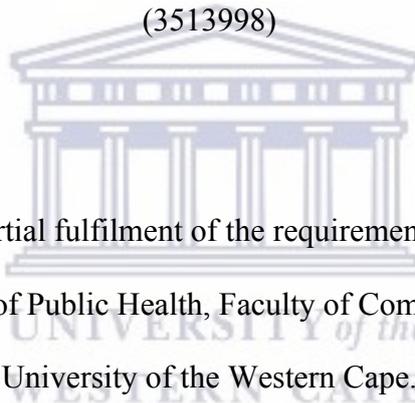


**EXPLORING THE BARRIERS TO OPTIMAL INFANT FEEDING IN  
THE FIRST SIX MONTHS OF LIFE IN DE DOORNS, WESTERN CAPE**

KELLY LEMAN SCOTT

(3513998)

The logo of the University of the Western Cape, featuring a classical building with columns and a pediment, with the text 'UNIVERSITY of the WESTERN CAPE' overlaid.

A mini-thesis submitted in partial fulfilment of the requirements for the degree of Masters in  
Public Health in the School of Public Health, Faculty of Community and Health Sciences,  
University of the Western Cape.

Supervisor: Ms Lungiswa Tsolekile

November 2017

# **EXPLORING THE BARRIERS TO OPTIMAL INFANT FEEDING IN THE FIRST SIX MONTHS OF LIFE IN DE DOORNS, WESTERN CAPE**

Kelly Leman Scott

## **KEYWORDS**

Infant feeding

Exclusive breastfeeding

Barriers

Trust

Support

Mothers

Fathers

Education

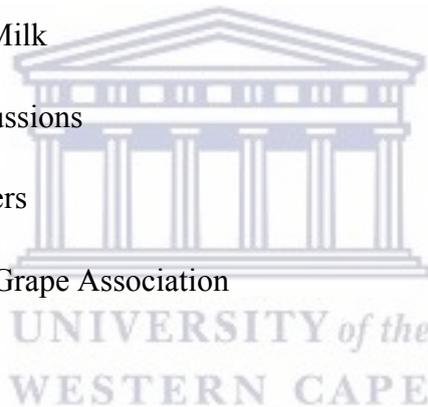
De Doorns

Western Cape



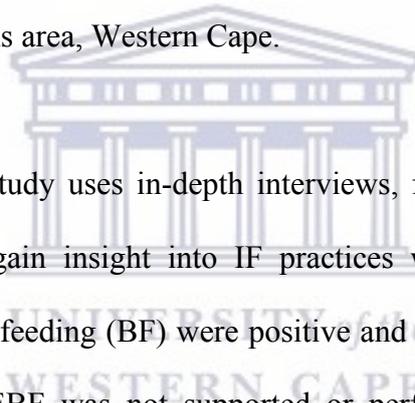
## ACRONYMS

<b>ANC</b>	Antenatal Care
<b>ART</b>	Antiretroviral
<b>BF</b>	Breastfeeding
<b>CHWs</b>	Community Health Workers
<b>CSG</b>	Child Support Grant
<b>DoH</b>	Department of Health
<b>EBF</b>	Exclusive Breastfeeding
<b>EBM</b>	Expressed Breast Milk
<b>FGDs</b>	Focus Group Discussions
<b>HCWs</b>	Health Care Workers
<b>HTA</b>	Hex Valley Table Grape Association
<b>IF</b>	Infant Feeding
<b>KI</b>	Key Informant
<b>MBFI</b>	Mother Baby Friendly Initiative
<b>NTP</b>	Nutrition Therapeutic Programme
<b>SADHS</b>	South African Demographic and Health Survey
<b>UIF</b>	Unemployment Insurance Fund
<b>WHO</b>	World Health Organization



## ABSTRACT

Adequate infant feeding (IF) practices, specifically exclusive breastfeeding (EBF) for the first six months of life, is one of the approaches to addressing malnutrition. The World Health Assembly has set an international target to increase the rate of EBF to 50% by 2025. In a study on the IF practices in the Breede Valley sub-district, within the Cape Winelands health district, the EBF rate was 6%. Despite a recently documented improvement in the South African EBF rate, further improvements need to be made to reduce our stagnant rates of stunting, undernutrition and increasing rates of overnutrition. This study aimed to explore the mothers' perceptions regarding the factors that contribute to poor IF practices in the first six months of life in the De Doorns area, Western Cape.



This qualitative, descriptive study uses in-depth interviews, focus group discussions and a key informant interview to gain insight into IF practices within the community. While mothers' perceptions of breastfeeding (BF) were positive and any breastfeeding was deemed beneficial for their infants, EBF was not supported or performed commonly. The study revealed that mothers' lacked the support of fathers and the generational advice they received was suboptimal. Participants were not able to define the local health facility as a trusted source of IF information and advice. Social and economic factors negatively influenced IF choices, including the necessity to work to gain financial independence as well as unfavourable working conditions for breastfeeding mothers. Mothers appeared to lack self-efficacy regarding their IF choices and also grappled with feelings of competition and judgement influencing deeper social issues such as skewed body image, teenage pregnancy and HIV with the related stigma.

Multiple strategies could be employed to influence the IF situation in De Doorns. Facility- and community-based health care workers need to be educated in counselling mothers to improve their self-efficacy regarding IF. Advocacy and collaboration with employers of mothers regarding the improvement of working conditions for breastfeeding women need to be addressed. Strategies to improve the involvement and knowledge of De Doorns fathers regarding IF practices are necessary to better support mothers. An eventual goal is to develop an IF education package for new parents that helps them to make an IF decision through building their comprehensive, objective knowledge surrounding IF choices and improving their self-efficacy regarding IF.

November 2017



## DECLARATION

I declare that *Exploring the barriers to optimal infant feeding in the first six months of life in De Doorns, Western Cape (2017)* is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Kelly Leman Scott



UNIVERSITY *of the*  
WESTERN CAPE

November 2017

Signed: .....

# CONTENTS

## Table of Contents

<b>KEYWORDS</b> .....	2
<b>ACRONYMS</b> .....	3
<b>ABSTRACT</b> .....	4
<b>DECLARATION</b> .....	6
<b>CHAPTER 1: INTRODUCTION</b> .....	9
<b>1.1 Problem Statement</b> .....	10
<b>1.2 Rationale</b> .....	11
<b>1.3 Thesis Outline</b> .....	11
<b>CHAPTER 2: LITERATURE REVIEW</b> .....	13
<b>2.1 Nutrition: The Foundation for the First 1 000 Days of Life</b> .....	13
2.1.1 Global and local prevalence of malnutrition .....	13
2.1.2 Feeding practices in the first six months of life .....	14
<b>2.2 Factors Associated with Poor IF Practices:</b> .....	17
2.2.1 Individual factors .....	17
2.2.2 Family, community-related and social factors .....	19
2.2.3 Health service factors .....	20
<b>2.3 Interventions for Improving IF Practices</b> .....	22
<b>CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY</b> .....	24
<b>3.1 Research Setting</b> .....	24
<b>3.2 Aim and Objectives</b> .....	25
<b>3.3 Materials and Methods</b> .....	25
3.3.1 Study design .....	25
3.3.2 Sampling methods .....	26
3.3.3 Data collection and analysis .....	27
<b>3.4 Rigour</b> .....	28
<b>CHAPTER 4: FINDINGS</b> .....	30
<b>4.1 Characteristics of the Sample</b> .....	30
<b>4.2 Participants' Perceptions of Infant Feeding in the First Six Months of Life</b> .....	32
4.2.1 Breastfeeding difficulties experienced by participants .....	32
4.2.2 Breastfeeding substitutes and perceptions thereof .....	33
4.2.3 Suboptimal IF practices and the consequences thereof .....	34
4.2.4 Maternal emotions related to the failure to breastfeed .....	35
<b>4.3 Influencers of IF Choices</b> .....	35
4.3.1 Fathers and their role in IF practices during the first six months of life .....	36
4.3.2 Generational IF advice provided to mothers .....	37
4.3.3 Community and health services factors that affect optimal IF practices .....	38
4.3.4 Community health workers role in IF practices .....	41
<b>4.4 Socio-Economic Factors Affecting the Community's IF Choices</b> .....	42
4.4.1 Body image and the role it plays in IF choices .....	42

4.4.2 Teenage pregnancies and the IF consequences .....	43
4.4.3 Employment and the working environment's influence on EBF .....	43
<b>CHAPTER 5: DISCUSSION .....</b>	<b>46</b>
<b>5.1 Limitations .....</b>	<b>57</b>
<b>CHAPTER 6: CONCLUSION.....</b>	<b>59</b>
<b>6.1 Recommendations.....</b>	<b>60</b>
<b>REFERENCES.....</b>	<b>63</b>
<b>APPENDICES .....</b>	<b>76</b>
<b>Appendix 1: Interview Guide for In-Depth Interviews.....</b>	<b>76</b>
<b>Appendix 2: Focus Group Discussion Guide .....</b>	<b>77</b>
<b>Appendix 3: Key Informant Interview Guide.....</b>	<b>78</b>
<b>Appendix 4: Information Sheet (English) .....</b>	<b>79</b>
<b>Appendix 5: Informed Consent Form (English).....</b>	<b>82</b>
<b>Appendix 6: Focus Group Confidentiality Binding Form (English) .....</b>	<b>83</b>
<b>Appendix 7: Information Sheet (Afrikaans) .....</b>	<b>84</b>
<b>Appendix 8: Informed Consent Form (Afrikaans).....</b>	<b>87</b>
<b>Appendix 9: Focus Group Confidentiality Binding Form (Afrikaans) .....</b>	<b>88</b>
<b>Appendix 10: Information Sheet (isiXhosa).....</b>	<b>89</b>
<b>Appendix 11: Informed Consent Form (isiXhosa) .....</b>	<b>92</b>



## CHAPTER 1: INTRODUCTION

In 2013, the World Health Organization (WHO) reported that globally 17 000 children below the age of five died on a daily basis and that an estimated 45% of those children were classified as malnourished (WHO, 2014a). Although malnutrition is estimated to contribute to more than one-third of all child deaths worldwide, it is rarely listed as the direct cause of childhood mortality (WHO, 2015). Adequate infant feeding (IF) practices, specifically giving only breast milk, i.e. exclusive breastfeeding (EBF), in the first six months of life, is one such approach that addresses a number of the causes of malnutrition (WHO, 2014b). On the other hand, suboptimal IF practices is reported to lead to 1.4 million deaths and represents 10% of the disease burden in children younger than five years of age (Black et al., 2008). Astoundingly, Lamberti et al. (2011) found that not exclusively breastfeeding was associated with a 566% increase in all-cause mortality in children aged 6-11 months, and a 223% increase in mortality in those aged 12-23 months.

In 2014, while the world's EBF rate was recorded as 38% (UNICEF, 2014), in comparison, South Africa's was a dismal 8% (UNICEF, 2014). While the most recent South African Demographic and Health Survey (SADHS) showed an improved EBF rate estimated at 31.6% (Statistics South Africa, 2017), this figure is still below the World Health Assembly's international target of a 50% EBF rate by 2025 (WHO, 2012). In a study by Goosen et al. (2014) on the IF practices in the Breede Valley sub-district, within the Cape Winelands health district, it was found that the EBF rate was a mere 6%.

Acknowledging the recommendations made by international bodies and evidence supported by the literature, the South African Department of Health has made strides to develop and enforce national policies that support optimal IF practices. In 2011, the South African

government made a declaration to support, protect and promote EBF and the continuation of breastfeeding, with the addition of complementary foods, until the child is two years old and beyond (Department of Health, 2011). While there is policy supporting the IF recommendations made for the first six months of life, South Africa's IF and nutritional status data does not reflect this political impetus (UNICEF, 2014; Statistics South Africa, 2017). Before addressing poor IF practices in South Africa, and more specifically in a rural area such as De Doorns, reasons for suboptimal IF practices need to be identified and described.

### ***1.1 Problem Statement***

Despite national and provincial political support for IF recommendations to be implemented in the first six months of life, South Africa's IF and nutritional status data does not reflect this (UNICEF, 2014; Statistics South Africa, 2017). Several factors may contribute to the poor implementation of IF policies. These include health care system factors such as the poor distribution of information by health staff during antenatal visits or the lack of adequate breastfeeding support postnatally. Client-related factors contributing to poor IF practices could include a lack of breastfeeding support in the workplace as well as in the home from family members. Goosen et al. (2014) concluded that community perceptions contributed to mixed feeding practices. Studies that explore these factors are lacking in the rural De Doorns community, and so for the successful implementation of IF policies, it is crucial to gain better insight from the beneficiaries of these policies with regards to their reasons for their suboptimal IF practices.

## ***1.2 Rationale***

This study attempted to explore the reasons for suboptimal IF practices in the De Doorns area of the Breede Valley Sub-district, Western Cape. In doing so, it will improve knowledge related to IF in the area, and assist in the facilitation of optimal IF practices through the development of educational materials plus intervention strategies by local health services. Findings will also assist role players to advocate on the community's behalf for a more supportive IF environment.

## ***1.3 Thesis Outline***

**Chapter 1:** Chapter 1 introduces and discusses the background, provides a statement of the problem and provides a rationale for the study.

**Chapter 2:** This chapter includes a literature review discussing the global and local prevalence of malnutrition and how it relates to infant feeding in the first six months of life. Suboptimal IF practices and how they relate to maternal, community, social and health service factors are discussed. Furthermore, interventions for improving IF practices during the first six months of life will be explored.

**Chapter 3:** The research methodology section describes the study setting, study population, sample, study design, ethical considerations, data collection tools and methods of data collection and provides analysis.

**Chapter 4:** This chapter reveals the findings per the objectives of the study. Socio-demographic characteristics, infant feeding perceptions in the first six months of life plus the various role players and influences on infant feeding choices in De Doorns are presented.

**Chapter 5:** The findings are discussed in this section using data collected during the study and relevant literature. The limitations of the study are also presented and discussed.

**Chapter 6:** This chapter presents the study's conclusion and highlights recommendations for further study and implementation.



## CHAPTER 2: LITERATURE REVIEW

This chapter presents an overview of relevant literature relating to the global and local prevalence of malnutrition and how infant feeding in the first six months of life can influence this phenomenon. Also, the factors associated with poor IF practices on an individual, community, social and health services level, will be discussed. Interventions for improving IF practices during the first six months of life will be highlighted as these will help to inform the objectives of the study.

### *2.1 Nutrition: The Foundation for the First 1 000 Days of Life*

Nutrition plays a pivotal role in the maintenance of good health. Furthermore, it enables humans to achieve their mental and physical potential, denotes the quality of the human diet related to nutrient requirements and is an essential indicator for tracking a population's health status (Webb, 2014). According to the WHO's Comprehensive Implementation Plan for Maternal, Infant and Young Children Nutrition, addressing the burden of malnutrition can be realised by concentrating efforts during the 'First 1 000 Days of Life'. Although a life-course approach needs to be considered for an adequate nutritional status to be sustained, special consideration must be given to this period from conception through the child's first two years of life (WHO, 2014a). Optimal IF during the first two years of life involves EBF, which is defined as feeding an infant with only breast milk for the first six months of life. A critical practice that aids optimal IF practice is the early initiation of breastfeeding after birth (DiGirolamo et al., 2001).

#### **2.1.1 Global and local prevalence of malnutrition**

Currently, UNICEF reports that nearly half of all deaths in children under the age of 5 years are caused by undernutrition, a form of malnutrition resulting from the inadequate intake of

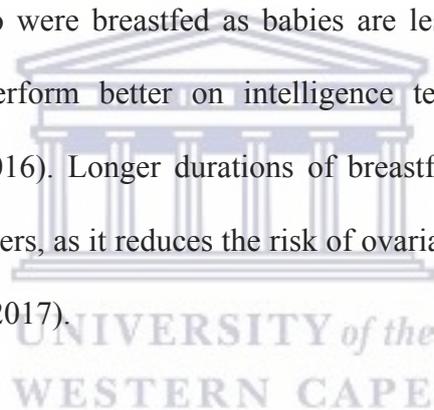
energy, macro- and micronutrients. This translates to about 3 million needless child deaths annually (UNICEF, 2015); additionally, about 12% of deaths of children aged below two years are attributed to suboptimal breastfeeding (WHO, 2015). According to the State of the World's Children, 9% of South Africa's children under five years old are underweight (moderate and severe) while 33% are stunted (moderate and severe) (UNICEF, 2014).

