take from a cup and using my finger to drop into the baby's mouth some few drops...ahh I just give a little bit, I will not give much (Laughing)-KIIM2*

*I gave breastmilk and water only....at three months I used to give her a tea spoon and when the baby grew I then used a table spoon, DIIM2*

*She started with that one day when she drank water and then I started breastfeeding her for six months and then started giving her other foods thereafter, A full day eh, the elders will be feeding the baby water using a spoon - DIIM3.*



Grandmothers appear to be very influential in so far as the practice of giving water to babies is concerned. For those mothers who deliver at home they are assisted by grandmothers who are usually the traditional birth attendants. Giving the baby water is one of the things that the grandmothers advise mothers to do. Moreover, grandmothers are also consulted by mothers who encounter breastfeeding challenges. As part of the baby's assessment, grandmothers give the baby water.

*They will (Grannies) come and examine the baby to see if there is problem and ask, 'did you breastfeed, did you give porridge, did you? Can you breastfeed?', and if the baby refuses to breastfeed or what, they will go on and say 'give me water and a tea spoon' - KIIM3*



*With others, let's say you are staying with a granny; the first thing after delivery is that the baby should be made to drink water- ZIIM2*

*You use your finger, drop it into a cup of water and then let the water drop into the mouth of the baby to drink - KGKI.*

*yes she can give the baby water...most of the times yes the elder people and us found it like that, even when the bay is bathing, they take the water that the baby is bathing with and give it to drink - KIIM2*

#### **4.3.3 The unpleasant feeling of breastfeeding when hungry**

Whilst breastfeeding is a natural way of feeding a baby, it can be an unpleasant experience for mothers when they do it while hungry. When hungry, a mother has to make a difficult choice between breastfeeding her beloved baby and going through an uncomfortable breastfeeding feeling and/or experience.

*Whenever I was breastfeeding my babies I would feel happy because I was getting enough food, but whenever hungry I would feel as if the baby is pulling me, as if the baby is like suckling or draining my blood. There is a difference in that the baby will be pulling you, it will be as if the baby is not sucking milk but blood from your body, because you will be feeling as if mmmh, now what the baby is sucking is no longer milk but sucking my blood - DGKI*

*I feel breastfeeding is painful myself when hungry...yes there are mothers who say breastfeeding is painful for them...yes they say it is painful - DHKI*

*But if you are hungry, you will have a big problem at times you feel dizzy because you will be breastfeeding a baby without having eaten anything. It becomes painful, because milk comes from eating – DIIM4*

*But when lam hungry, the baby will pull my breast to a point that I feel like my heart sinks in me, I feel the pain in my heart, when I breastfeed while hungry, I feel like lam so cold and feel like lam shivering because I will be hungry and on top of that someone is pulling my breast and that does not feel good - DIIM3.*

*There is a big difference, you feel powerless, and you feel as if your joints are powerless - KIIM1.*

*If you are full you don't feel anything even that you are breastfeeding No, but when you are hungry you even feel the pain in your heart...not breasts but the heart (laughing), you feel it like its sinking (the heart) when you are breastfeeding, eh because you will be hungry - KIIM2*

As well as the unpleasant feeling of breastfeeding when hungry, mothers also reported that breastfeeding a baby boy is a different experience from that of breastfeeding a baby girl. Boys were reported to breastfeed for longer, more frequently, pull the breast much harder. This was also shared by one of the key informants.

*Yes there is a difference boys feed more, he really feeds a lot even when he is grown he really feeds, there is a lot of difference, it is possible for a girl that when she sleeps you end up wondering if indeed she is still asleep but with a boy he easily wakes up and he wants to feed on the breast, he continues breastfeeding - DIIM4*

*With a baby girl, she doesn't breastfeed as much as the baby boy, the baby boy pulls so hard just like when you compare what a male adult eats in terms of sadza (pap), it will be a mountain while a female adult would be a sizeable portion. That is the difference I can give but there is a difference definitely!!!! (She laughs), the way he breastfed, he sucks for a long time and within short intervals he would want to breastfeed again - KIIM1*

*The girl breastfeeds but not as frequent as the baby boy does, looking at the time you were here, the baby boy could have breastfed maybe three times or so. A baby girl might feed on one breast and the other one a little bit leaving it still full, but with a boy it's different, you change him from one breast to another - KIIM3*

*I did not feel the strain in manner the girl breastfed but with the boy, especially around 7 to 8 months, upwards, mmmm...he will be sucking in a such as way that I feel he is not getting enough, if I did not supplement my diet with mahewu I noticed that he was not getting enough - ZIIM1*

*Yes, there is indeed a difference, a vast difference, aaah a boy suckles deeply when breastfeeding, a girl is able to feed on half this one, breastfeed and feed on half this one and a boy can feed on this one(breast) and finish it and eventually start on another one. A baby boy really suckles and pulls your breast to an extent that you feel like your heart sinks in you - DIIM3*

*No it's different, a baby girl will breastfeed in a normal way whereas a baby boy breastfeeds significantly...like a baby boy if he breastfeeds, from the mother, you see him crying, then you know he is not getting enough, and then we give him porridge - KGKI.*

For others, hunger comes with different emotions. One mother reported to have different feelings towards breastfeeding when hungry, losing that motherly love and the joy of breastfeeding a baby as would be the case when they are not hungry.

*There is a difference, say now I'm hungry and the baby wants to breastfeed, I become harsh to the baby and I breastfeed for a little because I would be hungry, but when I'm full I breastfeed lovingly - KIIM3*

#### **4.3.4 Mother not producing sufficient breast milk**

One of the major reasons why mothers introduce other foods to their babies is the perceived insufficient breastmilk production. Mothers got worried that when they do not produce enough breastmilk, the baby may not get enough nourishment and hence not grow well. Therefore to ensure their babies are well fed, mothers start to supplement breastmilk with other foods. Crying is the most common signal they use to tell that the baby is no longer getting enough from the breast.

*What I saw to be a problem in breastfeeding my children, at times I would not produce much breast milk, so the child won't be getting enough from breastfeeding alone, my breasts won't be producing much milk and so the baby will start crying. I can say this is a problem I came across...What made me do this (giving babies porridge) is that I noticed that at three months milk alone isn't sufficient to satisfy a baby without other things - KIIM3*

*What bothered me most is that the milk in my breast does not satisfy me, it makes you at times end up saying ah maybe I should give the baby other foods but you can see that it's better to force yourself to continue breastfeeding, the second one was troublesome she used to cry a lot, then I thought maybe she wasn't getting enough from the breast and I ended up giving her porridge - KIIM2*

*I noticed that the baby had a small body stature and then I thought may be the baby was not getting enough from the breast...I then said to her (my granny) I think the baby is not getting enough from the breast and she said you rather prepare some light porridge and the baby - DIIM2*

Both health and granny key informants reported some mothers having mentioned to them that they did not produce enough milk to satisfy their babies, a reason they decided to introduce solids to supplement breastmilk, especially when babies cried.

*There are a few who breastfeed exclusively because some complain that they don't have enough food...they usually say as a result, the milk is not sufficient and so the baby is not satisfied...when a mother breastfeeds with that problem of flat breasts, the baby does not sleep, it keeps crying all the time and that is part of what makes them start giving porridge – DHKI*

*Few of them do exclusive breastfeeding for 6 months but the majority again they, maybe take this as normal or as just common practice that the children get at the age of 3 months they start introducing solids and other milk formulas, uhm, it could be maybe just some may perceive that we have got insufficient milk,...because they may report to you that the milk was not coming well so the baby was crying – KHKI*

*We observe and see that by this time breast milk is no longer enough, that is when we give porridge to the baby, but if the mother produces enough breast milk, we don't give the baby some porridge because the baby will be getting enough, like a baby boy if he breastfeeds, from the mother, you see him crying, then you know he is not getting enough, and then we give him porridge - KGKI.*

Apart from the unpleasant experience of breastfeeding while hungry, mothers reported that hunger also curtailed milk production, i.e. they indicated that they did not produce as much milk when hungry as they do when they had eaten well (not hungry). Mothers emphasised that it is important they had adequate food to eat when breastfeeding, let alone if they are to breastfeed exclusively.

*There will be some milk coming out a little bit but maybe it's because the milk will be coming from very far because of shortage of food in my body - DIIM3*

*It's not the same because if you are hungry, how do you produce milk? If you are hungry, the milk would be less - KIIM3*

*Yes there will be some milk coming out when you are hungry but that will be a little and the baby will suck forever because there is not much milk coming out, the breast won't be producing much milk - KIIM2*

Mothers reported insufficient milk production as a barrier to EBF and that baby crying was an important clue that the baby was no longer getting enough from breastmilk alone. Mothers are aware that babies can cry due to other reasons other than hunger and reported that they would differentiate a baby crying from other causes other than from hunger.

*When I breastfed, the baby will still be crying, then I make porridge which would be light, give the baby to drink and the baby will stop crying, and the baby starts playing - KIIM3*

*What I noticed, was that the baby cries when she wasn't feeling well, but then there is a cry of saying I dint get enough that you see say when you finish breastfeeding and you put the baby down, she immediately cries then you see that it's because she isn't satisfied, she keeps on putting her fingers in her mouth and crying, so it means I didn't get enough. Then there is a cry of saying I'm not feeling well, and in that case she will be having high temperature - KIIM2*

*The sign is that the baby cries, the baby cries all the time, for a while you get the baby quiet but it start crying again and again. That is why mothers end up deciding that it's better to prepare some porridge for the baby and if the she prepares porridge and give it to the baby, the baby then stops crying. Mothers would insist saying to me "you see this baby is hungry its not getting enough from the breast milk. Then she will start preparing some porridge for the baby, starting with some very light porridge, ehe she will give the baby the light porridge to drink, if the baby drinks that porridge, it (the baby) stops crying and you also as a grandmother come to terms with the fact that for sure the baby was indeed hungry – DGKI*

*Sometimes (babies) may even refuse to breastfeed, usually the baby may cry may continue to cry they breastfeed and the baby cries and then, that they take as a clue that the baby is still hungry, and when they feed the baby with porridge, the baby stops crying – KHKI*

Poor attachment and positioning on the breast resulting in suckling being inefficient, subsequently leading to poor milk production was suggested as an alternative explanation to why babies cry even after a breastfeed. When that happens the baby may get frustrated and anxious when little or no breastmilk comes out and thus babies then exhibit their frustration and anxiety by crying.

*They may (mothers) think that their breast milk is no longer enough ahm, again another precursor to that may be that of poor position and attachment. Where there is poor position and attachment there is little milk production and there is also just the experience of breastfeeding itself is not a successful one, and as a result, you find that eh, they may think that the baby is not getting enough milk or they are not producing enough milk and they may start to mix the feed. What we do is we sometimes, we try to observe and assess the breastfeeding practice and often from most of the assessments we do you find that it would be poor attachment poor positioning...and usually when we do that you find that the baby starts breastfeeding well and the baby stops crying - KHKI.*

#### **4.3.5 Peer advice and misinformation**

Mothers discussed a lot of issues to do with breastfeeding including how their babies are gaining or losing weight during their routine baby clinics. In the process, mothers share thoughts and ideas, some of them not quite correct. Some mothers, particularly those with babies who may not be gaining weight as expected, will be under pressure and end up taking the advice from mothers whose babies seem to be gaining weight well, which may lead to inappropriate breastfeeding and feeding practices.