According to the South African Department of Health's Roadmap to Nutrition (Department of Health, 2013), country-specific data for South Africa on the contribution of stunting and wasting to the burden of disease are not available. Available studies and a recent Child Healthcare Problem Identification Programme (CHIP) audit suggest that malnutrition plays an important role in morbidity and mortality in South Africa. In participating hospitals it was found that about 29.5% of children under the age of who died were underweight for age and one third were severely malnourished. The vast majority of children with severe malnutrition who died were also HIV-infected (Department of Health, 2012). Also of great concern are the reported 6% and 3% of South African children, a finding of the most recent South African Demographic Health Study [SADHS] (Statistics South Africa, 2017), who are respectively underweight and wasted. Stunting also remains a national issue with 27% of children, aged 0-59 months, falling into this classification. This figure has not changed since the previous SADHS study in 2003 (Department of Health et al., 2007).

### **2.1.2 Feeding practices in the first six months of life**

Optimal IF during the 'First 1 000 Days of Life' involves the early initiation of breastfeeding within one hour of birth, followed by exclusive breastfeeding (EBF) where the child receives only breast milk and no other fluid or foodstuff, for the first six months of life. This should be followed by the timely introduction of adequate and appropriate-for-age complementary foods and continued breastfeeding until two years old and beyond (WHO, 2017).

Exclusive breastfeeding for the first six months has many benefits for the infant and mother (WHO, 2017). According to Victora et al. (2016), possibly no other health behaviour can affect such a range of outcomes in the two individuals involved: the mother and the child. During the postpartum period, early initiation of breastfeeding protects the newborn from acquiring infections and reduces newborn mortality. For the exclusively breastfed infant, one of the major benefits of EBF is the protection breast milk provides against gastrointestinal infections, observed not only in developing, but also in industrialised countries. For those infants aged older than six months, breast milk remains an essential source of energy as it can meet half or more of a child's needs between the ages of six and twelve months, and one-third of energy requirements between twelve and 24 months (WHO, 2017). In later life, children and adolescents who were breastfed as babies are less likely to be overweight or obese. Additionally, they perform better on intelligence tests and have higher school attendance (Victora et al., 2016). Longer durations of breastfeeding also contribute to the health and well-being of mothers, as it reduces the risk of ovarian and breast cancer and helps to space pregnancies (WHO, 2017).



Acknowledging the recommendations made by international bodies such as the WHO, UNICEF and evidence supported by literature, the South African Department of Health has made strides to develop and enforce national policies that support optimal IF practices and has made an important declaration to support, protect and promote EBF and the continuation of breastfeeding, with the addition of complementary foods, until 2 years old and beyond. The Tshwane Declaration of Support for Breastfeeding in South Africa was signed by the country's Minister of Health and committed the government to "support and strengthen efforts to promote breastfeeding" (Department of Health, 2011:1). More specifically, it committed itself to highlighting breastfeeding in all relevant policies, pass legislation related to breastfeeding and focus on interventions that promote breastfeeding such as human milk banking, the

development of Kangaroo Mother Care units and the up-scaling of the Baby-Friendly Hospital/Mother and Baby Friendly Initiatives (MBFI) in all provinces. Various national policies such as the Infant and Young Child Feeding policy (2013), the Roadmap to Nutrition (2012 to 2016), the Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa (CARMMA, 2012), the 2015 National Consolidated Guidelines for the Prevention of Mother-to-Child Transmission of HIV (PMTCT) and the Management of Children, Adolescents and Adults, all recommend EBF. Some provinces such as the Western Cape have also committed themselves to prioritise the “promotion of exclusive breastfeeding” as well as undertaken to ensure that “all health facilities are Mother-and-Baby Friendly and encourage breastfeeding” and develop “an evidence-based breastfeeding restoration policy that takes into account social determinants and provides recommendations for inter-sectoral action” (Department of Health, 2013: 22).

Despite globally recognised optimal IF recommendations, Cai et al. (2012) reviewed global breastfeeding trend data, of which 74% represented developing countries. The study showed that the prevalence of EBF in developing countries increased from 33% in 1995 to 39% in 2010; the most significant improvement took place in West and Central Africa where the prevalence more than doubled over the same 15 year period; modest gains were made in southern and eastern Africa where rates increased from 35% in 1995 to 47% in 2010. The investigators reviewed additional data of IF practices and noted that improvements were predominantly due to the decrease in the consumption of water, non-milk liquids and formula, as documented in Ghana (Cai et al., 2012). In 2014, the world’s EBF rate was recorded as 38% (UNICEF, 2014) while in comparison an EBF rate of 52% was reported for the eastern and southern African region; but South Africa, a member of this region, recorded a dismal 8% (UNICEF, 2014). Even as the most recent SADHS has shown an improved EBF rate of 31.6%, it also showed that 25.2% of children aged 0-5 months were not breastfed at all, while 11.4%

were receiving breast milk and other milk, and 17.6% were given complementary feeds (Statistics South Africa, 2017). Despite UNICEF (2014) reporting high rates of breastfeeding initiation at 61%, early cessation of breastfeeding and mixed feeding before six months of age are common practices amongst mothers in South Africa (Doherty et al., 2012).

## ***2.2 Factors Associated with Poor IF Practices:***

Recognising barriers and facilitators to optimal infant feeding is vital in developing feasible and sustainable strategies to improve global and national coverage of these critical public health interventions. In recent times, qualitative and quantitative studies conducted globally have revealed several common themes related to suboptimal IF practices.

### **2.2.1 Individual factors**

**Maternal concerns:** Numerous studies from the developed and developing world, suggest that perceptions such as insufficient milk supply (Hauck et al., 2011; Fjeld et al., 2008), previous negative experiences with breastfeeding (Zulliger, Abrams, Meyer, 2013) and views of the “child not being satisfied” (Fjeld et al., 2008) played a role in the early introduction of foods or fluids. A study in rural Bangladesh substantiated these findings as young women anticipated difficulties in feeding and perceived a need for additional education in IF (Hackett et al., 2015). In a Nigerian study, pre-lacteal feeds were significantly associated with reduced EBF practices and were commonplace amongst mothers that delivered by Caesarean section (Onah et al., 2014). Where a mother’s self-confidence was low with regards to BF, there was an increased chance of prelacteal feeds being given (Nguyen et al., 2013). An association between prelacteal feeds and suboptimal practices during infancy was also reported in this Vietnamese study (Nguyen et al., 2013).

**Maternal socio-demographic factors:** Further afield, it was found that mothers of an older age who gave birth were less likely to stop breastfeeding completely, compared to those of a younger age (Malhotra et al., 2008). Similarly, in two studies performed in Nigeria and one in India, it was found that mothers with a higher level of education practised EBF for longer (Malholtra et al., 2008; Ogbo et al., 2015; Onah et al., 2014). Inversely, it was found that a higher socio-economic status was associated with the lessened rate of EBF practice, possibly due to the use of infant formula as a status symbol (Onah et al., 2014). In a methodologically limited study using retrospective data collected from mothers of infants aged 0-35 months, it was found that higher levels of maternal education and socio-economic privilege were shown to contribute to a higher likelihood of stopping breastfeeding (Malhotra et al., 2008). In the study performed by Malhotra et al. (2008), due to the extended period involved, recall bias could have affected the validity of this result. Another study performed in an urban setting which investigated maternal employment and IF practices, found that in the early postpartum period, mothers employed outside the home were less likely to continue to BF compared to those who were not thus employed (Gielen et al., 1991). While this study found that the type of work was not predictive for the discontinuation of breastfeeding, the study's job type variability was low, making it less generalisable to other populations and necessitating the investigation of this in a South African context across different forms of employment. By further investigating the current working conditions of breastfeeding women in the Breede Valley area, one could better understand work-related issues that may influence IF practices.

**HIV status:** From an IF and HIV context, South African HIV-positive mothers stated that fears of stigmatisation, the involvement of other caregivers in infant feeding and HIV transmission via breast milk all influenced their choice to formula feed (Zulliger et al., 2013). In a longitudinal qualitative study, it was reported that approximately one month postpartum many HIV-positive South African mothers experienced pressure from family members to

introduce other liquids and foods (Doherty et al., 2006). This highlights the importance of support in a mother's feeding choice, as in the same study, those who were able to maintain EBF had a partner who was supportive of that choice. Furthermore, disclosure of their HIV-positive status to people at home was associated with the maintenance of EBF (Doherty et al., 2006). In a qualitative study performed in three southern African countries, mothers expressed concerns that exclusive feeding (whether breast or formula), in a context where mixed feeding is the norm, made relatives and other community members suspicious that they were HIV-positive (Buskens et al., 2007).

### **2.2.2 Family, community-related and social factors**

Despite many studies finding that health care workers (HCWs) and their advice are held in high regard, a recurring theme in the literature on studies conducted in African settings found that the advice heeded most by mothers originated from their mothers and elder female relatives (Buskens et al., 2007). In a qualitative study by Fjeld and colleagues, which explored infant and young child feeding practices, attitudes and knowledge (2008), it was found that the IF support and advice provided by HCWs was important to mothers. In addition, the study highlighted the mother's lack of authority and support in the household, as well as social context, and how it influenced their IF practices negatively (Fjeld et al., 2008). Mothers are required to challenge both their traditional systems of belief and influence, and those in authority when making IF decisions; so these multi-layered factors necessitate investigation and some of the issues pertaining to this are considered in this study. The social influences on different IF practices were also found to be important in India, between different religions and social groups or 'castes' (Malhotra et al., 2008).

A study by Goosen et al. (2014) found that HCWs and the infants' grandmothers were reported as sources of IF information. The non-ideal practice of giving water during the first

six months of the baby's life was supported and promoted by grandmothers who were the key role players giving advice and assistance to most mothers once back home.

In a support capacity, fathers played a role in IF practices. The southern African study found that fathers do not play a direct role in IF decisions, but could indirectly influence breastfeeding (Buskens et al., 2007), whether he exercises this economic support through buying supplementary formula leading to suboptimal IF practices, or by providing alternative resources for the family. A Nigerian cross-sectional quantitative study found that babies of educated fathers were more likely to be bottle-fed compared to babies whose fathers had no schooling (Onah et al., 2014).

### **2.2.3 Health service factors**

**Antenatal Care:** Several studies conducted internationally in developing countries found that mothers who underwent antenatal care (ANC) visits and education had a lower likelihood of stopping breastfeeding (Malhotra et al., 2008). Despite Malhotra's study (2008) being retrospective and cross-sectional, thus possibly allowing for recall bias and a limited period of observation, it should be noted for its national representation and high response rates. Other studies found that "the odds for predominant breastfeeding were significantly lower among mothers who had one to three ANC visits and those who had four or more visits compared to mothers who had no ANC visits" (Ogbo et al., 2015:4). In more local studies, South African mothers reported having received IF counselling and occasional pressure from ANC staff about the benefits of breastfeeding (Zulliger et al., 2013). The miscommunication of health promotion messages was highlighted in one South African study where HIV-positive women reported that when attending antiretroviral (ART) clinics, they were counselled to formula feed. However, when they attended the ANC clinics, breastfeeding was promoted. These women explained that they ultimately had to decide how to feed their baby based on their preferences (Zulliger et al., 2013). On the contrary, in a study conducted in the

Breede Valley sub-district, 34% of the mothers in the study population reported that they received no IF information at all during their pregnancy (Goosen et al., 2014). Of the 66% of mothers who reported that they had received IF information, 38% received it from HCWs whereas 25% reported receiving it from their mothers (Goosen et al., 2014). These findings highlight the need for consistent IF and health promotional messages that are well understood and received by women during pregnancy and postpartum. Although Step 3 of the Baby-Friendly Hospital Initiative (WHO & UNICEF, 2009) states that pregnant women should be informed about breastfeeding benefits and management thereof (WHO & UNICEF, 2009), it is clear from the literature available that IF messages are not reaching mothers in the correct form.

**Birth practices:** According to the WHO, early initiation of BF which occurs within the first hour of birth facilitates sustained BF (Sharma et al., 2016). Studies performed in Nigeria and Taiwan showed that the mode of delivery also had a strong influence on the practice of EBF. Delivery by caesarean section was associated with less EBF being practised (Onah et al., 2014; Chien, Tai, 2007). Mothers take longer to recover from anaesthesia before thinking of recommended IF practices (Onah et al., 2014) and increased maternal stress following operative deliveries could delay onset time for lactation (Sakha et al., 2008). In the United States, one study found that optimal BF outcomes were related to uncomplicated, unassisted vaginal births where mothers and infants remained together during the postpartum period; breastfeeding was started as soon as possible after birth and preferably following skin-to-skin contact (Brown, Jordan, 2013). A more recent prospective cohort cluster study conducted in six countries substantiated this and reported that delivery by caesarean section was a consistent barrier to early initiation of breastfeeding, and therefore optimal breastfeeding outcomes (Patel et al., 2015). In a Nigerian study, mothers delivering vaginally had a higher use of pre-lacteal feeds which was inversely associated with the practice of EBF (Onah et al.,

2014). This highlights the need to investigate health service delivery in South African hospitals to aid optimal IF practices.

### ***2.3 Interventions for Improving IF Practices***

In the Maternal and Child Nutrition series, Bhutta et al. (2013) describe the promotion of breastfeeding as one of the evidence-based interventions needed to address undernutrition and micronutrient deficiencies. The authors state that counselling or educational interventions increased EBF by 43% at day one postpartum, by 30% until one month and by 90% by 1-5 months of age. Combined individual and group counselling seemed to be better than individual counselling alone (Bhutta et al., 2013). While the study supported the potential for scaling up these interventions, the trials did not address the issue of the work environment and supportive strategies (Bhutta et al., 2013).

The outcomes of the PROMISE-EBF cluster randomised behaviour change intervention trial performed in Burkina Faso, South Africa and Uganda were promising. Peer counsellors supported mothers during their last trimester, and they were offered at least five postnatal visits. The study showed that the intervention led to less prelacteal feeding in Burkina Faso and Uganda with more children receiving colostrum and starting breastfeeding early, but no clear behaviour change was seen in South Africa (Engebretsen et al., 2014). Intervention studies related to breastfeeding and the workplace were challenging to find, thus indicating that this area of research is understudied.

Infant feeding is an ongoing and dynamic process that changes over time. Breastfeeding and optimal IF practices are underpinned by complex behaviours strongly influenced by numerous factors, including attitudes and experiences of the mother, family, the community and health care services. A multi-faceted approach, through cultural, socio-economic,

individual and health service lenses needs to dictate South Africa's response to inadequate IF practices.



## CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

This chapter will provide an overview of how the ultimate aim and objectives of the study were achieved. The study's design consisted of a 'multi-method' approach using qualitative methodology. Participants were purposively sampled, and data was collected in the form of in-depth interviews, focus group discussions and one key informant interview. Thematic coding analysis took place at every stage of the data collection process and ultimately a schematic thematic map was developed.

### *3.1 Research Setting*

The town of De Doorns is located within the Breede Valley sub-district of the Cape Winelands District, Western Cape. The town was established in 1725 and has a total population of 10 583, as of the most recent national census held in 2011 (Statistics South Africa, 2011). Within De Doorns, the dominant language is Afrikaans, spoken by 64.3% of the population, followed by isiXhosa, at 24.8%, and Sesotho and English, at 3.8% and 2.6% respectively. Statistics South Africa (2011) reports that the average household size is 3.4 people with 39.5% of households headed by females. Regarding living conditions, 51.3% of people live in formal dwellings and piped water is available inside 43.7% of dwellings in De Doorns (Statistics South Africa, 2011). De Doorns has an unemployment rate of 14.1% (Statistics South Africa, 2011) and many of the residents of De Doorns seek informal and temporary seasonal work on the many export grape farms in the area. This temporary seasonal work has led to the exponential growth of the informal settlements Stofland and Sandhills, situated west and east of De Doorns respectively, along the national highway (N1). Although district-specific statistics could not be found, the 2016 SADHS reported that in the Western Cape 88,7% of mothers attend four or more antenatal visits with 94,3% of mothers receiving antenatal care from a skilled health care provider (Statistics South Africa, 2017).

The Western Cape Province has the highest percentages of mothers who give birth in health facilities (98%) and who return to their local health facilities within two days postpartum (90.8%) (Statistics South Africa, 2017).

### ***3.2 Aim and Objectives***

This study aimed to explore the perceptions of mothers and community members regarding their understanding of poor IF practices and the factors that lead to such practices in the first six months of life in the De Doorns area, Western Cape. The study had the following objectives:

- To explore the perceptions of mothers with regards to IF practices during the first six months of life in De Doorns.
- To describe the factors that influence mothers' IF choices during the first six months of life in De Doorns.
- To identify individuals who influence IF choices during the first six months of life.
- To describe the roles of influencers on IF choices of mothers and their perceptions of IF during the first six months of life.
- To describe the challenges of mothers regarding IF during the first six months of life in De Doorns.

### ***3.3 Materials and Methods***

#### **3.3.1 Study design**

This descriptive study made use of qualitative methodology. A 'multi-method' approach was used consisting of various interviewing methods to gain a more complete and holistic understanding of the subject under study (Roller, Lavrakas, 2015). As qualitative research seeks to gain a greater understanding of social phenomena (Malterud, 2001), individual and group interviews were held to achieve clarity regarding the contextual and social norms

surrounding IF practices within De Doorns.

Individual in-depth interviews were performed with twelve women, who were mothers of infants between the ages of 0 to 5.9 months living in De Doorns. Two focus group discussions (FGDs) were performed – one with a group of English-speaking participants and one with Afrikaans-speaking participants. A key informant interview was conducted with one of the CHWs, who participated in both FGDs, and lives and works in the Sandhills, De Doorns community.

### **3.3.2 Sampling methods**

Through purposive sampling, 15 members of the De Doorns community were recruited for the study. Twelve mothers with infants between the ages of 0 to 5.9 months, who had engaged in poor IF practices, underwent in-depth interviews. In this study, poor infant practices were defined as ceasing to exclusively breastfeed infants before the age of 5.9 months. The researcher identified the participants while completing outreaches within the De Doorns community. Three participants originated from Sandhills informal settlement and ten from Stofland informal settlement. Upon the conclusion of the twelfth in-depth interview, data saturation was reached. The Biomedical Science Research Ethics Committee of the University of the Western Cape approved the scientific methodology and ethics of this study (BM/17/1/27). Participants were informed about the objectives, procedures and confidentiality aspects of the study and written consent was obtained from them.

### 3.3.3 Data collection and analysis

In-depth interviews using a semi-structured interview guide were held with the participant mothers after informing them about the purpose of the study using a participant information sheet and receiving their consent to participate. The interview guide included eight questions that sought to understand the participants' background, their IF history and their perceptions and feelings regarding optimal IF and child care. Participants were also asked to describe the key role players in their IF choices. Interviews were conducted in the participants' homes within the De Doorns area and took place between January and June 2017. The interviews were conducted by the researcher in the language of each participant's preference (either English, Afrikaans or isiXhosa) and audio-recorded. A CHW accompanied the researcher for two interviews with participants. All participants chose to undergo their interviews in English or Afrikaans. The interviews were audio-recorded and transcribed verbatim by the researcher. The researcher translated the Afrikaans transcriptions into English and then transcribed them. The interviews were coded manually according to the study's objectives using thematic coding analysis. Regular communication, during the data collection process, between researcher and study supervisor allowed for debriefing to take place and guarded against researcher bias through the discussion of the findings from different perspectives (Robson, 2011). The researcher's supervisor also checked the researcher's coded transcripts for accuracy and further analysis.

This preliminary analysis was used to prepare questions for the FGDs and key informant interview. To ensure rigour and having sensed that some of the participant mothers were withdrawn during the one-on-one interviews, possibly due to her professional role within the community, triangulation of the study methodology was employed. Two community health workers (CHWs) who work within the De Doorns community participated in both FGDs. The presence of the CHWs, as trusted and recognised members of the De Doorns community,

would also enhance open communication and better participation during the FDGs. Two FDGs, one in English and one in Afrikaans, were conducted with mothers grouped according to their language preference. Even though the number of participants was small, participants were grouped according to their language preference to serve as a proxy for their different cultural backgrounds. The English-speaking FDG consisted of six participants, and the Afrikaans-speaking FDG consisted of 4 participants. The FDGs were audio-recorded and transcribed by the researcher for analysis. The researcher translated the Afrikaans transcription into English and then transcribed it. The researcher's supervisor helped to guide and confirm the analysis process, as well as the study's findings.

Following the FDGs, one of the CHWs who had been present during both of the FDGs underwent a key informant (KI) interview. The interview questions followed on and sought to deepen the quality of data collected during the in-depth interviews and FDGs and were related to her personal IF experience and IF-related work based in the De Doorns community. This interview took place at her home in Sandhills.

Following the coding of the FDGs and KI interview, common feelings, concepts and themes that arose were summarised and added to build and elaborate on the preliminary analysis. A 'thematic map' was developed to clarify the data collected and explore the results as they related to further themes. Participants were often not interviewed in their first language or transcriptions were translated into English, therefore during the analysis process, the grammar of the quotations were modified so that they were understandable while the meaning of the sentiments were retained.

### **3.4 Rigour**

As I am passionate about IF and also currently a health professional working in this area, I

found that I had to guard against interpreting findings in a biased manner and at times found it difficult not to allow myself to be frustrated by the suboptimal IF counselling and treatment that participants received from HCWs. Note-taking in a reflexive journal helped me to work through and reflect on these feelings and, indirectly, this made my beliefs clear before the data analysis, which also countered possible bias (Malterud, 2001).

The interviews were conducted with the mothers in their own homes, thus eliminating possible participant bias and building a rich description of the study setting including cultural and social circumstances surrounding poor IF choices made within De Doorns.

Following the interview with some of the mothers, as a form of peer debriefing (Robson, 2011), CHWs were consulted in a private manner, regarding a mother's IF experience and cultural contexts, when the researcher did not fully understand them. They were consulted with to confirm the researcher's interpretation of statements, expressions or mannerisms that the mother displayed. Regular communication during the data collection process between researcher and study supervisor allowed for further debriefing to take place and guard against researcher bias through the discussion of the findings from different perspectives (Robson, 2011).

Through the triangulation of study methods and by increasing the number of sources used during data collection: namely the use of in-depth interviews, focus group discussions and a key informant interview, richer and more layered information related to the research question was provided (Robson, 2011). By broadening the interview methods in the study, more insight into the IF choices was developed, and the study became more holistic and less biased.

## CHAPTER 4: FINDINGS

This chapter seeks to illustrate the findings of the research conducted. The characteristics of the sample are described, illustrated in a table format and followed by the participants' perceptions of infant feeding in the first six months of life. The chapter goes on further to elaborate on the individuals who influence IF choices within the De Doorns community and highlights findings related to intra- and interpersonal as well as socio-economic factors that influence IF choices.

### *4.1 Characteristics of the Sample*

This study took place within two informal settlements of the De Doorns community, Western Cape. Of the 15 female participants who took part in the study, three participants originated from the De Doorns area, while the rest had moved to the area within the past few years with one mother having moved to De Doorns just four months before our interview. The ages of the participants ranged from 19-36 years old. Five of the twelve participants interviewed were first-time mothers, while the other ten had more than one child. Of the participants, nine of the mothers lived with their partners and the fathers' of their infants while five lived with family members. Table 1 on the page that follows contains a summary of the participants' socio-demographic characteristics.

**Table 1:** The socio-demographic characteristics of the study sample (n=15)

	<b>Participant Characteristics</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age Group</b>	<20	2	13.3
	20-29	13	86.7
<b>Ethnicity</b>	Black	11	73.3
	Mixed ancestry/ Coloured	4	26.7
<b>Employed/seeking employment</b>	Yes	8	53.3
	No	7	46.7
<b>Completed Grade 12</b>	Yes	4	36.4
	No	7	63.6
	Unknown	4	-
<b>Who they live with</b>	Partner	9	60
	Alone	1	6.7
	Family	5	33.3

## ***4.2 Participants' Perceptions of Infant Feeding in the First Six Months of Life***

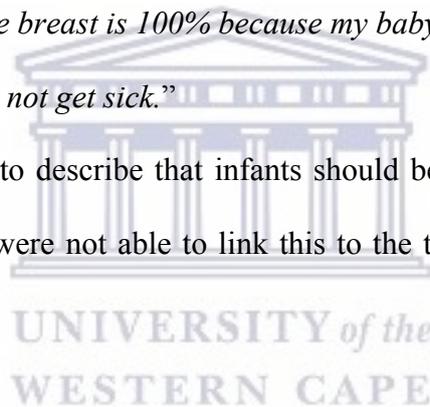
While there was an awareness of the benefits of breastfeeding for infants, participants cited EBF as a practice that is not commonly performed. Mothers were unable to define EBF during the in-depth interviews and the FGDs. However, CHWs were able to define EBF adequately. Many mothers were able to cite the benefits of breastfeeding and breast milk, with one mother describing breastfeeding as natural, rather than artificial. Some cited the following as benefits:

*“They [health care workers] say, the babies, who breastfeed do not get sick easily ... with all those things, like diarrhoea.”*

*“It is safer ... 'cause when you give the baby something else, we [the mothers] are told that it can make the stomach run ...”*

*“I think the thing is, the breast is 100% because my baby did not get sick, really I do not want to lie, she did not get sick.”*

While participants were able to describe that infants should be fed only breast milk for the first six months of life, they were not able to link this to the term ‘exclusive breastfeeding’ when asked to define it.



### **4.2.1 Breastfeeding difficulties experienced by participants**

To further add to the poor perceptions of EBF within the De Doorns community, participants referred to this IF practice negatively during the in-depth interviews and FGDs. During her in-depth interview, it was clear that a 23 year old mother of two had been instructed, instead of counselled or motivated, to exclusively breastfeed as she stated she had been informed at the local clinic that she *“must breastfeed until six months ...”*

In one FGD, the same participant described her breastfeeding experience as challenging due to physiological problems related to her breasts. The common reaction by the rest of the group to the participant’s account showed that they were sympathetic towards the participant

and her inability to EBF and it could suggest that these situations occur commonly. During the KI interview, the KI (a 32 year old mother of two) described her own EBF experience as challenging and a “*struggle*”. To this point, during both FGDs, the maintenance of EBF through the expression of breast milk was unanimously described as “*difficult*” as mothers struggled to express sufficient breast milk to sustain their infants.

#### **4.2.2 Breastfeeding substitutes and perceptions thereof**

During the FGDs when it was confirmed that while EBF did not occur, it was found that partial or any breastfeeding was valued and thought to be healthy. The early provision of infant formula, baby porridges and homemade liquids such as *ngqodi* (a porridge-like mixture of flour, water, salt and sugar) was thought to be an acceptable IF practice and still healthy for the baby.

During the in-depth interviews, mothers viewed infant formula as a solution to their breastfeeding problems, such as low blood glucose levels and low breast milk supply. This was the case with one participant as she described her child being provided with top-up formula milk post-delivery in a tertiary health facility as she “*did not have milk, in [her] breasts*” or when a mother had “*too little milk*” as was the case with another participant.

These experiences often took place while in a health facility, but when questioned about the influence that the provision of infant formula in health facilities has on mothers, a participant (27 year old mother of two) stated that it is a mother’s “*own [infant feeding] decision at the end of the day.*” Interestingly, more than one participant in one of the FGDs confirmed the belief that infants who receive infant formula at health clinics do so due to a mother’s positive HIV status.

### 4.2.3 Suboptimal IF practices and the consequences thereof

Mixed feeding described by participants as: giving other liquids and foodstuffs to the infant before six months of age, and its consequences, were referred to often during the in-depth interviews, FGDs and KI interview. During one of the FGDs, one mother shared with the group how mixed feeding had caused her daughter to be admitted to hospital several times for diarrhoea. She thought that bottle-feeding could have been the problem as she described: *“you leave it [the infant] with the nanny, they do not look after the bottles, they just give the bottle, and give it to the baby ... ”* While participants recognised that supplementing with formula milk is an issue affecting optimal IF practices and could be linked to illnesses like diarrhoea, it appears that mothers were implicating the mode of delivery of the formula milk.

During one FGD, a mother of two described how her five month old child had been admitted to hospital and treated for severe acute malnutrition due to mixed feeding. Her fellow participants reacted with sympathy and shock as she described how her infant was

*“lying there, not doing anything, only the heart was beating ... it [her infant] was not doing anything ... the body was swelling ... because [she] had been mixed feeding [her] baby.”*

Her infant demised during her admission to hospital.

In one FGD, a participant, who is a CHW, described how an overweight infant client of hers breathes: *“like ‘Huh huh’ [breathing through her mouth like a dog], like a small pig!”*

Following this account, the participant started laughing, and the other participants started to chuckle along with her, showing amusement and poor understanding of the consequences of poor IF choices.

During one of the in-depth interviews, it was clear that participant (23 year old with two children) would value receiving more in-depth information regarding IF practices as she said she had been told about EBF by HCWs at the local health facility but also stated: “*Sometimes they [the HCWs in the health facility] have to explain to the person [the mother] to be more confident in doing that [EBF].*” These sentiments were echoed during one FGD as one mother expressed:

*“[The nurses are] not advising us, like ‘Sisi [sister], after you get your baby you must not do that and that.’ They [the HCWs] are only telling us ‘Give your baby breastfeeding only and do not give your baby food until six months.’”*

#### **4.2.4 Maternal emotions related to the failure to breastfeed**

Interestingly, mothers during the in-depth interviews who were unable to breastfeed at all, expressed feelings of guilt, anger, shame and loss. The researcher noted that when asking these mothers, who had not exclusively breastfed or breastfed at all, about giving other fluids and substances to their babies, their tone became softer and they acted in a more shy and reluctant manner. One participant (26 year old and mother of two) expressed that she was “*very disappointed that [her baby] did not want to take the breast because [she] went to the clinic, [went to the nursing] Sister and she tried everything, tried everything.*” While another participant (23 year old mother of two) reported being excited about the process of breastfeeding:

*“... even I wanted my mother’s [milk] to come now, I was interested in breastfeeding my baby ... the problem was, I loved my baby, you see, I was excited too because I was not going anywhere [she was unemployed] ...”*

#### **4.3 Influencers of IF Choices**

During the discussions, it was clear that nuclear and extended families impact IF practices

and mothers' IF choices. The majority of participants, nine of the 15 mothers interviewed, lived with their partners. Five of the 15 participants lived with family members, other than their partners.

#### **4.3.1 Fathers and their role in IF practices during the first six months of life**

Only two of the 15 participants, two related their opinion that their' partners openly supported EBF as an IF choice and, as parents, presented a united front when making an IF choice. Although his IF knowledge may be more advanced than other fathers, due to his partner's role as a CHW, the KI stated that her husband:

*"...was very, very supportive. Really supportive, even now he was so cross with me because I wanted to take her off the breast, she was a year and eight months. He said 'No, no no, at least two years. It will be better!'"*

Participants expressed the presence of the father in their child's life to be vital and that it extended beyond money matters to emotional bonding and support. During one FGD, a mother confirmed this by stating: *"He must support you for the sake of the baby. It is not just about money, just that support ... that emotional support."*

On this point, a fellow FGD participant expressed the need for IF support by stating: *"[Fathers should] encourage it [EBF], they should encourage you. Because if he is encouraging you, then you feel like you are doing the best thing for your baby. But if he is like 'You can decide what you want' then you are not going to feel that this is something that I want to do, or have to do."*

This support was not always provided and participants expressed that fathers have a tendency to be absent. To illustrate their lack of involvement, one of the participants (a 23 year old mother of one) suggested that fathers flee.

Despite financial support from partners being described as critical by participants, it could potentially have adverse effects on EBF. In the instance of partners being breadwinners, mothers suggested that such financial support could be abused and used as a threat or a tool for blackmail. A FGD participant (a 27 year old mother of two) described:

*“It is sometimes [the case] when you are fighting in your house ... your husband, he is having that small [sense of] ‘You are not working, you must onthou ne, jy werk nie [remember that you are not working].”*

Furthermore, a mother described her experience of sharing a home with her aunt and uncle. She related how her uncle would complain when asked to replenish the baby’s supplies, and that he perceived her aunt to be wasteful: *“You [the aunt] want milk today, tomorrow, it is only two weeks, and the [formula] milk is finished!”*

#### **4.3.2 Generational IF advice provided to mothers**

While there did not appear to be one specific family member that provided support and influenced the IF choices of the participants, it was found that biological and non-biological maternal figures were influential in a mother’s IF decision-making, some supportive of EBF and some not. Some of these figures supported breastfeeding by encouraging the participants to continue with EBF and assisted them with breastfeeding techniques. When one participant (a 27 year old with two children) had experienced breastfeeding difficulties, her mother encouraged her to persevere by saying that she must *“not give him [her infant] the bottle but rather force him onto the breast.”* Another participant (26 year old mother of one) described her mother as instrumental in her breastfeeding experience:

*“... the one that helped me take care of the baby ... she taught me a lot, a lot. I did not know how to feed on this breast; she taught me how. I could not hold the baby on this side, and she taught me how to.”*

Another participant (a 27 year old mother of two), also illustrated how her mother had supported her by encouraging her to listen to the local HCW's advice when she stated:

*“She knows I am (HIV-) positive; she told me ‘My baby, you must listen to the nurse and the doctors ... they are saying that you must exclusively breastfeed because they know already that you are HIV-positive ... you must listen to the people.’”*

Apart from encouragement, suboptimal IF generational advice is also passed down to a mother, as the KI stated in her interview. She confirmed that the IF information provided during her CHW training was different to the IF information provided by her mother, as her mother had taught her out-dated teachings that had been passed on to her. During one FGD, this was substantiated as it was shared that:

*“Mothers understand [about EBF], but the problem is their backgrounds, it is how we grow up ... so mothers have decided that is how I grew up so that I must also raise my child like that ... ”*

During one of the FGDs, it was related how the older generation's belief about the reason for an infant's cry during the first three months of life could cause mothers to initiate complementary foods early.