*We meet at baby clinics, maybe I take out my breast and breastfeed, maybe my breast has water, because there is a difference as far as breasts are concerned, yet somebody else's may appear to be thick and you can hear them say, why does it appear as if your breast is weak, maybe if you could prepare just some thin porridge, sieve that porridge, and give to your baby - DIIM3*

*Ah well the other thing is if mothers see that their baby is not getting enough from the breast, they start thinking that also that the baby will fail to gain weight during the next baby clinic and then they start adding other foods - ZIIM2*

*There are women quite a number of them (women) who advise others that when a baby is born, one week later, they will encourage other women to start giving the baby some porridge so that the baby will grow up strong. Some mothers tell themselves that maybe the mother's breast has something wrong, this happens when they notice a problem on the baby, when the mother breast feeds and the baby develops diarrhoea, some mothers then suggest and encourage that maybe the mother's breast has a problem and suggest to the other that you would rather stop breastfeeding the baby - DGKI.*

#### **4.3.6 Breast conditions**

Breast conditions particularly swelling of breast (s) was reported as a barrier to exclusive breastfeeding. When the breast is swollen, babies tend to refuse breastfeeding on it, resulting in further swelling and pain when the baby suckles on it. When this happens at a time when the baby is still very young, this results in early introduction of babies to alternative foods other than breastmilk before the recommended age of six months.

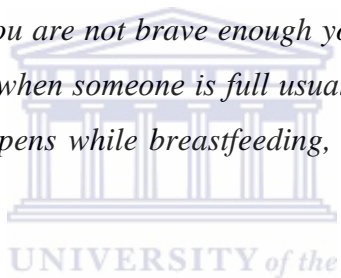
*On that particular day, when he was seriously ill he wasn't breastfeeding but by the time I started to breastfeed my breast were swollen and as you know what the elderly people say if the baby wasn't feeding, they told me to squeeze my breast into a napkin. I expressed into the napkin, then, I took the baby and breastfed - KIIM1*



*I had a problem with cancer, there is a time when I developed some sort of cancer or lumps on my breasts and those are some of the things that stop some mothers from breastfeeding as recommended, I had that experience although I recovered after receiving treatment - ZIIM3*

Mothers reported that when a baby belched while breastfeeding (*ukubhodlela ibele*) that caused that breast to swell. A swollen breast was reported painful when the baby suckled on it. This became a barrier to EBF as it resulted in mothers resorting to giving other foods while they sought treatment for their swollen breasts.

*The child may belch while breastfeeding and this causes the breast to get swollen. It gets swollen that if you are not brave enough you might think of even stopping to breastfeed...it's like when someone is full usually you belch...the baby belches also but when that happens while breastfeeding, it causes the breast to swell - KIIM2*



*Sometimes the baby refuses to breastfeed because it would have belched making it (breast) to swell. When the breast gets swollen, the milk produced will not be fresh, the milk turns sour... the milk continues to come but in a watery state and when the baby suckles on it, it is painful and the nipple will be painful when the breast is swollen - ZIIM1*

The issue of breast conditions, especially swollen breast as a barrier to exclusive breastfeeding was also echoed by both health and granny key informants.

*Some mothers bring up the issue of breast conditions like sore nipples, mastitis, engorgement, blocked ducts and presenting with symptoms like painful breasts, Oedematous (swollen) breasts uhm, redness in the breasts, nipple cracks or fissures. When such breast conditions occur they (mothers) usually stop breastfeeding and decide to give other feeds - KHKI*

*When we meet and they ask we tell them at times your veins will be swollen so it makes the breasts to be painful, it's as if it is a boil and ...then the baby can't breastfeed – KGKI*

*Some have sores (ulcers) on their breasts and thinking that a baby is no longer interested in breast milk, or that the breasts (nipples) will be cracked, they then decide that the baby should not breastfeed -DHKI*

#### **4.3.7 Myths, misconceptions and beliefs**

There are some misconceptions and/or myths about breastfeeding and pregnancy. When a mother gets pregnant while breastfeeding, she is quickly advised to stop breastfeeding as it is believed that breastmilk from a pregnant mother will cause the baby to develop diarrhoea or vomiting.

*As the first child I just did, I was using family planning pills. I forgot to take my pills and then I conceived and that is why I stopped breastfeeding - KIIM1*  
*I discovered that I was pregnant and I then quickly stopped breastfeeding the child - DIIM4*

*When she has falls pregnant, the mother of the baby who is now vomiting? We encourage the mother to stop breastfeeding the baby. We certainly give each other tips, at times it is because the mother may be pregnant, some babies develop diarrhoea and passes out the milk as it is soon after breastfeeding, the baby develops a running tummy and or vomit, passes out the milk and for that reason you may suggest that the mother stops what, breastfeeding – DGKI*

*When we tell mothers to breastfeed for a long time they fear they might conceive earlier than expected and when she conceives then she weans the baby as a way of protecting the child from diarrhoea – KGKI*

The practice of EBF does not take place in a vacuum or isolation, but it all happens in a social setting influenced by a milieu of myths and misconceptions. These myths and misconceptions interfere with mothers' breastfeeding choices and practices. Myths and misconceptions about aetiology and treatment of 'inkanda' (sunken fontanel) and 'amaketane' (infant-colic-like conditions) have important and far reaching effects on infant and young children feeding practices. Others include misconceptions about breastmilk going bad and emptying of the breast after travelling long hours before a breastfeed.

*When we grew up we heard the elders say when a baby suffers from inkanda (sunken fontanel) you shouldn't take him to hospital because he might die upon being given an injection...you are told to go and take certain herbs you chew them then spit it in your baby's mouth - KIIM3*

*As we grow up, we are told that if your baby has temperature first observe and see whether you can take the baby to an important person or check if its not the sunken fontanel because elderly people say if it's the sunken fontanel, if you go to the hospital and they give him injection the child might die - KIIM1*

*Well it's like when I travel and spend say 4 hrs away without breastfeeding, upon my return I should not go ahead and breastfeed the baby but should first go behind the granary and express out the milk that has gone bad and thereafter I can then breastfeed the baby - DIIM3*

*When she is breast feeding, maybe there is something that went wrong she takes the baby and breastfeeds, if the baby continues to refuse the breastfeed, we recommend the cow's milk, we boil the milk, thoroughly, then you give the baby then we emphasizes that she goes to express her breasts may be her breast milk is watery then you tell her to hold like so (demonstrating expressing the breast) so that she expresses out the milk with dirt (spoiled milk) but onto a towel and not onto the ground - KGKI*

#### ***4.3.8 Traditional and cultural norms and belief systems***

The traditional set ups where a woman joins her husband's family homestead renders them amenable to traditional, cultural and belief systems that have a strong influence on their breastfeeding decisions and practices. Under such settings there are expectations that the woman as a daughter in-law has to conform and comply with the practices of the matrimonial family. In some cases compliance to the expectations results in inappropriate infant feeding practices.

*The main barrier that I may highlight is cultural norms and values, Ah, you find that in this African setting, when a woman gets married and lives with her in-laws, [when she gives birth] it is said that the baby belongs to the family of the husband to an extent that she is supposed to live according to the standards and norms of that particular family. If the mother in law believes that the babies are supposed to be given solid foods even at birth even the pre-lacteal feeds ahm it might be gruel or something else she will be force to do that even when she doesn't want for marital security – KHK1*

*The truth is you cannot go against what an elderly lady says, but if it is that kind of who understands, you may try to explain your case although it is very difficult for grannies to understand - ZIIM2*

*There are things which are done because an elderly person told you to do so and you have to comply - KIIM3*

Key informants also alluded to the existence of important power dynamics within family settings. There are some important others in family settings with significant spheres of influence such as paternal grandmothers whose words of instruction and counsel are final and beyond reproach.

*Grannies who will be at home, you hear them saying, “Our grandchildren, in our clan, we do not give the baby breast milk for a week following birth” then during that period, the baby is given porridge and some muthi (traditional concoctions/medicines) and that will no longer be EBF - DHKI.*

*Yah, I (clears voice), maybe the fathers there, (laughs) and also the eh, Traditional Birth Attendants (TBAs) there, they may also want to do this and that and they may, don't give her eh, eh, don't do this in our culture we do this and that, you see. Sometimes even though we nurses do also have influence on that some influences on that during the, when the mother is attending the Ante Natal Clinics – ZHKI*

*Uhm, I can say its societal norms and expectations. Eh, because with these mothers remaining in the society, ah, in society, you find that usually it's the immediate people it can even be the mother to the woman, ah, mother to the breastfeeding mother or it could be the mother in law, it could be the sisters the sisters in law, the relatives, the immediate relatives who have their expectations and their norms, the family culture in our family we do it like this. So I think that they are the most influential people – KHKI*

#### **4.3.9 The HIV epidemic**

Findings from this study showed that the widespread of HIV and AIDS has affected breastfeeding practices. Those mothers who know their status may be advised by health professional of alternative ways of feeding their babies other than breastfeeding. For those who do not know their status, they breastfed in fear, as they entertained thoughts that they could be carrying the virus unknowingly or that they may get infected.

*These days they say a mother cannot breastfed as we used to because there are so many diseases like AIDS, what is that, they call it HIV - KGKI*

*And also being HIV positive, that also cause people not to breastfeed their babies as well - ZIIM3*

*Well like these days there are diseases, If I fall pregnant and go to the clinic or hospital I will need to be tested and should I test positive for HIV, I will then be given time on when to and not to breastfeed. Even if I would breastfeed for 6 months I will be worried, thinking about my life and that of the baby and those are some of the barriers to breastfeeding - DIIM3*

*I would say may be you would also find that some they don't opt to breastfeed because of this, of their status,...yes and even in HIV when someone gets to stage three or four, it is difficult for them to breastfeed normally and their babies are weaned and introduced to artificial feeds – ZHKI*

*Nowadays I think what disturbs so many people in breast feeding is the disease which is prevalent these days, AIDS, this is the disease which can disturb breastfeeding but before I didn't see any problem with breastfeeding, yes (laughing) this is what I see nowadays, this disease disturbs breastfeeding because we are told that if you have the disease you are not supposed to breastfeed - KIIM1*

*We usual hear that when you are positive, if you have a baby when you are positive, that baby must breastfeed for 6 months, once that 6 months is attained, one is no longer supposed to do what?, breastfeed - DGKI.*

#### **4.4 FACTORS ENABLING EXCLUSIVE BREASTFEEDING**

This study found important factors that adequate and nutritious food for the breastfeeding mother, support from husband, support from other family members and knowledge of the benefits of breastmilk to the baby enabled mothers to exclusively breastfeed.

##### ***4.4.1 Adequate and nutritious food for the lactating mother***

Findings from this study revealed that adequate food intake for a breastfeeding woman is important as mothers felt it directly linked to milk production. When a breastfeeding mother eats enough food, her breasts fill up with milk much faster, a reminder that she should breastfeed her baby.

*When I'm breast feeding I feel very hungry so I should eat a lot because someone is feeding from me, so I should have enough because if I don't, even if I breastfeed the breast will not produce anything and the baby will cry - KIIM1*

*Ah, there is a vast difference, she does not feel the pain of breastfeeding because as she breastfeed her baby the breasts will be oozing with milk when you breastfeed after having eaten well and full. It [breastfeeding] becomes painful, because milk comes from eating...long back what used to happen is that grannies used to roast round nuts for us so that you will have more milk in the breasts, including amahewu, haa, with that you produce plenty of milk - DIIM4*

*When I am full, I sit down and the baby starts enjoying and I also breastfeed with lovely emotions - DIIM3*

*If you are full at times the breasts even produce milk without the baby sucking, a sign that they are full. Within a short period of time after eating, you can feel the breasts tightening is a sure sign that they are getting full - KIIM3*

*As a mother I was eating enough food so that my breast would produce milk...because if you eat and drink water or relish that has no salt, nothing comes out so a breastfeeding mother must eat salty foods - KIIM2*

Health and granny key informants also concurred with mothers on the importance of good nutrition for the breastfeeding mother.

*Unless it was possible for them to get extra food ah, because when you tell a mother to go and continue breastfeeding she would tell you she is hungry she has no milk, some they actually don't really have enough because actually for one to have enough milk they got to eat nutritious food - ZHKI.*

*A breastfeeding mother must get sufficient food for her body for that is what makes her have what? Have enough milk to breastfeed the baby... when I am full; I would be very happy that my baby should get enough milk because milk will be oozing out freely. But when hungry, ah there is a problem. If a mother gets enough food, the milk oozes out of the breasts, she drags the baby from for a feed, for the baby to what?, to come and breastfeed and relieve her breasts that will be oozing with milk but for a lazy one will remain lazy, no food, and the milk will dry out too – DGKI*

Insufficient breastmilk production was mentioned as a major barrier to breastfeeding in this study. It however emerged from both mothers and KIs that that not only the mere availability of food but that there are certain types of food and drink that when consumed by a breastfeeding mother enhance breastmilk production. Such foods include fluids such as tea, ‘Mahewu’ and orange juice, ‘Sadza’ (pap), salted cow peas, salted ground and round nuts and ‘inkobe’(a boiled mixture of maize, ground nuts, round nuts and/or black eyed peas) and ‘Umbhida wendumba’ (cow pea leaves).

*Personally, when I get Sadza or something hot like tea...then you have things like inkobe (mixture of maize grains, ground nuts and black eyed peas) then I have these a little bit at a time, then my breasts will produce enough breast milk - KIIMI*

*Should add peanut butter, groundnuts and add salt, the mother so that she produces a lot of milk especially eating umbhida wendumba (cowpeas leaves) beans leaves that makes the mother to produce a lot of milk. The other thing is sadza [thick porridge made from corn or maize flour] and mahewu (drink made from corn flour and sugar),well when I drank mahewu particularly when well fermented for quite some time, waited for some time, and then I breastfed, I used to produce a lot of milk...mahewu works - KGKI*



*Whenever I noticed that my milk was longer sufficient, I would mostly drink lots of tea with milk, or buy a drink (juices), I will drink it regularly bit by bit or after eating several other kinds of food, I would then supplement with what, with a drink or with tea - ZIIM2*

*It depends on the type of food that we would have eaten, most of the times if we are breastfeeding mothers, we were given mahewu, tea and drink so that they may also assist, they help to increase the milk flow in the breasts, with me if I drink mahewu, or drink (juice concentrate) or tea, I feel I have increased flow of milk in my breasts and the baby sucks milk and gets the satisfaction - ZIIM1*

#### **4.4.2 Support from husband**

Support from spouse and/or husband was considered by mothers as important in supporting them to breastfeed successfully. Men can support mothers in many ways especially during the important period (bengabadlezane) [breastfeeding period]. From the interviews with mothers, it emerged that men can support by ensuring that mothers have enough food but also emotionally by faithfulness. Unfaithfulness was reported to cause stress and worrisome for a breastfeeding mother during the era of the HIV pandemic.

*Yes he can support me by making sure that there is enough food for me as a breastfeeding mother so I have enough milk for the baby - DIIM2*

*There is also an issue of having marital problems at home. If you think too much while breastfeeding, milk ends up not coming out properly. The same if you have stress, your mind is not totally on breastfeeding - ZIIM2*

*To have one faithful partner so that you don't have stress, be emotionally and mentally stable and concentrate. I would say with my second baby, my husband got unfaithful that time. Men should refrain from unfaithfulness so that we are able to breastfeed well with our minds settled that we will not be infected by the virus that may end up infecting the baby as well - DIIM3*

The importance of husband's support to his wife was also mentioned by key informants. The kind of support that husbands can render according to the key informants include emotional support, reducing workload during lactation period, providing and/or ensuring that there is enough food for the wife and ensuring a peaceful environment for a breastfeeding mother.

*I am talking about men, is it not true that this food is provided by men or fathers? Ehhe we encourage fathers to ensure that there is enough food for mothers. Since she is a breastfeeding mother, she must be looked after well and her mind should be stable so she is able to breastfeed her baby and she must not do hard work after delivery, men should be involved. It is also the men and/or fathers who cause mother's to be mentally stable, mental or emotional state is important and for the mind to be stable, to be at peace mentally...how can I put it? It depends on how she is being looked after, because a mother who is being looked after properly...has mental stability that is very important...you breastfeed well indeed because your mind is at peace – DGKI*

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*At times men leave in the morning going for beer drinks, and the mother has to see to it that the whole family in this particular home has food. So it is difficult for her to get time to sit down and feed the baby continuously, it will appear like its waste of time. One way of assisting mothers will be with food to ensure she produces enough milk – DHKI*

#### **4.4.3 Support from other family members**

Apart from support from men, this study also found that support and encouragement from close family members was crucial to keep mothers to breastfeed, especially during times when they are tempted to introduce other foods apart from breastmilk. Mothers mentioned family members such as their own mothers and grandmothers to their babies.

*Yes, because I was living with elderly women. They were checking that no, if you give the baby food before 6 months it may cause the baby to eventually suffer from piles -DIIM3*

*My mother in law? About breastfeeding? Well, haa, she used to encourage breastfeeding up to three years...she said she would breastfeed her children for longer periods and if it was a boy, the boy would and tend goats with others and upon return would ask to feed on the breast - DIIM4*

*My mother-in-law, she is the one who encouraged me to breastfeed my children but also my own mother, especially with my child who was born at home she encouraged me to breastfeed because there was a time when I wanted to wean the baby at 18 months because I wanted to go back to work but she insisted that I first wait for baby to grow I was patient and I breastfed for two years two months and then weaned the baby - KIIM1*

#### **4.4.4 Knowledge of the benefits of breastmilk to the baby**

The mothers' knowledge of the benefits of breastmilk to their babies was an important motivation for them to continue breastfeeding as long as it was possible. The knowledge and assurance that breastmilk contains all the nutrients that the baby needed to grow well and keep well and that it protected babies from getting sick was valued by many mothers.

*The reason I breastfeed them this way is because when the baby is still small, the mother's milk has everything in the form of nutrients/food, so I decided to breastfeed them like that so that they grow up being children with healthy bodies - ZIIM2*

*They taught us how to care for the baby. How to take care of the baby and they taught us that if you breastfeed your baby it will be protected against diseases, because he will be getting milk from whom? From the mother, it builds the body tissues - KIIM3*

*They said (the nurses) that the intestines will not be ready to deal with solids but breastmilk contains all the feeding that the baby needs from 0-6 months - DIIM2*

*It is because the way in which I breastfeed them even (she laughs) the first one, initially I did not have the experience, and now with the others I was now experienced because if you go to hospital whether for check-up before the baby, is born, you are taught a lot of different things on the bringing up of babies - DIIMI*

#### **4.5 OPPORTUNITIES TO INCREASE BREASTFEEDING UPTAKE**

Opportunities such involving men to support mothers breastfeed, technological advancement in the prevention of mother to child transmission (PMTCT), breastfeeding counselling and skills training all still remain unexplored fully. Yet these could have a huge impact on changing the current sub-optimal infant and child feeding practices in Zimbabwe.

##### ***4.5.1 Men's involvement in supporting mothers to breastfeed***

The involvement of men in infant and young and child feeding has a potential to improve uptake and adoption of optimal feeding practices, resulting in positive health and nutrition outcomes for children. Harnessing men's involvement still remains a missing link to reach greater heights. Men's lack of involvement was echoed by both mothers and key informants alike as a missed opportunity that need to be fully explored.

*In our area here, men, even for woman to just attend such eh, such--- many programmes involving health matters, it is rare for one to see a man accompanying a woman. There are a few men who are interested but almost all of them have nothing to do with it. A mother is supposed to see everything about a child, or herself – DHKI*

*So that everyone including the men themselves, their husbands, fathers, the brothers may also understand and appreciate the importance of exclusive breastfeeding – KHKI*

*Target even the men themselves and if we do these training we involve even the men even those who are not breastfeeding because they are still part of those people who influence or hinder the feeding practice - KHKI*

*Also it's important to start involving the men now, as leaders of the families may be we can come up with a breastfeed campaign, outreaches; road shows where we will really start to promote the breastfeeding - KHKI*

*That is why I am saying a mother must get adequate food, I am talking about men, is it not true that this food is brought by men or fathers? ehe, we really encourage fathers to ensure there is enough food for mothers – DGKI*

Mothers, like key informants reiterated that men had an important role to play in the feeding of the child particularly supporting them by one way or the other to successfully breastfeed.

*Men should refrain from unfaithfulness so that we are able to breastfeed well with our minds settled that we will not be infected by the virus that may end up infecting the baby as well - DIIM3*

*My husband must know that my wife is breastfeeding if the child cries and I sit down to breastfeed, he should let me breastfeed properly and free -KIIM3*

*My husband must assist me and say escort me to the clinic and has the right to take my baby to the clinic himself, which is important, is it not that the baby belongs to two people? - ZIIM3*

#### **4.5.2 Availability of ART and counseling services**

The recent advancement in technology in reducing the risk of transmission of the virus from the mother to the child present an opportunity to provide individually tailored breastfeeding counselling services for those who know their status. There are some encouraging reports on the effectiveness of such interventions amidst the threat of the HIV pandemic to breastfeeding.

*Yes they [mothers] do follow because eh, because when we test these children, we do this (Dry Blood Smears (DBS) testing for Human Immune Virus (HIV) and at 6 months you find that most of the children they are negative especially the results which came that came last is it two weeks ago - ZHKI*

*With the advent of More Efficacious Regime (MER) now and aahm, early infant diagnosis, most mothers now can actually exclusively breastfeed meaning that the baby is being protected by the ARV prophylaxis – KHKI*

*Mothers should know where to get help should know why they should exclusively breastfeed, and the benefits thereof, also to strengthen the More Efficacious Regime (MER) programs, the Prevention of Mother To Child Transmission (PMTCT) programs so that all mothers know that even if they are HIV positive their babies can still be exclusively breastfed and breastfed even beyond 6 months up to 2 years as long as they are being protected by prophylaxes and still be safe – KHKI*

#### **4.5.3 Health and nutrition education**

As noted earlier, poor understanding of breastfeeding emerged as one of the many barriers to EBF. Key informants acknowledged that lack of understanding and knowledge of breastfeeding among mothers still leaves a lot to be desired. Singled out in particular is the need to strengthen health and nutrition education for health professionals who in turn can educate mothers.