#### **4.3.3 Community and health services factors that affect optimal IF practices**

Within a public health setting, a community can be described as “as a group of people with diverse characteristics, who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings.” (Macqueen et al., 2001:1929).

Unfortunately, within the De Doorns community, participants were not able to define the local health facility as a trusted source of IF information and advice. Even more worrying is the fact that participants admitted that the local health facility staff were distrusted, provided them with confusing IF messages and were not believed to have followed their own IF advice

which they provided to clients, further perpetuating distrust. These issues were brought to light during the FGDs.

During one FGD, a participant (a 23 year old mother of one) stated that at home her aunt would enquire as to why she was only giving breast milk to her infant, and she would reply by saying: *“That is what they say at the clinic, and I think it is the best for my baby.”* Her aunt would respond by disputing that the participant knows enough and that she *“does not know what those people [the health care workers at the clinic] do with their babies when they are at home. Maybe they give them some food.”* This sentiment was further substantiated during the KI interview when she reiterated:

*“They [the mothers in the community] are always taking advice from other people, you see? [They say] ‘Those nurses [at the clinic] do not do that thing [exclusively breastfeed].’”*

This distrust appears to be perpetuated by some issues, namely the fact that participants were not always treated with kindness and compassion, especially when seeking help and advice related to breastfeeding problems, at health facilities. This was found by one mother (a 27 year old mother of two) and came to light during one FGD. She had visited the local clinic and had been honest with the HCWs about starting to give formula milk to her infant due to breastfeeding difficulties. She described how she was confronted by one member of staff: *“He just scolded me a lot and made an example of me [in front of the other people at the clinic]. But I just said to him he does not understand, and I gave him my reasoning (for giving formula milk).”*

Despite the same participant saying that she would not have a problem returning to the health facility and having to deal with that particular HCW, a comment she made during the FGD intimates that there was still a rift. She revealed:

*“I was so relieved [that] I did not have to go to him [the HCW who had scolded her] that next time ... because I had thought to myself, he and I would have just fought*

*again.”*

Participants confirmed that they received confusing, mixed messages about optimal IF practices from HCWs from health facilities. One participant described that one HCW would advise on one thing, related to EBF, while another would relate something different.

During one FGD, participants agreed that HCWs, during visits to their local health facility, ask mothers if they are breastfeeding. Mothers then misinterpret their enquiry to mean partial breastfeeding, instead of EBF and respond in the affirmative. In this case, one mother (a 26 year old mother of two) shared that HCWs tend to praise their partial breastfeeding practices and participants respond by continuing with this suboptimal IF practice. Another participant (a 36 year old mother of two) reported that when this occurs, mothers tend to continue with partial breastfeeding, especially if they deem that the child is well and healthy. Participants felt that the HCWs just hear the term breastfeeding and do no further probing, despite it not being EBF. To further compound the confusion surrounding IF messages, during one of the FGDs one of the participants, who is a CHW, described how mothers are counselled and how the benefits of EBF, such as breast milk “*always being available*” and “*cheaper*”, are highlighted. Information provided tends to lack the holistic, comprehensive and objective IF details needed by mothers, and appears to further perpetuate the ‘instruction’ of EBF rather than ‘counselling’ or support thereof.

The apparent lack of trust between HCWs and community members could be because mothers feel undervalued by HCWs at the local health facility; such as in her in-depth interview, one participant (a 23 year old mother of two) related that she had taken her son to be examined as he had developed sores on his scalp. She shared: “*The [nursing] sister did not even look at my child, she just said ‘No, when it is worse just come back.’ She did not help me.*”

When asked how the community perceives the public health services provided within De Doorns, it became apparent that any involvement related to home visits and the possibility of the initiation of support groups would be seen to be associated with HIV and therefore viewed negatively, despite being valued by mothers. Many mentioned that even the provision of infant formula, as a part of the Nutrition Therapeutic Programme (NTP), is seen as primarily for mothers who are HIV-positive. Furthermore, one of the participants (a 23 year old mother of one) highlighted that mothers of children solely fed formula were perceived to be HIV-positive: *“If the mother gives only formula [from the NTP] she will be judged because when the baby drinks only formula milk, then the mother is [HIV-] positive.”*

#### **4.3.4 Community health workers role in IF practices**

As was uncovered during the KI interview, the participants and greater community view CHWs as extensions of the local health facility. During the research process, the CHWs also expressed frustration at the lack of trust and implementation of optimal IF practices despite them counselling mothers within the community and at health facilities about EBF. One CHW reiterated: *“Most mothers are listening, but they are just not hearing ...”* One participant, also a CHW, substantiated this, as she felt that during home-based education sessions there is usually agreement and understanding. However, mutual understanding seemed to disappear once CHWs leave the homes.

While CHWs admitted that they enjoy their supportive roles and find their door-to-door outreach-work beneficial, it appears they fulfil a policing or enforcement role regarding optimal IF within the community. From anecdotes related during the FGDs and the KI interview, a CHW expressed that the mothers say to her: *“Ooh, I know the baby is not supposed to be eating. Do not tell the clinic!”* Upon asking her if mothers’ IF behaviour changes after their mutual interaction, the KI mentioned that many times mothers’ behaviour

does not change. She felt defeated revealing that the mothers “*give the baby the pap (porridge) anyway ...*”

#### ***4.4 Socio-Economic Factors Affecting the Community’s IF Choices***

A person’s HIV status and the stigma surrounding it was just one social issue that was found to influence a mother’s IF choice negatively. During the FGDs, it was highlighted that judgement and competition between young women is rife within the De Doorns community and negatively affects social issues such as skewed body images, teen pregnancy, financial support from the infant’s father and, indirectly, IF choices.

##### **4.4.1 Body image and the role it plays in IF choices**

Indirectly, the issue of body image appears to influence EBF negatively and is exacerbated by the judgement associated with one’s perceived HIV status.

Regarding IF, it was found that judgements made surrounding body image are conveyed with reference to how well fed and healthy a baby is. The need for children to grow fast, as mentioned, has become a cause for introducing other foods beside breast milk. The desire to have a baby that is or appears to be ‘healthy’ has propelled this need for babies to grow fast. Breast size was reported to be an indicator of a mother’s breast milk supply as the participants related an adolescent mother’s possible inability to provide enough breast milk for her twin infants. They describe the adolescent as skinny and young, thus questioning her ability to breastfeed her twins exclusively.

The desire to have round and chubby children leads to the early initiation of foods. This was found to be the case especially among a group of women, who lived on the same farm, and seemed to compete about who has the chubbiest child. A participant (a 32 year old mother of

two) in the FGD mentioned: *“For all of the mothers [living on the farm], it is a competition ... all of them want to have nice round, beautiful, fat children.”* This was substantiated during another FGD, where it was reported that having a small baby was sometimes perceived as the baby being underfed, thus the yearning for mixed feeding was driven by the desire to accelerate growth. Many of the concerns were brought about by fear of judgement from the community.

#### **4.4.2 Teenage pregnancies and the IF consequences**

Teenage pregnancy was explored during the FGDs, with participants viewing it as an error and having significant adverse effects on EBF. Teenagers were thought to be free-spirited and therefore lacked the ability to prioritise. Participants expressed that for young mothers, breastfeeding seemed like a punishment. It was felt that it inhibits their movements and their ability to socialise with others as they *“still want to go out and party.”* On the other hand, bottle-feeding for this group was seen as a saviour as it allowed them to be on the move. This was confirmed during a FGD as participants explained: *“Young girls get pregnant now and get children and then not even a month or two and then they are on the street ...”* A sense of judgement and competition also influences behaviour regarding teenage pregnancy as during the KI interview the interviewee stated: *“[Teenage pregnancy is] simply because teenagers compete. When I see my friend has a baby I tell myself, ‘I also have to have a baby.’”*

#### **4.4.3 Employment and the working environment’s influence on EBF**

During the in-depth interviews, participants highlighted the strain that social issues, such as substance abuse and gangsterism, place on the community. These issues not only affected the relationships they had with their families, but also at times forced them to work and earn an income to support their families and therefore compromise optimal IF practices. Work and unconducive working environments were raised by the majority of participants, as a barrier to choosing EBF as an IF choice. Those employed mentioned employment as a reason for cessation of EBF. The majority of mothers were seeking work and suggested numerous

reasons for seeking employment. Reasons included the ability to support others financially through education, medical expenses and to supplement others' salaries. During one FGD, a mother (a 26 year old, 2 one child) explained possible reasoning for working:

*“Sometimes you are two in the house; maybe your parents have passed away, you have a little sister who is still studying, then you are living with your sister who depends on you ... you have to work also to help your sister ...”*

As was illustrated in the section related to support from fathers, mothers tend to want their financial independence to avoid emotional blackmail, but also to be able to take care of themselves and their babies as well as potentially compete with other mothers, as one participant started to describe during the FGD:

*“... and I cannot look after my child nicely, you see? Sometimes I want my baby to be like other people that you see, she must be beautiful, and so I work because it [the money earned by her husband] is only enough for one person ...”*

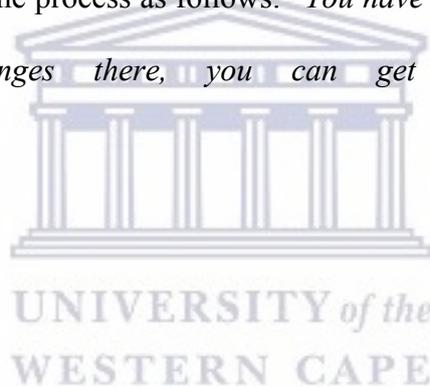
Ironically, while exclusive breastfeeding was described as inexpensive, and highlighted as being constantly available by CHWs, the KI confirmed the need for financial security as a motivation to cease EBF. She related a story of one of her clients who was the sole breadwinner in her household and stated:

*“Yes, she learnt [about EBF], but ... she just wants to give formula milk because she struggles a lot, she cannot use only breastfeeding. She will not stay at home for six months alone; she cannot afford it.”*

Most participants expressed that if mothers were married, then they would want to contribute to the financial security of the household, as one mother (27 years old, two children) stated during the FGD: *“[You want] to help each other with lots of things, now you are married ... you are one thing, now you have to help each other.”*

When participants were asked what their ideal workplace conditions would be it was

emphatically stated by one mother (23 years old, one child), and agreed upon by other participants, that *“every workplace should have a crèche there ... so that you can go to your child.”* During the other FGD, one mother substantiated this by describing an ideal work situation that had functioned well in the past. This was found to be during the time she was employed: *“She [her infant] could go with me to work, like when I worked at the crèche ...”* During the KI interview, it was confirmed that a change in the working environment and the employer’s attitude would need to take place for improved EBF rates to be realised. The loss of employment and deduction of hours if one breastfed were viewed as threats to breastfeeding in the workplace. The KI also emphasised that South Africa’s Unemployment Insurance Fund (UIF) could be used by new mothers but suggested that it needs improvement. She described the process as follows: *“You have to wait for that money. I think if they can make changes there, you can get mummies to breastfeed.”*



## CHAPTER 5: DISCUSSION

In this chapter, the findings are discussed using data collected during the study and relevant literature related to optimal IF choices and highlighted issues. The limitations of the study are presented and discussed.

The adequate provision of nutrients during the first 1 000 days of a child's life is essential to the realisation of their optimal physical and cognitive development, as well as their long-lasting health (WHO, 2014a). While EBF is widely recognised as the optimal way of feeding infants, this practice is not the popular choice for many with only 38% of mothers globally choosing to do so (UNICEF, 2014; WHO, 2017). While South Africa reports an improved rate of EBF between 2003 (Department of Health et al., 2003) and 2016 (Statistics South Africa, 2017), further improvements need to be made to reduce our stagnant rates of stunting, undernutrition and increasing rates of overnutrition (Statistics South Africa, 2017).

This qualitative study aimed to explore the perceptions of mothers and community members regarding their understanding of poor IF practices and the factors that lead to poor IF practices in the first six months of life in a rural community. While participants' perceptions of breastfeeding were positive and they deemed any form of breastfeeding to be suitable for their infants, EBF is limited while mixed feeding is common. The maintenance of EBF, including expressed breast milk (EBM), was believed to be difficult and something mothers are not prepared to do. Mothers grappled with many of the difficulties, noted in previous studies, which lead to suboptimal IF choices. These included low self-confidence related to breastfeeding which led to the use of pre-lacteal feeds (Nguyen et al., 2013) and fears that one's infant was not satisfied with BF alone (Fjeld et al., 2008). Experiences with

breastfeeding in the first hours and days of life are significantly associated with an infant's later feeding, hence, it has been shown that the supplemental feeding of breastfed newborns negatively affects breastfeeding outcomes and overall infant health (Centers for Disease Control and Prevention, 2013). During the study, it appeared that breast milk substitutes were viewed as the solution to various breastfeeding difficulties that occurred while still in maternity obstetric units or hospitals. Breastfeeding is known to be a complex biopsychosocial process requiring the learning of a skill as well as a psychological adjustment (Trickey & Newburn, 2012) and so any assistance that occurs during this crucial postpartum period should take that into account. While a mother's prenatal attitude towards breastfeeding has been found to predict a mother's intention to breastfeed (Wambach, 1997), DiGirolamo et al., (2005) found that the experiences of breastfeeding, especially in the early weeks, are more likely to have a stronger effect than the original intention.

While participants are aware of the benefits of breastfeeding, they expressed the desire to be wholly informed about IF choices and understand the consequences of various IF options rather than be instructed to EBF, as was found during the study process. While mothers expressed a strong desire to breastfeed, stories illustrating the extreme consequences of suboptimal IF practices: undernutrition, obesity and death, elicited reactions of shock and amusement from participants. These reactions illustrated their lack of information and understanding regarding the consequences of poor IF choices. This was also substantiated in studies performed in South Africa and, while they were related to HIV and IF, they confirmed that mothers seemed to be unaware of the dangers and consequences associated with mixed feeding (Sibeko et al., 2009, Chopra et al., 2005). Nabulsi (2011) emphasised the importance of mothers' knowledge about the benefits of breastfeeding as an underlying factor for maternal commitment to breastfeeding and, as stated previously, Bhutta et al. (2013)

report that counselling or educational interventions increased EBF rates and reduced the occurrence of mothers not breastfeeding.

Several studies have shown the impact of a mother's adequate knowledge of breastfeeding on her sense of empowerment regarding IF and subsequent longer duration of BF (Basrowi et al., 2015, Heidari et al., 2017, Susiloretni et al., 2014). In a recent qualitative study performed in Kwazulu-Natal, South Africa, advice given by health workers to mothers experiencing challenges with breastfeeding was found to be one of the determinants of mothers' feeding practices (Jama et al., 2017). An Iranian qualitative study suggested numerous measures that led to women's empowerment regarding BF and continued breastfeeding. These included (1) mother's mastery over breastfeeding techniques, (2) her ability to assess her breastfeeding status using appropriate solutions for increasing her breast milk supply when needed and (3) her perceived comprehensive support from positive HCWs, fathers and family members (Heidari et al., 2017). Trickey and Newburn (2012) suggest that the focus of a mother's IF journey should be directed towards protecting the conditions that make breastfeeding decisions realistic for the parents. Currently, the use of selective health information, such as only highlighting the benefits of breastfeeding, as can be seen in the study, is used to persuade more mothers to initiate and continue breastfeeding. Kent (2002) argues that mothers need to be more involved in the decision-making surrounding their infant's nutritional choices for optimal nutrition to be realised. Through empowerment, mothers would be able to develop their understanding of their situation, on their terms. This would lead to greater facilitation of learning rather than teaching (Kent, 1988), or in the case of IF choices made in De Doorns, instruction. In a study focusing on IF counselling performed in Uganda, HCWs provided information but also emphasised the importance of not making decisions for their clients, which the clients themselves acknowledged as positive. The topics

discussed were often chosen in an interactive process between the clients and counsellors. Extensive training in communication skills appeared to improve teaching and counselling and could be beneficial (Fadnes et al., 2010). Not only do De Doorns mothers feel misinformed, but also undervalued, if they are not adequately counselled, and empowered, regarding the health of their infants. This should be guarded against as it could further perpetuate distrust between HCWs and community members.