*We also want to strengthen the village health workers and community focal persons with breastfeeding counseling skills so they can also be able to provide on the ground assistance, so the only way you can promote and support it is by having people on the ground and institutions well trained and well knowledgeable about the importance of exclusive breastfeeding that's the only way we can increase the impact or increase rates of exclusive breastfeeding so far as long as you don't have people who have been trained and knowledge gaps, the success of breastfeeding or exclusive breastfeeding will still be very limited - KHKI*

*The ideal situation will be that they should come to the health centres but then it's also a challenge in terms of training. You will find that like in this particular area, we have done only one training on infant and young child feeding counselling involving the health workers the rural nurses so due to lack of resources we haven't really exhausted that area, so there are some, mostly its only one person per institution who has been trained and if that person is off duty or not available then there is no support that's given...-KHKI*

*Also health education must be provided consistently, it should not just remain at the same level – DHKI*

*(Clears voice) I think the best way is to continue giving health education so that they understand why they should give eh, continue giving exclusive breastfeeding to the babies until 6 months – ZHKI*

Mother's experience with health facility staff has an influence on whether or not a mother remains motivated to seek care from the facility again in future. Mothers who had unpleasant experiences with some health facility staff indicated reluctance to seek care from those facilities again. If this happens, it results in mothers missing important contacts such as pre and post natal care. The contact points are the main and only sources of health and nutrition education to include breastfeeding.

*There is nothing except to say that health workers should be encouraged to teach people especially mothers. They should not be lazy but be hospitable and desist from harassing clients because if they harass I will fear going to the hospital. To think that if I go to the hospital I will be badly treated and harassed, I end up not going...not everyone some are good some are not because as I saw it with my own eyes when I gave birth to my first child, I saw that with my own eyes as (name of hospital mentioned), I would be in pain and would not be allowed to shout for help....better I am assisted by Traditional Birth Attendant (TBA) at least if I tell them how I feel, they show sympathy and help by means possible - KIIMI*

*While I encourage mothers to take their babies to the hospital, again at the hospital I encourage the Doctors and Nurses to be gentle and kind, to treat us in a kind way not to harass us - KIIM3*

For some mothers, it was clear that if there was a need, they will take their baby to the health facility for treatment despite their previous experiences with health facility staff and physical distance. The issue of user fees is an impediment to these mothers seeking health care from health facilities. This is particularly so amidst the economic challenges that were attaining in Zimbabwe at the time of this study. Communities were finding things difficult in a dollarized economy, a situation that exacerbated the already existed situation of poor access to health services.

*It's only that the hospital nowadays is expensive...because if today my child gets sick, I cannot afford a dollar to go to [name of health facility mentioned] to seek treatment...it is because of the dollars that are hard to come by - KIIM1*

*They will not want you to deliver at our local clinic if your card is written {to hospital} during your expected month of delivery and so you will not be having money to go to the hospital and hence you eventually deliver at home - DIIM2*

*Try to cut off the cost of accessing healthcare...say for deliveries, they should be free of charge...because some mothers go to TBA because it's a cheaper there because all you have to do is to bring a bucket of maize meal or a chicken or something to say thank you – KHKI*



#### **4.6 Summary**

While mothers knew the importance of breastmilk for the health and growth of their infants, their knowledge and understanding of exclusive breastfeeding was vague, mixed, variable and unsatisfactory especially the notion of exclusivity as it related to breastfeeding. Mothers reported insufficient production of breastmilk; practices such as use of traditional herbal concoctions, certain myths, misconceptions and belief systems, the HIV epidemic and employment emerged as barriers to EBF. Availability of food for the mother, support from husband and other family members and adequate knowledge about breastfeeding are important enabling factors that interventions can build on the support mothers to exclusively breastfeed.

Access to breastfeeding information and counselling services, provision of the service, utilisation and coverage of services were all reported to be far too short of what is ideal and therefore inadequate to influence mothers' infant and young child care and feeding practices. It was interesting to learn from mothers that the experience of breastfeeding baby boys differed from that of breastfeeding baby girls, in as much as mothers also reported that breastfeeding when hungry feels different from breastfeeding when not hungry.

## CHAPTER 5

### DISCUSSION OF RESULTS

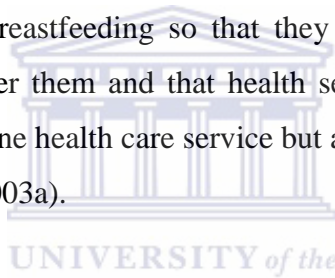
#### 5.1 BARRIES TO EXCLUSIVE BREASTFEEDING

This study showed that mothers' understanding of exclusive breastfeeding was vague, mixed and variable. Save for three mothers who are trained Village Health Workers (VHWs), most mothers did not demonstrate understanding of the concept of exclusive breastfeeding. Whilst some mothers reported not to have given their children any other food for six months *albeit* a few, the same mothers had given their babies water. In some cases, babies were given traditional herbal concoctions as treatment for conditions such as 'inkanda' (sunken fontanel) and 'amaketane' (infant colic-like related problems) once or several times.

It is clear from these findings that mothers did not differentiate exclusive breastfeeding from partial and/or predominant breastfeeding. For the majority of mothers, as long as it was water, fruits and other Breastmilk substitutes and not solid foods they considered themselves to have exclusively breastfed. For most mothers, what mattered was the length of the breastfeeding period and less about whether it was exclusive or not. What mothers strived to achieve was to breastfeed longer and this by itself is good foundation to build from. Building from their desire to breastfeed longer, mothers can be assisted to set a two-step goal, to (i) strive to breastfeed exclusively for the six months and then (ii) breastfeed for as long as they can possibly do.

Whereas all mothers who participated in this study breastfed their children and were aware of the benefits of breastmilk to their children, they however did not practice EBF. What emerged from the interviews with mothers is that they practiced either predominant breastfeeding, partial breastfeeding or mixed feeding. Lack of knowledge of EBF could be the reason why infant feeding practices in the study area were sub-optimal. This lack of knowledge on EBF could in part be explained by poor access to breastfeeding and counselling services. There is need to improve service provision and utilisation. A study in Tanzania found that mothers contact with health care services and health staff with requisite skills in breastfeeding increased rates of EBF (Shirima *et al.*, 2001).

In a randomised controlled trial conducted in Ghana where trained lactation counselling were used to support breastfeeding mothers, the rate EBF increase by 100% in the intervention arm of the trial (Aidam *et al.*, 2005b). The three mothers who showed good appreciation and understanding of EBF in this study were VHWs. This is no surprise as these mothers have received training in many aspects of health to include breastfeeding. For the Zimbabwe context, this cadre of VHWs should be revitalised and strengthened to serve as a conduit, linking the community and the health facilities in providing breastfeeding support and counselling services. Health workers are considered by the community as credible sources of information and VHWs as part of the health workers can be harnessed to promote the breastfeeding agenda at community level. As part of the global strategy on infant and young child feeding, it is expected that mothers have access to skilled support to help them initiate and sustain optimal and infant and young child feeding practices to include breastfeeding so that they are able to deal with possible challenges when they encounter them and that health services are available to support them not only through the routine health care service but also by extending the services to the community level (WHO, 2003a).



### ***5.1.1 Traditional, cultural norms and belief systems and influential others***

This study revealed the existence of traditional practices, cultural norms and belief systems that interfere with breastfeeding. Mothers expressed the foremilk and threw it away before they breastfeed their babies after having been away from the baby for a couple of hours. It is difficult to estimate how much is usually thrown away and how often. If significant amounts of milk are discarded, this practice, compounded by poor position on the breast may result in inefficient suckling and poor flow of breastmilk. This could be a possible explanation why babies continue to cry even after a breastfeed, reported by mothers in this study. The practice of discarding foremilk and colostrum has been reported elsewhere. Fjeld *et al.* (2008) in their study that investigated potential and barriers to the promotion EBF in Zambia found that some mothers expressed and discarded breastmilk including colostrum. Like the findings from this study, mothers from Western Cape in South Africa also discard a small amount of breastmilk prior to each breastfeed (Sibeko *et al.*, 2005).

This study also unveiled a number of myths and misconception that negatively impact on mothers' breastfeeding decisions, practices and their health seeking behaviours. The use of herbal and traditional concoctions for treatment of conditions such as *inkanda* (sunken fontanel) and *amaketane* (infant colic-like symptoms) indicates lack of understanding of the aetiology of these conditions. The two conditions are associated with young infants and this means children are given these root and bark infusions during early months of their lives. Use of other fluids including water for any reason during the period 0-6 months is contrary to the practice of EBF. Home treatment of the above mentioned conditions also becomes a deterrent for mothers seeking treatment from a health facility where they can also be supported to breastfeed successfully. The use of herbal concoctions as medicine found by this study has also been reported in other studies. For example, the use '*umuthi wenyoni*' for treating infant colic-like symptoms is a common practice in Western Cape Province of South Africa (Sibeko *et al.*, 2005). In Malawi, '*mzuwula*' and '*dawale*' (root Infusions) are given to infants less than six months to prevent '*Moto*' an illness believed to be caused by sexual impropriety within the home of or in community (Kerr *et al.*, 2008). The myths and misconceptions revealed by this study need to be demystified and/or corrected so that mothers can separate facts from fallacy. Once mothers have factual information, they will be able to make informed choices and decisions about how to care and breastfeed their babies.

Findings from this study have identified important family members that can be targeted by interventions and programmes that aim to improve infant and young child feeding practices particularly the uptake of EBF. Mothers mentioned their own mothers, other elderly women but more importantly mother in-laws as influential and powerful in influencing breastfeeding practices. Grandmothers have a very strong cloud of influence that is hinged on traditions, culture and belief systems. It emerged during in-depth interviews that grandmothers are taken to represent the interests of the family of her husband hence whatever they counsel is taken for word, even on matters to do with infant feeding practices. Similar to the findings of this study are those of Giugliani *et al.* (2008) and do Espirito Santo *et al.* (2007) in Brazil, and in Ghana by Otoo *et al.* (2009), and Malawi (Kamudoni *et al.*, 2010).

The need for understanding the influence of tradition, cultural norms on shaping mothers decisions and practices; including the power dynamics and spheres of influence by certain important others cannot be overemphasised. An understanding of these is important in the planning of targeted and context specific interventions that aim at improving infant and young child feeding practices. Findings from this study and others underscore the importance of strengthening the health and nutrition education not only within the health care delivery system but also taking the education and/or messages to the community, targeting important others as well the custodians of traditions, culture and belief systems.

### ***5.1.2 Perceived insufficient breastmilk production***

One of the key findings of this study is that mother's perceived insufficient breastmilk production is a barrier to EBF. Once a mother perceived that she did not produce enough breastmilk for her baby, she got worried that the baby will not grow well as would be shown by the baby either loosing weight or failing to gained weight during baby clinics. This worry prompted mothers to supplement breastmilk with other foods (mixed feeding) even before the baby is six months. Yet, WHO advises that infants be exclusively breastfed from birth to 6 months and thereafter get complementary food while continuing to breastfeed for two years and beyond (WHO, 2008b). These findings are not peculiar to this study. Similar findings have been reported in studies conducted in Zimbabwe (Cosminsky *et al.*, 1993; Nyadzayo, 2007) and elsewhere (Fjeld *et al.*, 2008; Kamudoni *et al.*, 2010; Otoo *et al.*, 2009; Sibeko *et al.*, 2005; Nankunda *et al.*, 2006; Guerrero *et al.*, 1999). In a child feeding practices study in rural district of Zimbabwe, mothers reported inadequate breastmilk production and baby crying as the reason for early supplementation (Cosminsky *et al.*, 1993). This finding has also been reported in a qualitative study that investigated breastfeeding perceptions among mothers in Mangochi district of Malawi (Kamudoni *et al.*, 2010) as well as by Otoo *et al.* (2009) in their study that investigated perceived incentives and barriers to EBF in Ghana. In a South African study conducted in Langa on the outskirts of Cape Town metropolis, perceived inadequate production of breastmilk was given by mothers as the main reason for using BMS (Sibeko *et al.*, 2005). Elsewhere similar findings have been reported in Zambia (Fjeld *et al.*, 2008), Uganda (Nankunda *et al.*, 2006) and Mexico (Guerrero *et al.*, 1999).

### ***5.1.3 Hunger and breastfeeding***

Another related finding by this study is relationship between milk production and hunger. During interviews, most mothers indicated that they produced less milk when hungry and that consumption of certain foods increased production of breastmilk. To describe their experiences of how it feels to breastfeed when hungry, mothers used words and expressions such as ‘painful’, ‘pulling too much’, ‘anger’, ‘no love’ and ‘feel my heart sinking’ and ‘sucking blood’. Like in this study, in a study by Kamudoni *et al.* (2010) in Malawi, mothers also reported that they experienced reduction in amount of breastmilk they produced when hungry. Should hunger really affect breastmilk production, a physiological investigation is required to understand the mechanism and establishment of biological plausibility of this finding. In the Malawi study however, authors described the finding as anecdotal since it is not supported by current scientific evidence from physiological studies (Kamudoni *et al.*, 2010). It is expected that all mothers can produce sufficient quantities of breastmilk for their babies at least in the first six months (Kamudoni *et al.*, 2010; LINKAGES, 2004).

Apart from hunger that influenced breastmilk production, mothers in this study described breastfeeding a baby boy being different from that of a baby girl. When sucking on the breast, boys were said to ‘pull hard’, ‘breastfeed longer’, ‘breastfeed significantly’ and ‘breastfeed more frequently’. It is not apparent from this study how this unpleasant feeling of breastfeeding while hungry influenced mothers’ breastfeeding decisions and patterns between baby boys and baby girls, a subject for further investigation.

The relationship between hunger and milk production found in this study is as anecdotal as it is intriguing. Whether or not this experience by mothers is influenced and/or related to their unpleasant memories of breastfeeding during the food crisis situation is beyond the scope of this study. It should be remembered though that whilst there has been improvement in the availability of food in Zimbabwe when this study was undertaken following dollarization of the economy, the country had been through a difficult economic crisis that was characterised by among other things a serious shortage of basic food commodities.

The extent to which mothers' food crisis experience influenced their responses cannot be ascertained. Whether or not mothers would have reported and mentioned so much about food and hunger relative to breastfeeding had they not experienced the food insecurity and hunger remains an unanswered question. With the majority of mothers not having been asked the ages of their youngest children, as to be able to ascertain whether or not they were actually breastfeeding during the crisis period, it not possible to infer if at all their description of experiences breastfeeding while hungry could be possibly linked to the then food insecurity crisis.

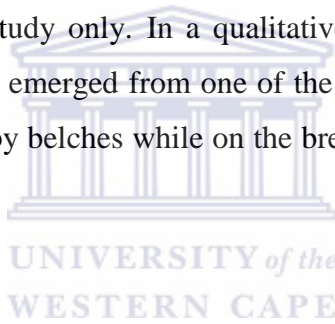
#### ***5.1.4 The practice of giving water to babies***

This study revealed that the practice of giving babies water is widespread. Between birth and the time the mother started to produces milk, some mothers gave their infants water during that time. In some cases, when the mother was briefly away, the baby was given water particularly when the baby cried. With mothers having demonstrated mixed and unconvincing understanding of exclusive breastfeeding, it is not surprising that they did not see giving water to their babies being contrary to the practice of breastfeeding exclusively. The practice of giving water to babies is however not uncommon and peculiar to this study.

This practice is reported widely in literature from different countries including Zimbabwe itself (Orne-Gliemann *et al.*, 2006; Nyadzayo, 2007; Cosminsky *et al.*, 1993). The practice has been found common in Ethiopia, Ghana, Brazil, Cameroon, Malawi, Zambia and Tanzania (Alemayehu *et al.*, 2009; Otoo *et al.*, 2009; do Espirito Santo *et al.*, 2007; Kakute *et al.*, 2005; Kamudoni *et al.*, 2010; Fjeld *et al.*, 2008; de Paoli *et al.*, 2001). Whilst this study did not explore the reason (s) for giving water to infants, a study conducted in Masvingo Province of Zimbabwe found that baby being thirst was the most common reason why mothers gave their babies water (Cosminsky *et al.*, 1993), a reason also given by mothers in Tanzania (de Paoli *et al.*, 2001).

### **5.1.5 Breast conditions**

Findings from this study revealed that breast conditions are a barrier to EBF. Conditions mentioned in this study include sore or cracked nipples, engorged and/or swollen breasts and breast lumps. Mothers reported that breastfeeding is painful and uncomfortable when one has any one of these breast conditions, leading to early introduction of solids. In Ghana, as in the present study, swollen and painful breasts, breast abscesses and sore nipples were mentioned by mother as barriers to EBF (Otoo *et al.*, 2009). In a study by Nankunda and colleagues (2006) in Uganda, breastfeeding counsellors identified breast conditions as a barrier to breastfeeding (Nankunda *et al.*, 2006). Breast engorgement was found to be associated with introduction of industrialized milks in a Brazilian study (Giugliani *et al.*, 2008). Related to breast conditions, it emerged during interviews that swelling of breast can be caused by the baby belching while suckling on the breast. This finding is not unique to this study only. In a qualitative study conducted among peri-urban women in Ghana, it also emerged from one of the focus group discussions (FGD) with mothers that when the baby belches while on the breast, that particular breast swells (Otoo *et al.*, 2009).



### **5.1.6 The HIV epidemic**

This study revealed that the HIV epidemic is considered by mothers as one of the barriers to breastfeeding, let alone EBF. During interviews with mothers, it emerged that depending on one's HIV status; mothers were advised to breastfeed for a short time or not to breastfeed at all. Some mothers mentioned that they feared breastfeeding for a long time in case they got infected; risking passing on the virus to their babies. For those advised to breastfeed for a short time, it meant that they would not breastfeed for as long as they would have wanted to. Like this study, mothers in a study in Ghana also mentioned HIV to be a barrier to breastfeeding (Otoo *et al.*, 2009). It would appear that mothers do not clearly discern between guidance from a public health view and specialised or individualised breastfeeding counselling for those who know their HIV status. This situation however could equally apply to those HIV negative as status may change during the breastfeeding period should one of the partners be exposed and get infected.



It is clear from this study that the HIV pandemic continues to pose a big threat to breastfeeding. An infected mother is confronted by a dilemma of competing risks of possibly transmitting the HIV in her breastmilk to her baby through breastfeeding or the to risk their baby dying from diseases that may come from malnutrition and infections should she choose not to breastfeed (WABA, 2007)

While EBF still remains the cornerstone for child survival (Kline, 2009), there still exists a public health dilemma around breastfeeding and HIV, that of determining the means for infected mothers in resource poor settings to make feeding choices relevant to their socio-cultural and economic circumstances (Coovadia & Bland, 2007). From a public health perspective, the WHO continues to encourage EBF for up to six months even in the context of HIV when the AFASS criterion is not met. This one size fit all message sounds much louder compared to the subtle personalised breastfeeding counselling voice and that causes confusion and challenges among mothers on which voice to listen to. Needed is a clear communication strategy that will help those infected and affected by HIV to make appropriate choices and decisions about feeding their infants and young children.

## **5.2 ENABLING FACTORS FOR EXCLUSIVE BREASTFEEDING**

### ***5.2.1 Adequate diet***

Findings from this study confirm the importance of good nutrition to a breastfeeding mother. Mothers in this study unequivocally concurred that a good diet is important for a breastfeeding mother. Moreover, this study also revealed that consumption of certain types of food and juice such as fruit juices, tea and mahewu (fermented traditional drink made from maize flour, sugar and yeast), roasted salty pulses and other salted foods increases breastmilk production. Current evidence however does not suggest that specific foods that breastfeeding mothers should either eat or avoid (LINKAGES, 2004) as is thought by mothers in this study. In the LINKAGES publication, it is the consumption of a variety of foods that is important as opposed to specific types of food.

Similar to findings by this study, mothers' experience of increase in breastmilk production following consumption of certain foods has also been reported in other studies. Salty foods, vegetables or relish with salt, roasted and salted groundnuts and round nuts, peanut butter, mahewu, tea with milk were reported to increase the flow of breastmilk in a study that investigated feeding practices in rural district in Zimbabwe (Cosminsky *et al.*, 1993). In a Ghanaian study, mothers concurred that to produce enough breastmilk, a mother should have access to a nutritionally balanced diet (Otoo *et al.*, 2009). As such, while malnutrition should not be a constraint to mothers' breastfeeding optimally, there could be value in providing mothers with extra food to facilitate increased milk production.

### ***5.2.2 Support from men***

Findings from this study showed that husband's involvement and their support to his lactating wife is important in enabling her to breastfeed. Mothers indicated that men can support them to successfully through emotional and social support, ensuring there is always adequate food and by taking over some of the domestic chores so that mothers have time to care for the baby. One of the things mentioned by mothers was faithfulness especially amidst the deadly HIV pandemic. Literature from breastfeeding programmes suggests that the best breastfeeding results have been observed in those programmes that involved men (SCUK, 2009).

There is evidence from other studies that men's involvement has resulted in some improvement in breastfeeding practices. In a study that investigated predictors of breastfeeding intention among low income women in Mississippi men's support, [although the kind of support is not spelt out] was associated with an increase in breastfeeding rates in (Mitra *et al.*, 2004). In another American study it was found that in families where the husband or partner provided financial means to the family, the mother was more likely to breastfeed exclusively (Chatman *et al.*, 2004).

### ***5.2.3 Support from family members***

This study revealed that mothers need support and encouragement from close family members to get on with breastfeeding. As in this study, the importance of family support in breastfeeding has also been reported in a study that was conducted in Mississippi (Mitra *et al.*, 2004). Similar findings were reported in a study that assessed infant feeding practices within a PMTCT programme in Manicaland province of Zimbabwe (Orne-Gliemann *et al.*, 2006). Family members mentioned include mothers, grandfathers (mentioned by some mothers) as well as grandmothers. Important to note is that the support and encouragement that mothers referred to in this study pertained to breastfeeding in general and not EBF *per se*. Nevertheless, the findings indicate that family members have such an important sphere of influence that if they are enlightened about EBF, their influence can be enhanced to yield optimal breastfeeding practices. Community outreach programmes and infant and young child feeding workshops need to target such important people if they are to produce the desired results. Once such people have the knowledge of breastfeeding, they can provide one to one support to mothers within homes and the community at large when organised into breastfeeding networks. One to one support for mothers during critical points such as before delivery and immediately after delivery has been reported to increase breastfeeding rates (LINKAGES, 2004).