While it would make sense to suggest that health care workers, either based at the local health facility or in the community, are easily aligned to provide comprehensive information regarding IF choices, participants did not feel that they are trusted sources of IF information. HCWs based in the local health facility were viewed as not approachable, compassionate or empathetic towards mothers and their IF choices and practices. While the stance of the provincial Department of Health (DoH) on IF is firmly one of protecting, promoting and supporting EBF (Department of Health, 2011), their IF vision will not be realised if mothers turn to other community members for IF advice or support, which was shown during the study process to be not wholly adequate. As highlighted by participants, mixed messaging and the lack of clarity surrounding IF terminology used during a child health visit to the local health facility and the fact that mothers do not fully understand the consequences of bottle feeding, could perpetuate suboptimal IF practices. This needs to be addressed as it has serious implications for what mothers' understand by EBF and what is deemed healthy for an infant. Two studies, one in both Tanzania and Sudan, attempted to alter HCWs' practices and found short seminars to be beneficial. It was necessary to have follow-up or refresher seminars so that their knowledge was maintained (Fadnes et al., 2010).

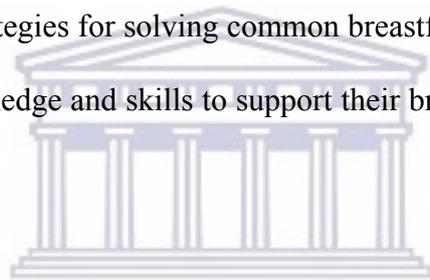
Numerous social, economic, inter- and intrapersonal factors negatively influenced mothers' IF choices. In this study, one of the most common socio-economic factors that affected IF choice was a mother's necessity to work and the poor working conditions within which a breastfeeding mother finds herself. This barrier to optimal IF is not unique to the community of De Doorns. In the Lancet Series on Breastfeeding, Rollins et al. (2016) state that work is a leading reason for not breastfeeding or the early cessation of EBF. The increasing amount of women in the workplace globally demands the consideration of their rights as mothers and employees. Studies based in Indonesia and Taiwan have shown the positive effects that a conducive workplace environment can have on BF. In Taiwan, a study was carried out in a factory setting with working hours (twelve-hour shifts) similar to those found on De Doorns farms. It was shown that when mothers are aware of breastfeeding-friendly measures in the workplace, it could significantly increase continued BF after returning to work (Chen et al., 2006). In Indonesia, Basrowi et al. (2015) found that the presence of a dedicated breastfeeding facility, as was suggested by participants in the form of a 'crèche' or day care centre, increased EBF practice by almost threefold and the knowledge of the breastfeeding support programme increased EBF practice by almost six times. In a US study (Dabritz et al., 2009), further evidence of success was cited of improving EBF rates, by 25%, when mothers had access to lactation rooms and timed breaks to express breast milk.

As was stated in this study and further substantiated in others, for worksite breastfeeding promotion programmes to be effective they must involve not only the employees but the employers and fellow workers alike (Chen et al., 2006). Education and training for health care professionals, the regulation and enforcement of workplace breastfeeding support policies and support from peers who act as breastfeeding role models should be included in these programmes (Johnson et al., 2015). As Rollins et al. (2016) have stated, millions of

working women, of which the majority of whom live in Africa or Asia, have no or inadequate maternity protection. The few data available suggest that maternity leave policies are effective at increasing exclusive breastfeeding (Rollins et al., 2016) and could be worth investigating by not only the provincial but also national Departments of Health to protect, promote and support EBF in communities such as De Doorns. While during the study process the KI mentioned the necessity of improving the accessibility to UIF monies to improve EBF rates, it might be valuable to start by strengthening the accessibility and utilisation of the Child Support Grant (CSG). In a recent report commissioned by the South African Department of Social Development, it was found that the CSG was underutilised as 17.5% of eligible children did not benefit from the grant in 2014 (Department of Social Development et al., 2016). Through the creation of greater awareness, surrounding the processes and documentation involved in applying for the CSG and shifting the registration process for the grant into the antenatal period, better IF choices could be made (WHO, 2013).

During the study, it became apparent that mothers' desires to seek work and for financial independence were influenced by the fathers of participants' infants. Fathers were found to be unsupportive emotionally, and at times financially, and this negatively influenced IF choices in De Doorns. This could lead to suboptimal infant nutritional intake by creating emotional instability and affect a mother's breast milk production, as well as push a mother to search for work, as was highlighted during the FGDs. In the Iranian study on empowerment in breastfeeding as viewed by women, mothers stated that assistance from partners greatly facilitated breastfeeding success (Heidari et al., 2017). There is strong substantiating evidence that fathers can influence the initiation of breastfeeding, contribute to maternal breastfeeding confidence, influence decisions regarding BF duration and weaning, and that without their partner's support, mothers are more likely to breastfeed for a shorter duration (Maycock et

al., 2015). Due to this, the need for fathers to be included during the antenatal and postnatal periods is especially important. During the prenatal period, Trickey and Newburn (2012) found that there is potential through antenatal education to raise awareness amongst women and their partners of the need for practical domestic support, emotional encouragement and of how they can access prompt, skilled support in the early days and weeks. While fathers may understand some of the benefits of breastfeeding, it has been shown that they can hold negative attitudes towards EBF due to feelings of exclusion in the feeding process and a lack of attention from their partner (Maycock et al., 2015). Through their involvement in the breastfeeding decision-making process, fathers can identify and fulfil a role of ensuring that infants receive the benefits of breastfeeding (Rempel & Rempel, 2011). With the acquisition of practical IF advice and strategies for solving common breastfeeding difficulties, fathers are empowered to use their knowledge and skills to support their breastfeeding partner (Maycock et al., 2015).

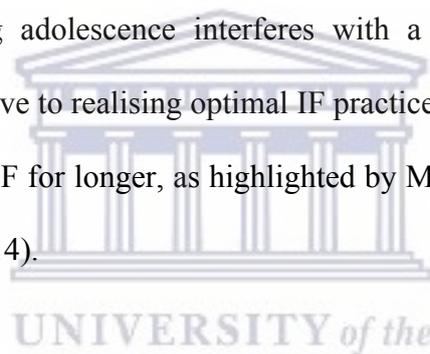


While the study process revealed that one sole source of IF advice could not be identified, generational advice from maternal and non-maternal figures close to mothers was observed. In two studies performed in African countries, positive effects on IF practices were witnessed following the use of a participatory communication and empowerment education approach for grandmothers' nutritional knowledge in Senegal (Aubel, Touré, Diagne, 2004) and the use of father and grandmother peer dialogue groups in western Kenya (Martin et al., 2015). The peer educators reported being motivated by multiple factors, including their increased knowledge of maternal dietary and IF practices, improved communication with their wives or daughters-in-law, increased respect and appreciation from their families, the group members' positive changes in behaviour and increased recognition within their communities. It was found that several organisation-level factors assisted the success that contributed to peer educator motivation, namely, clearly communicated responsibilities, strong and consistent

supportive supervision and opportunities for social support amongst fellow peer educators. A Swedish study suggested one way to strengthen a mother's feeling of security is to provide care and support. This could be elicited through individual, on-going face-to-face support consisting of relationship building and an authentic presence (Palmér et al., 2015) with HCWs, either based in the community or the local health facility. In the PROMISE-EBF study, peer counselling interventions and their effects on EBF rates were found to be successful in Uganda and Burkina Faso: a third of mothers reported EBF in the control clusters at an infant age of twelve weeks, compared to 80% of mothers exclusively breastfeeding at the same age in the intervention clusters. The study also had South African sites, and it was found that despite a small absolute increase, the intervention did have a significant effect on EBF rates (Tylleskär et al., 2011). A global analysis of the work of CHWs confirmed that they provide a critical link, as peers, between communities and their health and social service systems. A review recommended that community-based programmes be inserted into the wider health system and that CHWs be included in health human resource planning to improve CHW programmes (Shrimpton et al., 2016). In the cases of HIV and IF, it has been found in South African settings that the disclosure of one's HIV status, with subsequent support from those disclosed to, can be an enabling factor that helps to support EBF and the continuation thereof amongst HIV-positive mothers (Doherty et al., 2006; Jama et al., 2017). In a recent South African study, it was found that strategies aimed at increasing maternal self-efficacy, instead of suggesting educational strategies, were more effective than those strategies that focus on enhancing knowledge (Jama et al., 2017).

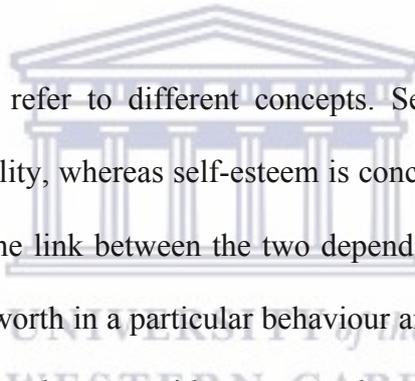
Interestingly, mothers within the De Doorns community appeared to grapple with feelings of competition and judgement influencing deeper social issues such as teenage pregnancy and

HIV related stigma, thus, inadvertently affecting poor IF practices. The recent SADHS found that 27.8% of women aged 19 years had started childbearing (Statistics South Africa, 2017). Pregnancy during adolescence poses potential issues not only for the health of adolescents' infants, but also the mothers themselves, as it has been shown that they have a higher risk of maternal and infant complications and mortality with poorer birth outcomes than compared to pregnancies in older women. Worryingly for future generations, pregnancy in adolescence slows and stunts a girl's further growth (Black et al., 2013). A third of the participants from the study had had their first child during their adolescent years while attending high school. Of these four participants – despite them returning to school following the birth – none had completed their high school career. This observation agrees with Mchunu et al. (2012) who found that pregnancy during adolescence interferes with a young women's educational attainment. This is counteractive to realising optimal IF practices, since mothers with a higher level of education practise EBF for longer, as highlighted by Malholtra et al. (2008), Ogbo et al. (2015) and Onah et al. (2014).



In this study, participants were vocal about their feelings related to pregnancy during adolescence, which was viewed as undesirable. Motivating factors for teenage pregnancy could be peer competition, as well as the use of the infant as an asset to garner commitment from the partner. Macleod (1999) reviewed South African research conducted on teenage pregnancy and the 'causes' thereof and confirmed the issues found in De Doorns. It was found that adolescents who fall pregnant have a poorly defined sense of identity, low self-image and self-confidence, and are plagued by feelings of insecurity and inadequacy. Also, Mchunu et al. (2012) found that 19% of respondents stated that they fell pregnant because they wanted to prove their maturity or identity as women.

Several studies have researched the reasons for young mothers not exclusively breastfeeding and choosing suboptimal IF practices. Weimann, Dubois and Bereman (1998) found that adolescents chose not to breastfeed if they had low financial status, little family support and no breastfeeding role models. Additionally, issues such as modesty when breastfeeding and a poor self-image were found to affect adolescent mothers more than adult mothers (Kennedy, 2000). During a study investigating the duration of breastfeeding in young mothers, a link between self-esteem and self-efficacy was confirmed which suggests that many of the women invest a sense of self-worth in their ability to breastfeed. General self-efficacy, postnatal breastfeeding self-efficacy and self-esteem were found to influence adolescent mothers' breastfeeding duration (Bailey, Clark, Shepard, 2007).



Self-efficacy and self-esteem refer to different concepts. Self-efficacy is concerned with judgements of personal capability, whereas self-esteem is concerned with judgements of self-worth (Bailey et al., 2007). The link between the two depends partly on whether the person emotionally invests their self-worth in a particular behaviour and if it is acquired successfully (Bandura, 1997). This might be the case with a new mother as she may invest her sense of worth in her ability to breastfeed, as well as it may influence how much effort she will use and how long she will persevere in the face of obstacles. Studies indicate that mothers with high self-efficacy are eager to continue breastfeeding and that maternal confidence is a predictor of the breastfeeding decision (Palmér et al., 2015). A critical factor affecting a new mother's sense of security or insecurity in IF is her tendency to look at herself from the outside, imagining others' perceptions of her (Palmér et al., 2015), thus she becomes her own toughest critic in decisions regarding IF. Others' gazes and her own beliefs about what they see create feelings of either security or insecurity which in turn can relate to the success or failure of BF. To feel existentially secure, the mother's interpretation of others' perceptions

of her appears paramount, especially those of the infant's. A well-nourished and satisfied infant provides the mother with the confirmation necessary for feelings of security (Palmér et al., 2015). According to Schwarzer (1992), self-efficacy is not based on unrealistic optimism, but optimistic self-beliefs based on experiences. He argues that individuals with high self-efficacy are self-confident in their view of being able to deal with life's stressors. This indicates that mothers, to feel secure, need to be prepared for the behaviour and demands of infants and interpret their cues constructively. This ties in with the Iranian study that highlighted the mother's need for mastery over breastfeeding techniques and her independent assessment of her infant's nourishment and growth to feel empowered regarding breastfeeding (Heidari et al., 2017). In Nabulsi's study (2011), mothers who stopped BF early were found to be psychologically unprepared for breastfeeding-associated pain, sleep deprivation, exhaustion or other dramatic life changes. This study also identified maternal will and unselfishness as being key factors for successful breastfeeding (Nabulsi, 2011) further substantiating findings from the studies of Jama et al. (2017) and Palmér et al. (2015). While it may be difficult to alter traditionally held views within the De Doorns community, strategies to improve and increase both partners' self-efficacy and self-confidence will be greatly beneficial. Not only will these strategies help mothers to BF successfully and overcome IF difficulties, but will aid fathers in feeling that they can support their partners and contribute to the health of their children. In a broader sense, it could assist women and girls in the De Doorns community to overcome their intrapersonal issues, such as skewed body images and possibly the disclosure of their HIV statuses to loved ones.

While the participants highlighted many issues related to poor IF choices, many opportunities also arose during the research process. Mothers' vocal sense of wanting to be wholly informed should be heeded and from the literature highlighted previously, should be empowered with improved self-efficacy and confidence related to IF, rather than just increase

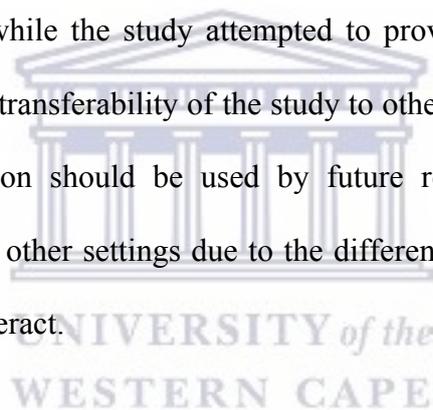
their IF knowledge. Mothers were self-aware and deeply thoughtful regarding their IF situations and able to empathise with other mothers. While it appeared that group-based counselling and the initiation of IF support groups could be beneficial in De Doorns, participants refuted the idea if it was to be initiated by local health care staff. This further supports the widely recognised principle of successful implementation of community-based nutrition programmes through community ownership, participation and involvement (Sanders, 1999). Peer-to-peer support and counselling does occur in South Africa and is implemented by non-profit organisations such as mothers2mothers and Philani Trust in conjunction with the Department of Health to provide community-based HIV and IF support. If these programmes could be scaled up and transferred to more sites nationally, this could benefit EBF rates. Within the community itself, it is positive that CHWs based in the community find their occupation to be fulfilling and enjoyable. Further research should be done to promote their important role in IF counselling and further enhance their abilities to include methods related to self-efficacy and overcome BF difficulties.

### **5.1 Limitations**

Language barriers between researcher and participants could have been limiting in the participant's interpretations of questions. The researcher, while fluent in Afrikaans, is not wholly fluent in Xhosa and therefore despite CHWs accompanying her during some in-depth interviews, their accurate interpretation and translation of statements made in Xhosa may have been misinterpreted. A more skilled qualitative interviewer or researcher may have also elicited more in-depth information from participants at the beginning of the data collection period, as the researcher was new to the experience and still developing her questioning skills. The use of another interviewer was not possible due to time and financial constraints.

Due to time constraints, ethical approval was not sought from the Cape Winelands District Department of Health and so interviews were not able to be conducted with HCWs working at the local health facility. As they are the facilitators of antenatal care and IF education to the De Doorns community, their exclusion from the study was limiting. Without the involvement of representatives from the local health facility, suggestions and recommendations made by the researcher are less likely to be adopted, hindering the change that needs to take place in the De Doorns community. In future research conducted regarding IF, the facilitators of IF education need to be involved to provide a holistic picture of the situation so that more effective change can be affected.

Methodologically speaking, while the study attempted to provide a rich description of the study population and site, the transferability of the study to other contexts and settings cannot always be guaranteed. Caution should be used by future researchers when transferring findings cited in this study to other settings due to the different contexts within which these participants live, work and interact.



## CHAPTER 6: CONCLUSION

In this chapter, concluding remarks related to the study are provided, and recommendations for future research and interventions to influence optimal IF practices in the De Doorns area are made.

This qualitative study aimed to explore the perceptions of mothers and community members regarding how they understood poor IF practices and the factors that led to poor IF practices in the first six months of life in the De Doorns area, Western Cape.

While mothers' perceptions of breastfeeding were positive and they thought of any form of breastfeeding as good for their infants, EBF was not supported or commonly performed. Numerous social, inter- and intrapersonal factors negatively influenced mothers' IF choices, including the necessity to work, subsequent working conditions and relationships with their partners and fellow community members. Strategies such as peer-to-peer counselling and an improved antenatal IF education package could improve a mother's confidence and self-efficacy leading to improved IF practices. However, facilitators of such initiatives have to be carefully selected if they are to succeed.

As has been stated in UNICEF's Conceptual Framework of Malnutrition (UNICEF, 2008) and the Alma Ata (WHO, 1978), in order to realise an optimal public health and nutrition goal such as optimal IF, a multi-sectoral and collaborative effort needs to take place. Breastfeeding is generally thought to be an individual's decision and the sole responsibility of a woman to succeed, ignoring the role of society in its support and protection (Rollins et al., 2016). As stated in the Innocenti Declaration in 1990, the establishment of breastfeeding as

highly-valued within society necessitates “the reinforcement of a ‘breastfeeding culture’” (UNICEF, 2005), which involves not only the mother and child but various role players and sectors to work together in the attainment of this goal.

### **6. 1 Recommendations**

The improvement of EBF and how it is perceived within the De Doorns community will necessitate a change in a multi-sectoral and collaborative manner. The following are the recommendations that have emerged from the study:

- Local HCWs would need to be approached to clarify mixed IF messages that are confusing mothers and perpetuating feelings of distrust thereby improving the perceptions of optimal IF practices. It has been shown that breastfeeding outcomes are improved when health care staff are educated in a manner that provides more regular, consistent training sessions. Health care workers should also be consulted about their preferred format of the trainings to encourage attendance (Centers for Disease Control and Prevention, 2013). The WHO’s Baby Friendly Hospital Initiative is an active and ongoing initiative within the Breede Valley sub-district as the Mother Baby Friendly Initiative (MBFI). Suggestions, within the parameters of the MBFI provincial training protocol, to adapt the consistency and format of the IF education provided through this initiative could be made to HCWs. The sub-district MFBI champion could facilitate smaller group sessions at the health facility to allow HCWs to air their views, debrief and gain clarity regarding particular IF issues which they may have encountered with mothers. The inclusion of CHWs in these IF education and debriefing sessions would allow for collaboration between facility- and community-based services. Practical sessions regarding BF difficulties, motivational interviewing methods and strategies to improve not only mothers’ but also their own self-efficacy regarding BF practices, could be suggested. Ownership and buy-in from HCWs and the local health facility management team would be essential, and so suggestions they make regarding the

timing and format of sessions should be taken into consideration to improve attendance.

- While mothers should not be dissuaded from working to support their families, advocacy surrounding working conditions on farms in the De Doorns area should be encouraged. With the support of the Cape Winelands District Integrated Nutrition Programme (INP) coordinator, the MBFI champion for the Breede Valley sub-district could approach the Hex Valley Table Grape Association (HTA) to engage in consultative dialogue. Topics such as adequate maternity leave and mothers being allowed to take their allotted 30 minute breastfeeding or breast milk expression breaks twice per day, according to South Africa's Basic Conditions of Employment Act (Department of Labour, 2014), should be highlighted during these meetings. Through consistent and clear communication with and the education of the HTA regarding optimal infant feeding practices provided by a MBFI champion, a multi-sector collaboration could be possible where the private and public sector work together to improve infant feeding practices. Suggestions could be sought to improve the mobility of mothers during the working day to allow them to hand express in private or access their infants at established day care centres that already exist on farms.
- To address the inclusion of fathers from the De Doorns community, while communicating with the HTA, the possibility of regular and intimate (regarding attendance) seminars provided by the local health facility's male nursing sister should be explored and piloted. The male HCW from the local health facility could facilitate the provision of seminars that provide information on IF practices and strategies to solve IF difficulties. Gender and cultural norms could also be challenged through open communication and counselling on how fathers could support their partners psychologically, as well as in the household. Through the instigation of these seminar within the workplace, fathers could be encouraged to accompany mothers to the local health facility for their antenatal sessions. This would encourage them to engage with other additional and preventative health care interventions available at the health facility, such as male medical circumcision, HIV

testing and TB screening.

- To enhance the IF education package provided to parents during the antenatal period, further research needs to be conducted to describe and evaluate the current IF education package provided to new parents in health facilities. The beneficiaries and users of the IF education package, alike, should be consulted about their experience of the current package to improve it. Following this formative research and the use of other relevant literature and with the assistance of the national Department of Health, an objective IF education package could be developed for use throughout South Africa.



## REFERENCES

- Aubel, J., Touré, I. & Diagne, M. (2004). Senegalese grandmothers promote improved maternal and child nutrition practices: the guardians of tradition are not averse to change. *Social Science & Medicine* 59(5): 945-959.
- Bailey, J., Clark, M. & Shepherd, R. (2007). Duration of breastfeeding in young women: Psychological influences. *British Journal of Midwifery* 16(3): 172-178.
- Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. New York: Freeman & Co.
- Basrowi, R.W., Sulistomo, A.B., Purwito Adi, N. & van Vandenplas, Y. (2015). Benefits of a Dedicated Breastfeeding Facility and Support in Indonesia. *Pediatric Gastroenterology, Hepatology Nutrition* 18(2): 94-99.
- Bhutta, Z.A., Ahmed, T., Black, R.E., Cousens, S., Dewey, K., Giugliani, E., Haider, B.A., Kirkwood, B., Morris, S.S., Sachdev, H.P.S. & Shekar, M. (2013). Maternal and Child Undernutrition 3: What works? Interventions for maternal and child undernutrition and survival. *The Lancet* 371(9610): 417-440.
- Black, R.E., Allen, L.H., Bhutta, Z.E., Caulfield, L.E., de Onis, M., Ezzati, M., Mathers, C. & Rivera, J. (2008). Maternal and child undernutrition: global and regional exposures and health consequences. *The Lancet* 371(9608): 243-260.

Black, R.E., Victora, C.G., Walker, S.P., Bhutta, Z.A., Christian, P., de Onis, M., Ezzati, M., Grantham-McGregor, S., Katz, J., Martorell, R. & Uauy, R. (2013). Maternal and child undernutrition and overweight in low-income and middle-income countries. *The Lancet* 382 (9890): 427-51.

Brown, A. & Jordan, S. (2013). Impact of birth complications on breastfeeding duration: an internet survey. *Journal of advanced nursing* 69(4): 828-839.

Buskens, I., Jaffe, A. & Mkhathswa, H. (2007). Infant feeding practices: realities and mind sets of mothers in Southern Africa. *AIDS care* 19(9): 1101-1109.

Cai, X., Wardlaw, T. & Brown, D.W. (2012). Global trends in exclusive breastfeeding. *International Breastfeeding Journal* 7(12).

Centers for Disease Control and Prevention. (2013). *Strategies to Prevent Obesity and Other Chronic Diseases: CDC Guide to Strategies to Support Breastfeeding Mothers and Babies*. Atlanta: U.S. Department of Health and Human Services.

Chen, Y. C., Wu, Y. & Chie, W. (2006). Effects of work-related factors on the breastfeeding behavior of working mothers in a Taiwanese semiconductor manufacturer: a cross-sectional survey. *BMC Public Health* 6(160).

Chien, L-Y. & Tai, C-J. (2007). Effect of delivery method and timing of breastfeeding initiation on breastfeeding outcomes in Taiwan. *Birth* 34(2): 123-130.

Chopra, M., Doherty, T., Jackson, D. & Ashworth, A. (2005). Preventing HIV transmission

to children: Quality of counselling of mothers in South Africa. *Acta Paediatrica* 94: 357-363.

Dabritz, H.A., Hinton, B.G. & Babb, J. (2009). Evaluation of lactation support in the workplace or school environment on 6-month breastfeeding outcomes in Yolo County, California. *Journal of Human Lactation* 25: 182-93.

Department of Health, Medical Research Council, OrcMacro. (2007). *South Africa Demographic and Health Survey 2003*. Pretoria: Department of Health.

Department of Health (South Africa). (2011). The Tshwane Declaration of support for breastfeeding in South Africa. *South African Journal of Clinical Nutrition* 24(4): 214.

Department of Health (South Africa). (2012). *Roadmap for Nutrition in South Africa 2012 – 2016*. Pretoria: Department of Health.

Department of Health (Western Cape, South Africa). (2013). *Healthcare 2030*. Cape Town: Western Cape Department of Health.

Department of Labour. (2014) . *Basic Guide to Maternity Leave*. [Online]. Available at <http://www.labour.gov.za/DOL/downloads/legislation/acts/basic-conditions-of-employment/Act%20-%20Basic%20Conditions%20of%20Employment.pdf>.

Department of Social Development, South African Social Security Agency, UNICEF. (2016). *Removing barriers to accessing Child Grants: Progress in reducing exclusion from South Africa's Child Support Grant: Summary*. Pretoria: UNICEF South Africa.

DiGirolamo, A.M., Grummer-Strawn, L.M. & Fein, S. (2001). Maternity Care Practices: Implications for Breastfeeding. *Birth* 28(2): 94-100.

DiGirolamo, A., Thompson, N., Martorell, R., Fein, S. & Grummer-Strauss, L. (2005). Intention or experience?: Predictors of continued breastfeeding. *Health Education and Behaviour* 32(2): 208-226.

Doherty, T., Chopra, M., Nkonki, L., Jackson, D. & Persson, L. A. (2006). A longitudinal qualitative study of infant-feeding decision making and practices among HIV-positive women in South Africa. *The Journal of Nutrition* 136(9): 2421-2426.

Doherty, T., Sanders, D., Jackson, D., Swanevelder, S., Lombard, C., Zembe, W. & Engebretsen, I. M. S. (2012). Early cessation of breastfeeding amongst women in South Africa : an area needing urgent attention to improve child health. *BMC Pediatrics* 12(105).

Engebretsen, I.M.S., Nankabirwa, V., Doherty, T., Diallo, A.H., Nankunda, J. Fadnes, L.T., Ekström, E-C., Ramokolo, V., Meda, N., Sommerfelt, H., Jackson, D., Tylleskär, T. & Tumwine, J.K. (2014). Early infant feeding practices in three African countries: the PROMISE-EBF trial promoting exclusive breastfeeding by peer counsellors. *International Breastfeeding Journal* 9(19).

Fadnes, L.T., Engebretsen, I.M.S., Moland, K.M., Nankunda, J., Tumwine, J.K. & Tylleskär, T. (2010). Infant feeding counselling in Uganda in a changing environment with focus on the general population and HIV-positive mothers: a mixed method approach. *BMC Health Services Research* 10(260).

Fjeld, E., Siziya, S., Katepa-Bwalya, M., Kankasa, C., Moland, K.M. & Tylleskär, 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(26).

Gielen, A.C., Faden, R.R., O'Campo, P., Brown, C.H. & Paige, D.M. (1991). Maternal Employment during Early Post-Partum Period: Effects on Initiation and Continuation of Breastfeeding. *Pediatrics* 87(3): 298-305.

Goosen, C., McLachlan, M. & Schubl, C. (2014). Infant feeding practices during the first 6 months of life in a low-income area of the Western Cape Province. *South African Journal of Child Health* 8(2): 50–54.

Hackett, K.M., Mukta, U.S., Jalal, C.B.J. & Sellen, D.W. (2015). A qualitative study exploring perceived barriers to infant feeding and caregiving among adolescent girls and young women in rural Bangladesh. *BMC Public Health* 15(771).

Hauck, Y. L., Fenwick, J., Dhaliwal, S. S. & Butt, J. (2011). A Western Australian survey of breastfeeding initiation, prevalence and early cessation patterns. *Maternal And Child Health Journal* 15(2): 260-268.

Heidari, Z., Kohan, S. & Keshvari, M. (2017). Empowerment in breastfeeding as viewed by women: A qualitative study. *Journal of Education and Health Promotion* 6(33): 1-7.

Jama, N. A., Wilford, A., Masango, Z., Haskins, L., Coutsooudis, A., Spies, L. & Horwood, C.

(2017). Enablers and barriers to success among mothers planning to exclusively breastfeed for six months: a qualitative prospective cohort study in KwaZulu-Natal, South Africa. *International Breastfeeding Journal* 12(43).

Johnson A.M., Kirk, R. & Muzik, M. (2015). Overcoming workplace barriers: a focus group study exploring African American mothers' needs for workplace breastfeeding support. *Journal of Human Lactation* 31(3): 425-433.

Kennedy, M. (2000). Focal point on breastfeeding: Teens and breastfeeding. *IJCE* 15(2): 20-2.

Kent, G. (1988). Nutrition Education as an Instrument of Empowerment. *Journal of Nutrition Education* 20(4): 193-195.

Kent, G. (2002). A gendered perspective on nutrition rights. *Agenda* 51: 43-50.

Lamberti, L.M., Walker, L.C.F., Noiman, A., Victora, C. & Black, R.E. (2011).

Breastfeeding and the risk for diarrhea morbidity and mortality. *BMC Public Health* 11(3): 1-12.

Macleod, C.I. (1999). The 'Causes' of Teenage Pregnancy: Review of South African Research – Part 2. *South African Journal of Psychology* 29(1): 8-16.

MacQueen, K.M., McLellan, E., Metzger, D.S., Kegeles, S., Strauss, R.P., Scotti, R., Blanchard, L. & Trotter, R.T. (2001). What Is Community?: An Evidence-Based Definition for Participatory Public Health. *American Journal of Public Health* 91(12): 1929-1938.

Malhotra, R., Noheria, A., Amir, O., Ackerson, L.K. & Subramanian, S.V. (2008).

Determinants of termination of breastfeeding within the first 2 years of life in India: evidence from the National Family Health Survey. *Maternal and Child Nutrition* 4(3): 181-193.

Martin, S. L., Muhomah, T., Thuita, F., Bingham, A. & Mukuria, A.G. (2015). What motivates maternal and child nutrition peer educators?: Experiences of fathers and grandmothers in western Kenya. *Social Science and Medicine* 143(9): 45-53.

Malterud, K. (2001). Qualitative Research: Standards, Challenges, and Guidelines. *The Lancet* 358: 483-488.

Maycock, B.R., Scott, J.A., Hauck, Y.L., Burns, S.K., Robinson, S., Giglia, R. & Binns, C.W. (2015). A study to prolong breastfeeding duration: design and rationale of the Parent Infant Feeding Initiative (PIFI) randomised controlled trial. *BMC Pregnancy and Childbirth* 15(1): 159-167.

Mchunu, G., Peltzer, K., Tutshana, B. & Seutlwadi, L. (2012). Adolescent pregnancy and associated factors in South African youth. *African Health Sciences* 12(4): 426-434.

Nabulsi, M. (2011). Why are breastfeeding rates low in Lebanon?: A qualitative study. *BMC Pediatrics* 11(75): 1-6.

Nguyen, P.H., Keithly, S.C., Nguyen, N.T., Nguyen, T.T., Tran, L.M. & Hajeebhoy, N. (2013). Prolactal feeding practices in Vietnam: challenges and associated factors. *BMC Public Health* 13(1): 1-11.

Ogbo, F. A., Agho, K. E. & Page, A. (2015). Determinants of suboptimal breastfeeding practices in Nigeria: evidence from the 2008 demographic and health survey. *BMC Public Health* 15(259).

Onah, S., Osuorah, D.I.C., Ebenebe, J., Ezechukwu, C., Ekwochi, U. & Ndukwu, I. (2014). Infant feeding practices and maternal socio-demographic factors that influence practice of exclusive breastfeeding among mothers in Nnewi South-East Nigeria: a cross-sectional and analytical study. *International Breastfeeding Journal* 9(1): 1-18.

Palmér, L., Carlsson, G., Brunt, D. & Nyström, M. (2015). Existential security is a necessary condition for continued breastfeeding despite severe initial difficulties: a lifeworld hermeneutical study. *International Breastfeeding Journal* 10(1): 1-11.

Patel, A., Bucher, S., Pusdekar, Y., Esamai, F., Krebs, N.F., Goudar, S.S. & Kodkany, B. S. (2015). Rates and determinants of early initiation of breastfeeding and exclusive breast feeding at 42 days postnatal in six low and middle-income countries: A prospective cohort study. *Reproductive Health* 12(2): 1-11.

Rempel, L.A. & Rempel, J.K. (2011). The breastfeeding team: the role of involved fathers in the breastfeeding family. *Journal of Human Lactation* 13(3).

Robson, C. (2011). Flexible Research. *Real World Research*. Melbourne & Chichester: Wiley, 152-160.