### ***5.2.4 Knowledge of the benefits of exclusive breastfeeding***

This study revealed that whilst most mothers may not have exclusively breastfed their babies as recommended, it was clear during interviews that mothers were aware of some of the benefits of breastmilk to their babies such as ‘making children grow well and healthy’, ‘making children less sick and grow with strong bones and walk on time’ and that it ‘contains all the feeding’. These benefits at least motivated mothers to breastfeed though not exclusively unfortunately. Mothers with intentions to breastfeed and knowledge about breastfeeding have been found to face fewer barriers to breastfeeding. Such mothers were also found to be more confident with exclusively breastfeeding (Mitra *et al.*, 2004). A study in Tanzania found that mothers who had knowledge on some breastfeeding issues reported longer periods of breastfeeding compared to those who lacked knowledge (Shirima *et al.*, 2001).

This study also revealed that breastfeeding baby boys feel different from breastfeeding baby girls. Mothers reported that boys ‘pull harder, breastfeed for longer, breastfeed more frequently and that mothers feels significantly drained after breastfeeding a baby boy. It would be interesting to understand whether or not this would lead to mothers deciding to either wean baby boys much earlier than baby girls, especially during lean or hunger period of the year, or whether baby boys are exclusively breastfed for shorter periods when compared to baby girls. These questions are beyond the scope of this study and would certainly warrant further investigation.



## CHAPTER 6

### CONCLUSION AND RECOMMENDATIONS

#### 6.1 CONCLUSIONS

- Mothers' understanding of EBF was found vague, mixed, and variable as they could not distinguish EBF from partial and predominant breastfeeding.
- Barriers to EBF found in this study include (i) mothers' perceived insufficiency of breastmilk production (ii) poor understanding of EBF (iii) use of traditional herbal concoctions as medicine (iv) the practice of giving babies water (v) myths and misconceptions about breastfeeding (vi) breast conditions (vii) traditional and cultural belief systems (viii) HIV epidemic and (ix) employment not supported by breastfeeding friendly labour policies.
- Enabling factors for EBF include (i) adequate food for the breastfeeding mother (ii) men's support (iii) mother's knowledge of benefits of EBF and (iv) support from other family members.
- Access to breastfeeding information and counselling services, provision of the service, utilisation and coverage of services all fall far too short to produce the desired infant and young child feeding indicators.
- There still exist widespread myths and misconceptions around breastfeeding and these compounded by cultural norms, belief systems, values and societal expectations negatively interfere with mothers' breastfeeding decisions, choices and practices.
- Breastfeeding baby boys feel different from breastfeeding baby girls, in as much as the feeling of breastfeeding when hungry is different from the feeling when not hungry.

## 6.2 RECOMMENDATIONS

- The Ministry of Health and Child Welfare needs to deliberately invest in the training of health professionals to include community based cadres such as VHWs on infant and young child feeding with emphasis on breastfeeding counselling and support skills to ensure a routine, systematic and predictable provision of breastfeeding counselling and messages at all contact points within health facilities.
- The Ministry of Health and Child welfare should initiate community outreach programmes and networks using VHWs as a conduit to take the breastfeeding messages outside the walls of health facilities. The outreach programmes should deliberately involve men, grandmothers and important others so as to re-direct their influence to promoting, supporting optimal breastfeeding practices.
- In the short term, there should be deliberate efforts to immediately develop breastfeeding messages that demystify and clear misconceptions around breastfeeding and pregnancy, giving babies water and use of traditional herbal infusions as a priority.
- Programme planners and policy makers to consider the two physiological states [pregnancy and lactating] as criteria for prioritisation of women in supplementary feeding or food assistance programmes so as to improve birth outcomes and support optimal breastfeeding practices.
- Amidst economic and physical barriers, health workers should purpose not to be themselves a deterrent to mothers accessing health care services by showing a positive attitude, appropriate professional conduct. Health workers have a duty of care to offer their indispensable services to mothers and their infants and the population in general.

- Whereas nutrition and health education is necessary as part of efforts to increase uptake of exclusive breastfeeding, it is by itself not sufficient and need to be supported by an enabling environment for mothers to translate knowledge into practice. To this end, interventions such as safety nets and broader social protection mechanisms are needed coupled with nutrition friendly agricultural programmes (promoting wide range/variety crops and small ruminant animals).

### ***6.2.1 Recommendations for further research***

- With boys having been reported to be more likely to be malnourished than girls in Zimbabwe (FNC, 2010) and boys breastfeeding patterns reported in this study, an in-depth exploration of breastfeeding practices in Zimbabwe is required to determine if the sex of the child influences women/mothers' breastfeeding and complementary feeding practices.
- Mothers in this study and elsewhere reported that they experience reduction in breast milk production when hungry and yet current evidence suggests that may happen only when a mother is severely malnourished. Should hunger really affect breastmilk production, a physiological investigation is required to understand the mechanism and establish if there is some biological explanation to support mothers' lived experiences of reduced breastmilk production when hungry.
- Transferability of the findings from this study may be limited by contextual variations. There is need to scale up this study to other parts of the country so as to gain a national level understanding of factors influencing mothers' breastfeeding choices and practices in Zimbabwe.

## References

- Aidam, B. A., Perez-Escamilla, R., Lartey, A., Aidam, J. (2005a). Factors associated with exclusive breastfeeding in Accra, Ghana. *European Journal of Clinical Nutrition*, 59(6), 789.
- Aidam, B. A., Perez-Escamilla, R., Lartey, A. (2005b). Lactation Counselling Increases Exclusive Breast-Feeding Rates in Ghana. *The Journal of Nutrition*, 135(7), 1691.
- Alemayehu, T., Haider, J., & Habte, D. (2009). Determinants of exclusive breastfeeding practices in Ethiopia. *Ethiopian Journal of Health Development*, 23(1), 12-18.
- Arora, S., McJunkin, C., Wehrer, J., Kuhn, P. (2000). Major Factors Influencing Breastfeeding rates: Mother's Perception of Father's Attitude and Milk Supply. *Pediatrics*, 106(5), e67.
- Bakoula, C., Veltsista, A., Prezerakkou, A., Moustaki, M., Fretzayas, A., Nicolaidou, P. (2007). Working mothers breastfeed babies more than housewives. *Acta Pædiatrica*, 96(4), 510.
- Black, R. E., Allen, L. H., Bhutta, Z. A., Caulfield, L. E., de Onis, M., Ezzati, M., *et al* (2008). Maternal and Child Under nutrition: Global and regional exposures and health consequences. *The Lancet*, 371(9608), 243-260. doi:DOI: 10.1016/S0140-6736(07)61690-0
- Bland, R. M., Rollins, N.C., Coutsooudis, A., Coovadia, H.M. (2002). Breastfeeding practices in an area of high HIV prevalence in rural South Africa. *Acta Pædiatrica*, 91 (6), 704.
- Boyd, C. O. (2001). Phenomenology the method. In P. L. Munhall (Ed.), *Nursing research: A qualitative perspective* (3rd ed., pp. 93-122) Sudbury, MA: Jones and Bartlett.
- Chatman, L. M., Salihu, H.M., Roofe, M.E.A., Wheatle, P., Henry, D., Jolly, P.E. (2004). Influence of Knowledge and Attitudes on Exclusive Breastfeeding Practice Among Rural Jamaican Mothers. *Birth*, 31(4), 265.
- Coovadia, H. M., Bland, R.M. (2007). Preserving breastfeeding practice through the HIV pandemic. *Tropical Medicine International Health*, 12 (9), 1116.
- Cosminsky, S., Mhloyi, M., Ewbank, D. (1993). Child feeding practices in a rural area of Zimbabwe. *Social Science Medicine*, 36 (7), 937.
- Coutsoudis, A., Coovadia, H.M., Wilfred, C.M. (2008). HIV, infant feeding and more perils for poor people: New WHO guidelines encourage review of formula milk policies. *Bulletin of the World Health Organization*, 86, 210.



- Coyne, I. T. (1997). Sampling in Qualitative Research. Purposeful and theoretical sampling: Merging or clear boundaries? *Journal of Advanced Nursing*, 26(3), 623.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage
- Creswell, J. W., Miller, D.L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39 (3), 124.
- de Paoli, M., Manongi, R., Helsing, E., Klepp, K. (2001). Exclusive Breastfeeding in the era of AIDS. *Journal of Human Lactation*, 17(4), 313.
- Dearden, K., Altaye, M., de Maza, I., de Oliva, M., Stone-Jimenez, M., Morrow, A. *et al* (2002). Determinants of optimal breast-feeding in peri-urban Guatemala City, Guatemala. *Revista Panamericana De Salud Pública*, 12, 185.
- Devers, K. J., Frankel, R.M. (2000). Study Design in Qualitative Research 2: Sampling and Data Collection Strategies. *Education for Health*, 13 (2), 263.
- do Espirito Santo, L. C. , Oliveira, L.D., Giugliani, E.R.J. (2007). Factors associated with Low incidence of Exclusive Breastfeeding for the First 6 months. *Birth*, 34 (3), 212.
- Earle, S. (2002). Factors affecting the initiation of breastfeeding: Implications for breastfeeding promotion. *Health Promotion International*, 17(3), 205.
- Family Health International. (2005). *Qualitative Research Methods: A Data Collector's Field Guide*, Research Triangle Park, North Caroline, USA
- Fjeld, E., Siziya, S., Kapeta-Bwalya, M., Kankasa, C., Moland, K.M., Tylleskar, T. (2008). 'No sister, the breast alone is not enough for my baby. A qualitative assessment of potentials and barriers in the promotion of exclusive breastfeeding in southern Zambia. *International Breastfeeding Journal*, 3(1), 26.
- FNC. (2010). *Zimbabwe National Nutrition Survey; Preliminary findings*. Harare, Zimbabwe: Food and Nutrition Council, Scientific & Industrial Research & Development Centre (SIRDC).
- Gifford, S. (1996). Qualitative Research: The Soft Option? *Health Promotion Journal of Australia*, 6, 58-61.
- Gifford, S. (1998). Analysis of Non-numerical Research. In C. Kerr, R. Taylor & G. Heard (Eds.), *Handbook of public health methods* ( pp. 543-554). London: McGraw Hill.

- Giugliani, E. R. J., do Espírito Santo, L. C., de Oliveira, L. D., Aerts, D. (2008). Intake of water, herbal teas and non-breast milks during the first month of life: Associated factors and impact on breastfeeding duration. *Early Human Development*, 84(5), 305-310. DOI: 10.1016/j.earlhumdev.2007.08.001
- Goga, A. E., Van Wyk, B., Doherty, T., Colvin, M., Jackson, D.J., Chopra, M. (2009). Operational Effectiveness of guidelines on Complete Breast-Feeding Cessation to Reduce Mother-to-Child Transmission of HIV: Results from a Prospective Observational Cohort Study at Routine Prevention of Mother-to-Child Transmission Sites, South Africa. *Journal of Acquired Immune Deficiency Syndromes*, 50 (5), 521.
- Green, J., Thorogood, N. (2004). Qualitative Methodology and health research. *Qualitative methods for health research* (pp. 3-26). London; Sage Publication.
- Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods*, 3 (1)
- Guerrero, M. L., Morrow, R.C., Calva, J.J., Ortega-Gallegos. H., Weller, S.C., Ruiz-Palacios, G.M., Morrow, A.L. (1999). Rapid ethnographic assessment of breastfeeding practices in Peri-urban Mexico City. *Bulletin of the World Health Organization*, 77, 323.
- Haider, R., Bir, J., Hamdani, J., Habte, D. (1997). Reasons for failure of breast-feeding counselling: Mothers' perspectives in Bangladesh. *Bulletin of the World Health Organization*, 75 (3), 191.
- Jones, G., Steketee, R.W., Black R.E., Bhutta, Z.A., Morris, S.S. (2003). How many child deaths can we prevent this year? *Lancet*, 362 (9377), 65.
- Kakute, P. N., Ngum, J., Mitchell, P., Kroll, K. A., Forgwei, G. W., Ngwang, L. K., Meyer, D. J. (2005). Cultural Barriers to Exclusive Breastfeeding by Mothers in a Rural Area of Cameroon, Africa. *Journal of Midwifery & Women's Health*, 50(4), 324-328. doi:DOI: 10.1016/j.jmwh.2005.01.005
- Kamudoni, P. R., Maleta, K., Shi, Z., de Paoli, M. M., Holmboe-Ottesen, G. (2010). Breastfeeding perceptions in communities in Mangochi district in Malawi. *Acta Paediatrica*, 99(3), 367.
- Kline, M. W. (2009). Early exclusive breastfeeding: Still the cornerstone of child survival. *The American Journal of Clinical Nutrition*, 89 (5), 1281.
- Koyanagi, A., Humphrey, J.H., Moulton, L.H., Ntozini, R., Mutasa, K., Iliff, P. *et al* (2009). Effect of early exclusive breastfeeding on morbidity among infants born to HIV-negative mothers in Zimbabwe. *The American Journal of Clinical Nutrition*, 89 (5), 1375.

- Kuhn, L., Sinkala, M., Kankasa, C., Semrau, K., Kasonde, P., Scott, N., *et al.* (2007). High uptake of exclusive breastfeeding and reduced early post-natal HIV transmission. *PLoS ONE*, 2 (12), 1363.
- Lauer, J., Betran, A., Victora, C., de Ons, M., Barros, A. J. D. (2004). Breastfeeding patterns and exposure to suboptimal breastfeeding among children in developing countries: Review and analysis of nationally representative surveys. *BMC Medicine*, 2, 26-26.
- Liamputtong, P. R., Ezzy, D. (2005). In-depth Interviews. In *Qualitative research methods* ( pp. 54-74). Sydney: Oxford University Press.
- LINKAGES. (2004). *Breastfeeding and maternal nutrition Frequently Asked questions (FAQ)*. Retrieved Accessed 13/2011, 2011, from <http://www.linkagesproject.org/media/publications/frequently20asked20questions/FAQMatNutEng.pdf>
- Malterud, K. (2001). Qualitative research: Standards, challenges, and guidelines. *Lancet*, 358 (9280), 483.
- Marshall, M. N. (1996). Sampling for Qualitative Research. *Family Practice*, 13(6), 522-525.
- Mays, N. (2000). Qualitative research in health care: Assessing quality in qualitative research. *BMJ. British Medical Journal*, 320(7226), 50.
- Mitra, A. K., Khoury, A. J., Hinton, A. W., Carothers, C. (2004). Predictors of Breastfeeding Intention Among Low-Income Women. *Maternal and Child Health Journal*, 8 (2), 65.
- MoHCW. (2002). *National Infant and Young Child Feeding Assessment: Practices and Policies, 2002*. Harare Zimbabwe: Ministry of Health and Child Welfare.
- MoHCW. (2003). *National Nutrition and EPI Survey Report*, Ministry of Health and Child Welfare, Harare, Zimbabwe.
- Nankunda, J., Tumwine, J. K., Soltvedt, A., Semiyaga, N., Ndeezi, G., Tylleskr, T. (2006). Community based peer counsellors for support of exclusive breastfeeding: Experiences from rural Uganda. *International Breastfeeding Journal*, 1, 19-19.
- Nyadzayo, T.K. (2007). Determinants of Mixed Feeding Practices in Women Attending Family Health Clinics in Harare: *A Dissertation submitted in partial fulfilment of Master in Public Health Degree*, University of Zimbabwe, Faculty of Medicine, Department of Community Medicine, Harare, Zimbabwe

- Ogundele, M. O., Coulter, J. B. S. (2003). HIV transmission through breastfeeding: Problems and prevention. *Annals of Tropical Paediatrics*, 23 (2), 91.
- Orne-Gliemann, J., Mukotekwa, T., Miller, A., Perez, F., Glenshaw, M., Nesara, P., Dabis, F. (2006). Community-based assessment of infant feeding practices within a programme for prevention of mother-to-child HIV transmission in rural Zimbabwe. *Public Health Nutrition*, 9 (05), 563.
- Otoo, G. E., Lartey, A. A., Perez-Escamilla, R. (2009). Perceived Incentives and Barriers to Exclusive Breastfeeding Among Peri-urban Ghanaian Women. *Journal of Human Lactation*, 25 (1), 34.
- Pope, C., Mays, N. (1995). Qualitative research: Reaching the parts other methods cannot reach: An introduction to qualitative methods in health and health services research. *BMJ. British Medical Journal*, 311 (6996), 42.
- Sachdev, H. P. S., Mehrptra, S. (1995). Predictors of exclusive breastfeeding in early infancy: Operational implications. *Indian Pediatrics*, 32, 1287.
- Sandelowski, M. (1986). The Problem of Rigor in Qualitative Research. *Advances in Nursing Science*, 8 (3), 27.
- Scanlon, K. S., Grummer-Strawn, L., Shealy, K. R., Jefferds, M. E., Chen, J., Singleton, J. A., Philip, C. M. (2007). Breastfeeding trends and updated national health objectives for exclusive breastfeeding --- United States, Birth years 2000--2004. *Morbidity and Mortality Weekly Report*, 56(30)
- SCUK. (2009). *Hungry for Change: An eight step costed action to tackle global child hunger*. London, United Kingdom: The Save the Children Fund.
- Shirima, R., Gebre-Medhin, M., Greiner, T. (2001). Information and socioeconomic factors associated with early breastfeeding practices in rural and urban Morogoro, Tanzania. *Acta Paediatrica*, 90 (8), 936.
- Sibeko, L., Dhansay, M. A., Charlton, K. E., Johns, T., Gray-Donald, K. (2005). Beliefs, Attitudes, and Practices of Breastfeeding Mothers from a Peri-urban Community in South Africa. *Journal of Human Lactation*, 21(1), 31-38. doi:10.1177/0890334404272388
- UNICEF. (2005) Celebrating the Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding Past Achievements, Present Challenges and the Way Forward for Infant and Young Child Feeding 1990-2005. Florence, Italy
- WABA. (2007). A matter of life or death; The untold story of HIV, breastfeeding and Child Survival. Asia Pacific Institute of Broadcasting Development Conference on Global Media Strategies for HIV and AIDS, 28 May 2007, Kuala Lumpur.

- Weinberg, G. A. (2000). The dilemma of postnatal Mother-to-Child Transmission of HIV: To breastfeed or not? *Birth*, 27 (3), 199.
- WHO. 2010, *Guidelines on HIV and infant feeding. 2010. Principles and recommendations for infant feeding in the context of HIV and a summary of evidence*, World Health Organisation, Geneva, Switzerland. WHO. (2003a). *Global Strategy for Infant and Young Child Feeding*. Geneva Switzerland: World Health Organisation.
- WHO. (2003b). *HIV and infant feeding: Framework for priority action*. Geneva Switzerland: World Health Organisation.
- WHO. (2007). *Evidence on the long term effects of breastfeeding. systematic reviews and meta analyses*. Geneva, Switzerland: World Health Organisation.
- WHO. (2008c). *Indicators for assessing infant and young child feeding practices; Part I Definitions*. Geneva, Switzerland: World Health Organisation
- WHO. (2008b). *HIV transmission through breastfeeding; a review of available evidence*. Geneva, Switzerland: World Health Organisation.
- WHO. (2008a). *International Code of Marketing of Breast milk Substitutes*. Geneva, Switzerland: World Health Organisation.
- WHO. (1981). *International Code of Marketing of Breastmilk Substitutes*. Geneva, Switzerland: World Health Organisation.
- Xu, F., Binns, C., Zheng, S., Wang, Y., Zhao, Y., Lee, A. (2007). Determinants of exclusive breastfeeding duration in Xinjiang, PR China. *Asia Pacific Journal of Clinical Nutrition*, 16(2), 316.
- Zimbabwe Central Statistical Office (ZCSO). (2000). *Zimbabwe Demographic and Health Survey (ZDHS): Key findings report, 1999*
- Zimbabwe Central Statistical Office(ZCSO). (2007). *Zimbabwe Demographic and Health Survey (ZDHS) 2007*
- Zimbabwe Central Statistical Office (ZCSO). (2009). *Multiple Indicator Monitoring Survey. Preliminary Report 2009*

APPENDIX 1



**UNIVERSITY OF THE WESTERN CAPE  
School of Public Health**



Private Bag X17 • **BELLVILLE** • 7535 • South Africa  
Tel: 021- 959 2809, Fax: 021- 959 2872

**CONSENT FORM**

**Title of Research Project:** Factors associated with exclusive breastfeeding in KweKwe District, Zimbabwe.

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way.

**Participant's name**.....

**Participant's signature**.....

**Witness**.....

**Date**.....

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

**Study Coordinator's Name:** Themba Nduna

**University of the Western Cape**  
**Private Bag X17, Belville 7535**  
**Telephone: (021)959-**  
**Cell: +263 712 778 128**  
**Fax: (021) 959- 2173**



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**School of Public Health**

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**CONSENT FORM**

**(Invumo evela kophendula imibuzo)**

**Isihloko salesi sifundo:** Inkambo yabo mama yokumunyisa abantwana esigabeni se KweKwe, e Zimbabwe

Ngithole ingcazelo engcweleyo ngalesi sifundo njalo sichasiswe ngolimi engiluzwisayo. Ngalokho ke ngikethe ukuba lengxenywe kulesi sifundo. Imibuzo yonke engibe layo iphenduliwe. Kusobala kimi lokuba ibizo lami kunye lakho konke okuphathelene lami kuza ngcinwa kuyimfihlo kulesi sifundo. Ngiyazwisisa njalo ukuba uma ngingasathandi ukuba lengxenywe kulesi sifundo ngilakho ukushiya loba siphilisi isikhathi ngingaphanga zizatho zokuba kungani sengiguqule umcabango.

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**Ibizo lalowo opha imvumo.....**

**Ibizo elixakaxiweyo (signature).....**

**Ufakazi (witness).....**

**Ku mhlaka (date).....**

Uma ungaba lemibuzo ephathelene lalesi sifundo loba nje okunye ofuna ukuba kwazi ukhululekile ukungithinta kunombolo lekheli engaphansi:

**Study Coordinator's Name:** Themba Nduna

**University of the Western Cape**

**Private Bag X17, Belville 7535**

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**Participant Information Sheet**

**Date:** 9 August 2010

Dear participant:

Thank you for your willingness to take part in this important research. This information sheet tells you why this research is being undertaken and what it will involve. You are requested to give your consent for me to conduct an interview with you.

**Information about the interviewer**

My name is Themba Nduna; I am a student at the University of the Western Cape. I am required to undertake research and write a mini thesis as partial fulfilment of the requirements for the Master in Public Health degree that I am studying for with the University of the Western Cape, School of Public Health.