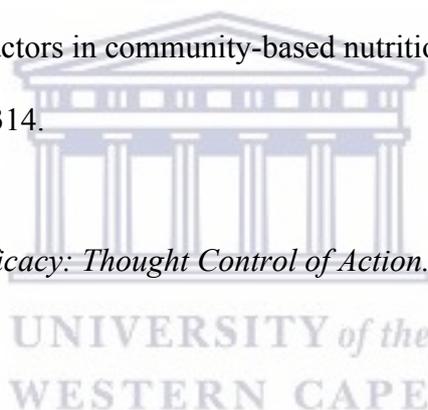
Roller, M.R. & Lavrakas, P.J. (2015). *Applied Qualitative Research Design: A Total Quality Framework Approach*. New York: The Guildford Press.

Rollins N.C, Bhandari, N, Hajeebhoy, N, Horton, S, Lutter, C.K, Martines, J.C, Piwoz, E.G, Richter, L.M. & Victora, C.G. (2016). Why invest, and what it will take to improve breastfeeding practices in less than a generation?. *The Lancet* 387: 491-504.

Sakha, K. & Behbahan, A.G.G. (2008). The onset time of lactation after delivery. *Medical Journal of Islamic Republic of Iran* 19: 135-139.

Sanders, D. (1999). Success factors in community-based nutrition programmes. *Food and Nutrition Bulletin* 20(3): 307-314.

Schwarzer, R. (1992). *Self-Efficacy: Thought Control of Action*. Washington D.C.: Hemisphere Publishing.



Shrimpton, R., Plessis, L.M., Delisle, H., Blaney, S., Atwood, S.J., Sanders, D., Margetts, B. & Hughes, R. (2016). Public health nutrition capacity : Assuring the quality of workforce preparation for scaling up nutrition programmes. *Public Health Nutrition* 19(11): 2090-2100.

Sibeko, L., Coutsoydis, A., Nzuzza, S. & Gray-Donald, K. (2009). Mothers' infant feeding experiences: constraints and supports for optimal feeding in an HIV-impacted urban community in South Africa. *Public Health Nutrition* 12(11): 1983-1990.

Statistics South Africa. (2011). My settlement: De Doorns (Western Cape, South Africa). *Pretoria: Statistics South Africa*. [Online]. Available at

[http://www.statssa.gov.za/?page\\_id=4286&id=126](http://www.statssa.gov.za/?page_id=4286&id=126).

Statistics South Africa. (2017). *South African Demographic Health Study*. [Online]. Available at <http://www.statssa.gov.za/publications/Report%2003-00-09/Report%2003-00-092016.pdf>.

Susiloretni, K.A., Hadi, H., Prabandari, Y.S., Soenarto, Y.S. & Wilopo, S.A. (2014). What works to improve duration of exclusive breastfeeding: lessons from the exclusive breastfeeding promotion program in rural Indonesia. *Maternal Child Health Journal* 19(7):1515-1525.

Trickey, H. & Newburn, M. (2012). Goals, dilemmas and assumptions in infant feeding education and support: Applying theory of constraints thinking tools to develop new priorities for action. *Maternal and Child Nutrition* 10(11): 72-91.

Tylleskär, T., Jackson, D., Meda, N., Engebretsen, I.M., Chopra, M., Diallo, A.H., Doherty, T., Ekstrom, E.C., Fadnes, L.T., Goga, A., Kankasa, C., Klungsoyr, J.I., Lombard, C., Nankabirwa, V., Nankunda, J.K., Van de Perre, P., Sanders, D., Shanmugam, R., Sommerfelt, H., Wamani, H. & Tumwine, J.K. (2011). Exclusive breastfeeding promotion by peer counsellors in sub-Saharan Africa (PROMISE-EBF): a cluster-randomised trial. *The Lancet* 378: 420-427.

UNICEF. (2005). *Infant and Young Child Feeding: Innoceti Declaration 2005*. [Online]. Available at [http://www.unicef-irc.org/publications/pdf/declaration\\_eng\\_p.pdf](http://www.unicef-irc.org/publications/pdf/declaration_eng_p.pdf).

UNICEF. (2008). *UNICEF Conceptual Framework for Malnutrition*. [Online]. Available at

<http://www.unicef.org/nutrition/training/2.5/4.html>.

UNICEF. (2014). *The State of the World's Children 2014 In Numbers: Every Child Counts*. [Online]. Available at <http://www.unicef.org/sowc2014/numbers/documents/english/EN-FINAL%20Table%202.pdf>.

UNICEF. (2015). *Undernutrition*. [Online]. Available at <http://data.unicef.org/nutrition/malnutrition>.

Victora, C.G, Aluísio, J.D Barros, A.J.D, França G.V.A, Horton, S, Krasevec, J, Murch, S, Sankar, M.J, Walker, N. & Rollins, N.C. (2016). Breastfeeding in the 21st century: epidemiology, mechanisms and lifelong effect. *The Lancet* 387: 475-90.

Wambach, K. (1997). Breastfeeding intention and outcome: A test of the Theory of Planned Behaviour. *Research in Nursing and Health* 20(1): 51-59.

Webb, P. (2014). *Nutrition and the Post-2015 Sustainable Development Goals: A Technical Note*. Boston: United Nations Standing Committee on Nutrition. [Online]. Available at [www.unscn.org/files/Publications/...Nutrition/Final\\_Nutrition%20and\\_the\\_SDGs.pdf](http://www.unscn.org/files/Publications/...Nutrition/Final_Nutrition%20and_the_SDGs.pdf).

Weimann, C., Dubois, J. & Bereman, A. (1998). Strategies to promote breastfeeding among adolescent mothers. *Archives of Pediatric and Adolescent Medicine* 152(9): 862-869.

World Health Organization. (1978). Declaration of Alma-Ata. *International Conference on Primary Health Care*. Alma-Ata: World Health Organization.

World Health Organization. (2012). *WHA Global Nutrition Targets 2025: Breastfeeding Policy Brief*. [Online]. Available at [http://www.who.int/nutrition/topics/globaltargets\\_breastfeeding\\_policybrief.pdf](http://www.who.int/nutrition/topics/globaltargets_breastfeeding_policybrief.pdf).

World Health Organization. (2013). *Essential Nutrition Actions: Improving Maternal, Newborn, Infant and Young Child Health and Nutrition*. Geneva: World Health Organization.

World Health Organization. (2014a). *Comprehensive Implementation Plan for Maternal, Infant and Young Children Nutrition*. [Online]. Available at [http://www.who.int/nutrition/publications/CIP\\_document/en](http://www.who.int/nutrition/publications/CIP_document/en).

World Health Organization. (2014b). *Children: reducing mortality*. Geneva: World Health Organization. [Online]. Available at <http://www.who.int/mediacentre/factsheets/fs178/en>.

World Health Organization. (2015). *Child Health*. [Online]. Available at <http://www.afro.who.int/en/clusters-a-programmes/frh/child-and-adolescent-health/programme-components/child-health.html>.

World Health Organization. (2017). *Infant and young child feeding*. [Online]. Available at <http://www.who.int/mediacentre/factsheets/fs342/en>.

World Health Organization & UNICEF. (2009). Section 1: Background and Implementation. *Baby-Friendly Hospital Initiative Revised, Updated and Expanded for Integrated Care*. Geneva: World Health Organization Press, 20.

Zulliger, R., Abrams, E. J. & Myer, L. (2013). Diversity of influences on infant feeding strategies in women living with HIV in Cape Town, South Africa: a mixed methods study. *Tropical Medicine & International Health* 18(12): 1547-1554.



## APPENDICES

### *Appendix 1: Interview Guide for In-Depth Interviews*

Introduce interviewer to participant.

Start by introducing the study and what it entails.

Present Participant Information Sheet and explain the confidentiality procedure to be upheld during the research process. Ask participant to sign form giving consent to go ahead with the interview. Explain that participant may refrain from partaking in the interview and study at any point.

Interviewer to explain that they will be taking notes during the interview and that the interview will be tape-recorded. Emphasise the confidentiality of all documents and materials used within the study.

Begin questioning (below find semi-structured questions):

Background information: age of child and mother, birth history, living circumstances including people residing in household, highest schooling level achieved, employment status, health status

Begin asking the participant questions:

What do you believe makes a baby healthy?

Does a baby need anything additional to milk during the first 6 months of life? Why does she think they do or do not?

What has been your infant feeding (IF) experience?

What are you currently feeding your baby?

If they stopped breastfeeding (BF) exclusively, ask why did they stop giving only breast milk?

How do you feel about stopping BF?

Why do you feel this way?

Who has influenced your IF choices? Who has given you IF advice?

How did the mother feel about this advice?

Who did the mother ask for help or get IF support from if they struggled with IF?

Blank card statements used by interviewer to summarise key points raised during the interview.

Close interview and thank participant for their valuable input.

## *Appendix 2: Focus Group Discussion Guide*

Introduce interviewer to participants.

Start by introducing the study and what it entails.

Present Participant Information Sheet and explain the confidentiality procedure to be upheld during the research process. Ask participants to sign form giving consent to go ahead with the discussion. Explain that participant may refrain from partaking in the discussion and study at any point.

Interviewer to explain that they will be taking notes during the discussion and that it will be tape-recorded. Emphasise the confidentiality of all documents and materials used within the study.

### **Questions:**

Begin discussion by asking participants to describe their IF experience, ask to describe and probe further if they were negative or positive experiences.

Ask to describe their current involvement with mothers, who referred them for study, and their children.

What do they understand by exclusive breastfeeding? How do they feel about giving only breast milk for the first 6 months of a baby's life? Ask why they feel that way, to describe their opinions on topic.

What do they believe makes a baby healthy? Do the babies need anything additional to milk during the first 6 months of life? And ask to explain why.

Close discussion and thank participants for their valuable input.

### *Appendix 3: Key Informant Interview Guide*

Introduce interviewer to key informant (KI) and thank them for opportunity to conduct interview.

Start by introducing the study and what it entails.

Present Participant Information Sheet and explain the confidentiality procedure to be upheld during the research process. Ask key informant to sign form giving consent to go ahead with the interview. Explain that participant may refrain from partaking in the interview and study at any point.

Interviewer to explain that they will be taking notes during the discussion and that it will be tape-recorded. Emphasise the confidentiality of all documents and materials used within the study.

#### **Questions:**

Ask KI about their background:

- Where they grew up
- How long they have resided in the De Doorns community

Ask about career history and subsequent involvement in De Doorns community regarding infant feeding:

- How did you come to learn about optimal infant feeding and exclusive breastfeeding?
- What did you learn about optimal infant feeding and exclusive breastfeeding?
- How did what you learnt about infant feeding influence your career and own infant feeding practices?
- How do you understand your professional role in the community?
- Could you describe any cultural differences regarding infant feeding that you have experienced in De Doorns?

Ask about KI's own birth history and their own infant feeding history

- Can you please describe your infant feeding history of your own children please?

Ask about KI's view on current infant feeding practices in De Doorns:

- In your opinion, what do think about the current infant feeding practices in De Doorns?
- What do you think should be changed to improve the infant feeding practices in De Doorns?

Explore and reflect on any themes that arise in the KI interview as well as the in-depth interviews and focus group discussions.

Close the interview and thank the KI for participating in the the study.

*Appendix 4: Information Sheet (English)*



**UNIVERSITY OF THE WESTERN CAPE**

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2809 Fax: 27 21-959 2872

E-mail: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

**INFORMATION SHEET**

Project Title: “Exploring the barriers to optimal infant feeding practices in the first 6 months of life in the De Doorns community”.

**What is this study about?**

This is a research project being conducted by Kelly Scott at the University of the Western Cape. We are inviting you to participate in this research project because you are a mother of a child that is younger than 6 months old or are a person related to one. The purpose of this research project is to investigate the infant feeding practices of children aged less than 6 months and it is hoped that with your participation I can explore the reasons why mothers living in De Doorns do not exclusively breastfeed their children until 6 months of age.

**What will I be asked to do if I agree to participate?**

You will be asked to be interviewed in your home, or if you are taking part in the focus group discussion, in a centrally located place in De Doorns. A community care worker will be present during interviews and focus group discussions. Both interviews and focus group discussions will be tape-recorded. Questions about your infant feeding experience and opinions will guide the interview/focus group discussions. The interview should take around an hour and the focus group discussion no longer than two hours.

**Would my participation in this study be kept confidential?**

The researchers undertake to protect your identity and the nature of your contribution. To ensure your anonymity, the interviews and focus group discussions will be anonymous and will not contain information that may personally identify you.

To ensure your confidentiality, I shall keep all records of your participation, including a consent form, which I will ask you to sign to indicate that you agree to participate in this study. I will keep these documents and copies of recordings locked away at all times and destroy them once the study is finished.

If we write a report or article about this research project, your identity will be protected.

In accordance with legal requirements and/or professional standards, we will disclose to the appropriate individuals and/or authorities information that comes to our attention concerning child abuse or neglect or potential harm to you or others. In this event, we will inform you that we have to break confidentiality to fulfil our legal responsibility to report to the designated authorities.

### **What are the risks of this research?**

There may be some risks from participating in this research study. All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

### **What are the benefits of this research?**

This research is not designed to help you directly, but the results may help health services and staff to better protect, promote and support breastfeeding in your community for the benefit of children in De Doorns. We hope that, in the future, other people might benefit from this study through improved understanding of the barriers to optimal infant feeding and the people and things that influence a mother's decision to stop exclusively breastfeed.

There are no costs for participating in this study besides the time spent in the interview or the focus group discussion.

### **Do I have to be in this research and may I stop participating at any time?**

Your participation in this study is completely voluntary. This means that you do not have to take part in it if you do not want to. If you do choose to participate, you may choose to stop at any time. You may also choose not to answer particular questions that are asked in the study and please say if you do not want to discuss something during the interview/focus group discussion. If you will be in the focus groups the extent to which your identity will remain confidential is dependent on participants' in the Focus Group maintaining confidentiality.

### **What if I have questions?**

This research is being conducted by *Kelly Scott* at the University of the Western Cape. If you have any questions about the research study itself, please contact Kelly Scott at 084 297 0190 or [kelscott22@gmail.com](mailto:kelscott22@gmail.com).

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

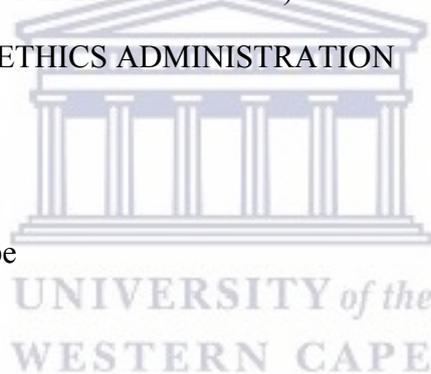
Prof Helen Schneider  
School of Public Health  
Head of Department  
University of the Western Cape  
Private Bag X17  
Bellville 7535  
soph-comm@uwc.ac.za

Prof José Frantz  
Dean of the Faculty of Community and Health Sciences  
University of the Western Cape  
Private Bag X17  
Bellville 7535  
chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Research Ethics Committee. (REFERENCE NUMBER: BM/17/1/27)

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office  
New Arts Building,  
C-Block, Top Floor, Room 28  
University of the Western Cape  
Private Bag X17  
Bellville 7535



*Appendix 5: Informed Consent Form (English)*



**UNIVERSITY OF THE WESTERN CAPE**

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2809 Fax: 27 21-959 2872

E-mail: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

**INFORMED CONSENT FORM**

Title of Research Project: *Exploring the barriers to optimal infant feeding in the first 6 months of life in the De Doorns community*

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name.....

Participant's signature.....

Date.....

**BIOMEDICAL RESEARCH ETHICS ADMINISTRATION**

Research Office  
New Arts Building,  
C-Block, Top Floor, Room 28  
University of the Western Cape  
Private Bag X17  
Bellville 7535

*Appendix 6: Focus Group Confidentiality Binding Form (English)*



**UNIVERSITY OF THE WESTERN CAPE**

Private Bag X 17, Bellville 7535, South Africa  
Tel: +27 21-959 2809 Fax: 27 21-959 2872  
E-mail: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

**FOCUS GROUP CONFIDENTIALITY BINDING FORM**

Title of Research Project:*Exploring the barriers to optimal infant feeding in the first 6 months of life in the De Doorns community.*

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone by the researchers. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits. I understand that confidentiality is dependent on participants' in the Focus Group maintaining confidentiality.

I hereby agree to uphold the confidentiality of the discussions in the focus group by not disclosing the identity of other participants or any aspects of their contributions to members outside of the group.

Participant's name.....

Participant's signature.....

Date.....