**Title of the study**

Factors associated with exclusive breastfeeding in KweKwe District, Zimbabwe.

**Purpose of the study**

Studies have shown that uptake of exclusive breastfeeding is poor and low in Zimbabwe in spite of numerous programmes and interventions aimed at promoting and protecting this important practice. Exclusive breastfeeding is an important and proven health strategy to reduce illness and deaths in infants and young children. It is hoped that findings from this study will provide important information and insight that will help understand the barriers to exclusive breastfeeding as well as enabling factors that can be strengthened to promote exclusive breastfeeding in children aged 0-6 months. Insights gained from this study will not only be important in designing appropriate interventions to support, promote and protect breastfeeding but also provide important information that will inform and guide the conduct of a national breastfeeding survey planned jointly by the Ministry of Health and Child Welfare and UNICEF in Zimbabwe.



## **Confidentiality**

All information collected about you during the interview will be kept strictly confidential. Your name will not be written on the questionnaire. I will refer to your name and information provided by you by a pseudonym or invented name that I will ask you to choose. The data and information you provide will be kept secure and will be seen by the research team only; it will be immediately destroyed following completion of the research.

## **Voluntary participation and withdrawal**

Taking part in this study is entirely voluntary, and it is up to you to decide to or not to take part. You do not have to give a reason(s) to decline participation. If you decide to take part but later change your mind during the course of the interview, you are free to withdraw at any time without giving any reason(s). There will be no negative consequences if you withdraw. You may also decide or choose not to answer particular questions that are asked during the interview and if there is anything that you would prefer not to discuss please feel free to indicate as such.

## **Benefits and costs**

There are no direct personal benefits to you for participating in this study. There are no costs associated with your participation in this study apart from the valuable time you will spend sharing your experiences and thoughts with me during the interview. However your participation will be greatly appreciated and information you provide will be a valuable contribution to the body of knowledge important for designing future health interventions that will improve health outcomes.

## **Informed consent**

Should you be interested to take part in this study, your informed consent will be required. I have attached herewith a consent form so that you can first sign a copy before I can proceed interviewing you.

## **Questions**

Should you have questions or want to know more I can be contacted as follows: **Themba Nduna, Student Number:** 2930798, [ndunx2007@gmail.com](mailto:ndunx2007@gmail.com). You can also contact my Supervisor, Dr. Brian Van Wyk on +27 82 804 9055 (mobile), or c/o School of Public Health of the University of the Western Cape, +27 959 2173 (office) or by email on [bvanwyk@uwc.ac.za](mailto:bvanwyk@uwc.ac.za)



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**Participant Information Sheet**  
**(Okumele kwaziwe ngozaphendula imibuzo)**

**Mhlaka ka:** 9 ku Ncwabakazi 2010

Kuwe ozaphendula imibuzo

Ngiyabonga ukutshengisa kwakho isifiso sokuba lengxenye kulesisifundo esiqakatheke kangaka. Lolugwadlana-ke luchaza izinto ezithile ezimqoka eziphathelene lalesifundo ukumele uzazi. Uyacelwa ke ukuba nxa usuthe wazwisisa ngalesifundo, ungiphe imvumo egcweleyo yokuba ngiqhubeke ngikubuze imibuzo. Isivumelwano esigcweleyo sizasenza ngokulobelana phansi mina lawe.

**Okuphathelene lobuza imibuzo**

Ibizo lami ngu Themba Nduna. Ngingumfundi kugatsha lwezempilo esikolweni sezempilo (School of Public Health) se-University of the Western Cape, yase South Africa. Lokhu kucubungula kolwazi engikwenzayo kungesinye sezifundo okumele umfundi azenze ukuze aphiwe isithupha semfindo yozinga ulungaphezulu kusigaba sezempilo (Master of Public Health).

**Isihloko salesi sifundo sithi**

Inkambo yabo mama yokumunyisa abantwana esigabeni se KweKwe, kwele Zimbabwe.

**Kungani lesisifundo siqakathekile?**

Uchago lwebele lika mama lipha umntwana ukudla okwaneleyo ukuze akhule ondlekile njalo evikelekile emkhuhlaneni evame ukugcina ithethe izimpilo zabantwana. Kungakho omama abalabantwana abasanda kuzalwa kusiya kunyanga eziyisithupha bekhuthazwa ukuba bangaphi abantwababo ukunye ukudla ngitsho lamanzi okunatha kodwa baphe abantwababo ibele (bamunyise) ukuze bakhule kahle, bondlekile njalo bevikelekile emkhuhlaneni. Ukuhlolisisa okwenziwa e-Zimbabwe kutshengisa ukuthi omama abanengi abalabantwana abasanda kuzalwa kusiya kunyanga eziyisithupha abamunyisi abantwababo njengalokho okukhuthazwayo (ukuthi bamunyisa okwezinyanga eziyisithupha umntwana engaphiwa okunye ukudla ngaphandle kwebele). Ngakho lesisifundo siqonde ukuzwisisa kulabo omama abalenkambo yokumunyisa ukuba yiziphi izinto abahlangana lazo kulenkambo yokumunyisa ezenza ukumunyisa ngendlela kube lula kunye lalezo ezizimpazamo ekumunyisweni kwabantwana ngendlela ekhuthazwayo.

Ke-ulwazi oluzavezwa yilokhu kuhlolisisa luzasetshenziswa ukubumba amaqhinga kunye lenhlelo ezizaphathisa omama ukuba bamunyise abantwana njengenkuthazo abayiphiwayo ukuze abantwana abanengi kwele Zimbabwe bakhule bondlekile njalo bevikelekile emkhuhlaneni eminengi. Lolulwazi njalo luzaba ngamaseko esifundo esilandelayo esizacubungula ngalesisifundo sigqela izwe lonke lase Zimbabwe.

### **Okuzaphathwa mfihlo kulesisifundo**

Ibizo lakho, lapho ohlala khona, lazo nje zonke impendulo ozazipha kulesisifundo kuza gcinwa kuyimfihlo. Kuzakwaziwa yimi kunye lalowo ongiholayo kulokhu kuhlolisisa kumbe ukucubungula kolwazi. Njalo ibizo lakho kalisoze lilotshwe ndawo kungwalo zalesisifundo njalo konke ozakusho akusoze kwaziwe ukuba kwakhulunywa nguwe loba ngubani ozaba lengxenywe kulesisifundo. Zonke izingwalo eziphathelele lalokhu kuhlolisisa (kumbe lesi sifundo) zizangcinwa endaweni efihlekileyo zifinyelelwa kuphela yimi lalowo ongiholayo kulesi sifundo.

### **Kungumlandu na ukuba ube lengxenywe kulesisifundo?**

Amanadla okwenza isinqumo sokubalengxenywe loba ukungabi lengxenywe kulesisifundo akuwe kuphela. Nxa uthe wakhetha ukubalengxenywe kulesisifundo, konke kusemandleni akho njalo ulakho ukwala ukuba lengxenywe loba yisiphi isikhathi ungaphanga zizatho zokuba kungani usube lomqondo owahlukileyo. Njalo nxa uthe wakhetha ukuba lengxenywe, ukhululekile ukungaphenduli imibuzo ethile ozwa kusithi ungayiphenduli ngaphandle kokupha izingatho zokungaphenduli leyo mibuzo.

### **Nzuzo bani ozayithola nxa uthe wakhetha ukuba lengxenywe kulesisifundo?**

Akulanzuzo oyitholayo ngokubalengxenywe kulesisifundo. Njalo awulahlekelwa yinzuzo ngokube lengxenywe ngaphandle kuphela kwesikhathi ozasichitha uphendula imibuzo engizakubuza yona. Ukuba lengxenywe kwakho kulesisifundo kule ndonsela enhle ekuzwisiseni lesi senzo esiqakathekileyo ekondliweni kwabantwana kanye le kubavikeleni emkhuhlaneni evame ukugcina ithethe izimpilo zabo.

### **Imvumo evela kuwe**

Nxa uthe wakhetha ukuba lengxenywe kulesi sifundo, sizalobelana isivumelwano kuphetshana engizakupha lona. Lesi sivumelwano siyisitshengiselo njalo isiqiniseko sokuba kuyisifiso njalo lesinqumo sakho sakho ukuba lengxenywe kulesisifundo ngaphandle kokubanjwa ngamandla ukuba uphatheke kuso.

### **Imibuzo**

Uma ungaba lemibuzo ethile loba ungafuna ukuzwisisa ngalesi sifundo ngemva kokuba sengihambile, ungangilobela ku: [ndunx2007@gmail.com](mailto:ndunx2007@gmail.com) loba ukungishayela ucingo ku +263 774 378 408. Njalo ungalobela lowo ongifundisayo njalo ongiholayo kulesisifundo uqgihalwazi Brian Van Wyk kukheli le nombolo ezilandelayo: +27 82 804 9055 (mobile), or c/o School of Public Health of the University of the Western Cape, +27 959 2173 (office) or by email to [bvanwyk@uwc.ac.za](mailto:bvanwyk@uwc.ac.za)

## APPENDIX 5

### In-depth Interview Guide

*This research study aims to understand perceptions and understanding women and health workers regarding exclusive breastfeeding.*

Date:...../...../..... Place..... Start time.....End.....

#### Demographic information

Age:  Marital status  Number of children  Breastfeeding:  Breastfed in the past:

#### Understanding and experience with exclusive breastfeeding

Tell me about exclusive breastfeeding in your own understanding

Can you tell me about your own experience with breastfeeding?

What do you think about breastfeeding particularly exclusive breastfeeding?

How do you breastfed of have you breastfed your children?

How are decisions about to or not to breastfeed are made (how and by who)

Why did you choose to breastfeed?

#### Enabling factors

Tell me about factors that make the practice of exclusive breastfeeding easy to do in this community/locality

Tell me about people who important in influencing breastfeeding decisions

Where do you/have you received information about breastfeeding apart from what you have mentioned above?

#### Barriers to exclusive breastfeeding

What do you think prevents women in this locality from not breastfeeding their babies exclusively for the six months?

## APPENDIX 6

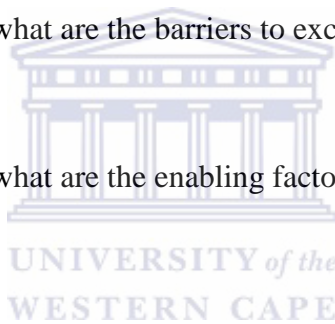
### Semi structured questions for key Informants

**Interview date:** .....**Time: from.....to.....**

**Place:..... Respondent ID (Pseudo name): .....**

#### **Interview setting:**

1. Tell me about breastfeeding practices in this area/locality
2. From your experience, what are the barriers to exclusive breastfeeding in this locality?
3. From your experience, what are the enabling factors for exclusive breastfeeding in this locality?
4. If mothers were to breastfeed exclusively, what could be done?
5. From your experience, who influences breastfeeding decisions and practices?
6. Where do breastfeeding women go for support and/or counselling if they have breastfeeding problems?
7. Tell me about exclusive breastfeeding in your own understanding
8. What makes a mother to or not to breastfeed (breastfeeding predictors)



**Appendix 7**

Authorisation by Ministry of Health and Child Welfare to Conduct Interviews