**BIOMEDICAL RESEARCH ETHICS ADMINISTRATION**

Research Office  
New Arts Building,  
C-Block, Top Floor, Room 28  
University of the Western Cape  
Private Bag X17  
Bellville 7535



## UNIVERSITEIT VAN DIE WESKAAP

Privaatsak X 17, Bellville 7535, Suid Afrika  
Tel: +27 21-959 2809 Faks: 27 21-959 2872  
E-pos: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

### INLIGTINGSVORM

Navorsingsprojek Titel: *Die hindernisse na optimale babavoeding praktyke in die eerste 6 maande van 'n kind se lewe in die De Doorns gemeenskap te verken.*

#### **Waaroor gaan die studie?**

Hierdie navorsingsprojek sal Kelly Scott deur Universiteit Weskaap uitvoer. Ons nooi u om deel te neem in die navorsingsprojek omdat u 'n moeder van 'n kind jonger as 6 maande of u is 'n persoon wat u ken. Die doel van die studie is om die babavoeding praktyke van kinders onder die ouderdom van 6 maande te ondersoek en ek hoop met u deelname sal ek die redes kan ondersoek waarom moeders in De Doorns nie hulle kinders uitsluitlik borsvoed vir 6 maande nie.

#### **As ek deelneem, wat moet ek doen?**

Ons sal 'n onderhoud hou in u eie huis, of as u deel is van die fokusgroep besprekings, sal dit in 'n sentrale perseel in De Doorns gehou word. 'n Gemeenskapsgesondheidswerker sal saam met die navorser die onderhoud uitvoer. Onderhoude en fokusgroep besprekings sal per bandopname opgeneem word. Die onderhoud en fokusgroep besprekings sal gelei word deur vroeë oor u babavoedingservaring en opinie. Die onderhoude sal omtrent 'n uur neem en die fokusgroep besprekings nie langer as twee ure nie.

#### **Sal my vertroulikheid in die studie gehou word?**

Die navorsers onderneem om u identiteit en u bydrae tot die studie beskerm. Om u anoniem te verseker, die onderhoude en fokusgroep besprekings sal anoniem wees en sal nie enige inligting bevat wat kan u identifiseer.

Om u vertroulikheid te verseker, sal ek al die besonderhede van u deelname, insluitende u toestemmingvorm en enige van die bandopnames privaat en toegesluit hou en dit vernietig as die studie klaar is.

As ons 'n verslag of artikel skryf oor hierdie navorsingsprojek, sal u identiteit beskermde wees.

In ooreenstemming met wetlike vereistes en professionele standaarde, ons sal enige kindermishandeling, verwaarlosing of potensiale skade, aan u self of ander mense, openbaar na die toepaslike individue of owerhede. In hierdie geval, ons sal u inlig dat ons moet vertroulikheid breek om hierdie wetlike verantwoordlikhede te voltooi.

### **Wat is die risikos van hierdie navorsing?**

Daar mag risikos van hierdie navorsing wees. Alle menslike interaksies kan risikos voer en kan lei tot ongemaklikheid, sielkundig of anders, deur die proses van die navorsing. Ons sal probeer om hierdie risikos te verminder en vinnig op te tree as u enige van hierdie gevoelens ervaar. Waar nodig, sal ons die toepaslike verwysings maak om verder hulp te kry by die geskikte persone.

### **Wat is die voordele van die navorsing?**

Hierdie navorsing is nie ontwerp om u direk te help nie, maar die resultate kan tog die gesondheidsdienste en personeel help om borsvoeding beter te beskerm, te bevorder en te ondersteun in u gemeenskap. Ons hoop, dat in die toekoms, ander mense deur hierdie navorsing bevoordeel gaan word deur die verbetering in begrip van die hindernisse tot optimale babavoedingspraktyke.

Daar is geen koste om deel te neem in hierdie studie nie behalwe die tyd wat u spandeer saam met ons vir die onderhoud offokusgroep besprekings.

### **Moet ek deelneem in hierdie navorsing en mag ek ophou op enige tyd deur die proses?**

U deelname is heeltemaal vrywillig. Dit beteken u hoef nie deel te neem as u nie wil nie. As u besluit om deel te neem, mag u kies om enige tyd gedurende die studie te stop. U mag kies om vrae deur die studie nie te beantwoord nie en asseblief sê as u iets wil beprek gedurende die onderhoud of fokusgroep besprekings. As u in die fokusgroep besprekings is sal u vertroulikheid afhang van die ander deelnemers se vertroulikheid.

### **Wat as ek vrae het?**

Hierdie navorsingsprojek sal Kelly Scott deur Universiteit Weskaap uitvoer. As u enige vrae het, kontak gerus by 084 297 0190 of [kelscott22@gmail.com](mailto:kelscott22@gmail.com).

As u enige vrae het met betrekking tot die studie of u regte as 'n deelnemer, of u wil probleme rapporteur, kontak gerus:

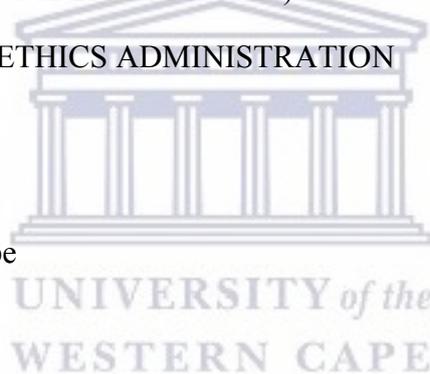
Prof Helen Schneider  
School of Public Health  
Head of Department  
University of the Western Cape  
Private Bag X17  
Bellville 7535  
soph-comm@uwc.ac.za

Prof José Frantz  
Dean of the Faculty of Community and Health Sciences  
University of the Western Cape  
Private Bag X17  
Bellville 7535  
chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Research Ethics Committee. (REFERENCE NUMBER: BM/17/1/27)

BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office  
New Arts Building,  
C-Block, Top Floor, Room 28  
University of the Western Cape  
Private Bag X17  
Bellville 7535



*Appendix 8: Informed Consent Form (Afrikaans)*



**UNIVERSITEIT VAN DIE WESKAAP**

Privaatsak X 17, Bellville 7535, Suid Afrika  
Tel: +27 21-959 2809 Faks: 27 21-959 2872  
E-pos: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

**INGELIGTE TOESTEMMINGVORM**

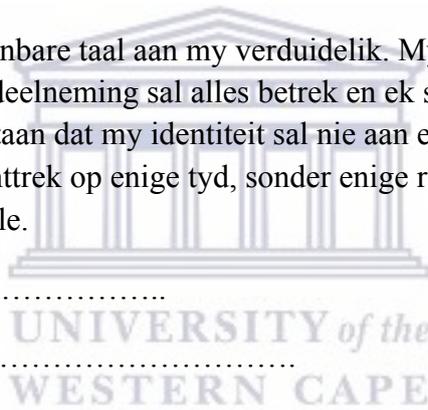
Navorsingprojek Titel: *Die ondersoek van hindernisse tot optimale babavoedingspraktyke in die eerste 6 maande van lewe in die De Doorns gemeenskap.*

Hierdie studie was in 'n verstanbare taal aan my verduidelik. My vrae oor die studie was beantwoord. Ek verstaan wat deelneming sal alles betrek en ek stem om deel te neem van my eie keuse en vrye wil. Ek verstaan dat my identiteit sal nie aan enige iemand aangegee word nie. Ek verstaan dat ek mag onttrek op enige tyd, sonder enige rede of vrees van negatiewe gevolge, of verlies van voordele.

Deelnemer se naam.....

Deelnemer se tekening.....

Datum.....



**BIOMEDICAL RESEARCH ETHICS ADMINISTRATION**

Research Office  
New Arts Building,  
C-Block, Top Floor, Room 28  
University of the Western Cape  
Private Bag X17  
Bellville 7535

*Appendix 9: Focus Group Confidentiality Binding Form (Afrikaans)*



**UNIVERSITEIT VAN DIE WESKAAP**

Privaatsak X 17, Bellville 7535, Suid Afrika  
Tel: +27 21-959 2809 Faks: 27 21-959 2872  
E-pos: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

**FOKUSGROEP BESPREEKINGS VERTROULIKHEID BINDEDEVORM**

Navorsingprojek Titel: *Die ondersoek van hindernisse tot optimale voedingspraktyke in 'n baba se eerste 6 maande van lewe in die De Doorns gemeenskap.*

Iemand het vir my die studie beskryf in 'n taal wat ek verstaan. My vrae oor die studie was deur die navorser beantwoord. Ek verstaan wat my deelname gaan behels en sal deelneem uit eie keuse en vrye wil. Ek verstaan dat my identiteit sal nie aan enige iemand gedurende die navorsing bekend gemaak word nie. Ek verstaan dat ek mag op enige tyd gedurende die studie onttrek sonder om 'n rede te gee en sonder die vrees van nadelige aksie. Ek verstaan dat vertroulikheid van wat bespreek is gedurende die fokusgroep besprekings is afhanklik van die ander deelnemers se vertroulikheid.

Ek stem saam om die vertroulikheid van die fokusgroep besprekings te handhaaf. Ek stem saam om die vertroulikheid van enige van die besprekings in die fokusgroep te handhaaf deur niks van die identiteite van die ander deelnemers te openbaar nie of enige aspekte van die besprekings te deel met enige iemand anders buite die fokusgroep besprekings nie.

Deelnemers se naam.....

Deelnemer se handtekening.....

Datum.....

**BIOMEDICAL RESEARCH ETHICS ADMINISTRATION**

Research Office  
New Arts Building,  
C-Block, Top Floor, Room 28  
University of the Western Cape  
Private Bag X17  
Bellville 7535

## Appendix 10: Information Sheet (isiXhosa)



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2809 Fax: 27 21-959 2872

E-mail: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)

### IPHEPHA LENKCAZELO KUMTHATHI-NXAXHEBA (PARTICIPANT INFORMATION SHEET)

October 2016

Mthathi-nxaxheba obekekileyo,

Enkosi ngokuzinika ixesha lokuba ubeyinxalenye yoluphando. Mna ndingu Kelly Scott, ndigqibezela izifundo zam zeMasters kwicandelo leMpilo Yoluntu kwidyunivesiti yeNtshona Koloni.

Kuphando lwam ndizama “Ukuphonononga imiqobo ethi ithintele ukutyiswa kweentsana ngendlela efanelekileyo kwiinyanga ezi-6 zokuqala ezelwe kwidolophana yase De Doorns”. Oku kulandelayo yingcaciso ngoluphando nokuzibandakanya okunokwenzeka. Ukuba unemibuzo okanye unento ongayiqondiyo nceda undibuze. Iinkcukacha zam nezomphathi wam zezo zibhalwe ekupheleni kwale ncwadi.

Kolu phando sizama ukujonga indlela yokondla abantwana abanobudala obungaphantsi kweenyanga ezintandathu, saye sithemba ukuba ngenxaxheba oyithathayo siya kukwazi ukuphonononga izzathu ezenza oomama abahlala eDe Doorns bangafuni ukuncancisa ibele kuphela abantwana babo de iinyanga zibe ntandathu ubudala. Ndinqwenela ukwazi ukuba ingaba kukho mntu uthile othi abenefuthe ukuyekeni koomama ukuncancisa ibele lodwa abantwaneni. Ndinqwenela nokuthetha noomama ngolwazi nokuqonda kwabo ngokuncancisa ibele lodwa. Siyathemba olu phando luyakunceda oonompilo abasebenza eDe Doorns ukunceda ngcono oomama noluntu ukunika inkxaso, ukuphuhlisa inkqubela nokhuseleko ekuncanciseni eluntwini luphela.

Olu phando luquka udliwano-ndlebe nabazali beentsana ezingaphantsi kweenyanga ezi-6 ubudala, beyakuhanjelwa ngonompilo kumakhaya abo, baze abo bangancancisi bele lodwa bazimanye namaqela engcebiso bekunye nabo bantu babacebisayo ukuthabatha isigqibo ngokundla usana. Udliwano-ndlebe kunye negxoxo yamaqela iyakushicilelwa. Imibuzo emalunga nokutyisa iintsana yiyo eyakukhokela udliwano-ndlebe okanye ingxoxo yamaqela. Iingxoxo zamaqela ziyakhuhlalelwa apho wonke umntu anokufikelela apha eDe Doorns.

Udliwano-ndlebe luyakuthatha nje iyure ibe nye, ize indibano yamaqela ithathe nje iiyure ezi-2 kuphela.

### **Imfihlelo, ukuzibandakanya ngokukhululekileyo nokurhoxa**

Igama lakho nezinto esithe saxoxa ngazo ziyakugcinwa ziyimfihlo de luphele uphando. Ndiyakuzigcina zonke iinkcukacha zakho kunye necwecwe lemvume kwaye uyakucelwa utyikitye uzichaza ukuba uyavuma ukuthatha inxaxheba kolu phando. Ziyakugcinwa emfihlakalweni zonke iinkcukacha zakho ze zitshatyalaliswe ekupheleni kolu phando. Ukuthatha kwakho inxaxheba akunantlawulo kwaye usenokurhoxa nanini na ufuna. Unako ukungayiphenduli eminye imibuzo ebuzwayo kwaye nceda uxele xa ungafuni kuthetha/kuxoxa kudliwano-ndlebe okanye kwiqela lengcebiso. Kungumnqweno wam ukuba konke okuxoxwa kumaqela engcebiso kube yimfihlo ephelela kumalungu eqela elo, kodwa khumbula ukuba konke oko kuxhomekeke kubantu abakweliqela.

### **Inzuzo nenkcitho**

Olu phando alwenzelwanga ukuncedana nawe ncakasana, kodwa iziphumo zalo zinokunceda iziko lezempilo noonompilo ekukhuseleni ngcono, ekuphuhliseni inkqubela nenkxaso ekuncanceneni eluntwini ukuncedana nabantwana eDe Doorns. Siyathemba ukuba abantu bayakuzuzisa lukhulu kolu phando ngokufumana ulwazi oluphuhlileyo ngemiqathango yokutyisa iintsana. Akukho nkcitho ekuthabatheni inxaxheba kolu phando ngaphandle kokuchitha ixesha kudliwano-ndlebe kunye nokuba kumaqela engcebiso.

### **Ulwazi ngesivumelwano**

Icwecwe lakho lesivumelwano sokuthabatha inxaxheba, sifuneka kwaphambi kokuba kwenziwe udliwano-ndlebe nawe. Icwecwe lesivumelwano lidityaniswe nomqulu wengcaciso ukwenzela ukuba ulifunde, ukuze uthathe isigqibo sokuba uyanqwena na okanye awufuni.

### **Imibuzo**

Ukuba uneminye imibuzo okanye ufuna ukwazi nangantoni na, nceda uqhakamshelane nam okanye umphathi wam ongu-Lungiswa Tsolekile.

Kelly Scott

Student Number: 3813998

Cellphone number: 084 297 0190

Email address: kelscott22@gmail.com

Telephone at work: (023) 348 4894

Prof Helen Schneider  
Head of Department (School of Public Health)  
University of the Western Cape  
Private Bag X17  
Bellville 7535  
hschneider@uwc.ac.za

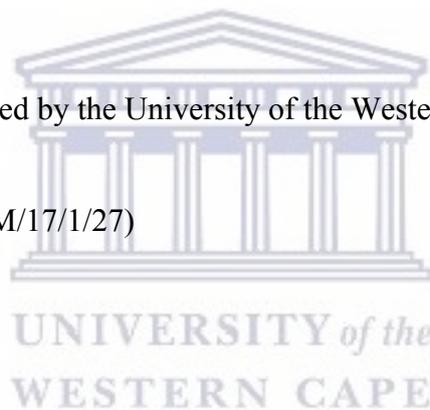
Prof José Frantz  
Dean of the Faculty of Community and Health Sciences  
University of the Western Cape  
Private Bag X17  
Bellville 7535  
chs-deansoffice@uwc.ac.za

#### BIOMEDICAL RESEARCH ETHICS ADMINISTRATION

Research Office  
New Arts Building,  
C-Block, Top Floor, Room 28

This research has been approved by the University of the Western Cape's Senate Research Committee.

(REFERENCE NUMBER: BM/17/1/27)



*Appendix 11: Informed Consent Form (isiXhosa)*



**UNIVERSITY OF THE WESTERN CAPE**

**Private Bag X 17, Bellville 7535, South Africa**

**Tel: +27 21-959 2809 Fax: 27 21-959 2872**

**E-mail: [soph-comm@uwc.ac.za](mailto:soph-comm@uwc.ac.za)**

**ICWECWE NGOLWAZI LWESIVUMELWANO  
(INFORMED CONSENT FORM)**

Isihloko senkqubo yophando: *Ukuphonononga imiqobo ethi ithintele ukutyiswa kweentsana ngendlela efanelekileyo kwiinyanga ezi-6 zokuqala ezelwe kwidolophana yase De Doorns*

Njengokuba sekukhankanyiwe kumqulu wengcaciso ukuba ukuthatha kwakho inxaxheba yinto oyenza ngokuzithandela kwaye awusayi kunyanzelwa kolu phando. Ukungavumi kwakho ukuthatha inxaxheba, awusayi kohlwaywa okanye uphulukane noncedo kwaye wamkelekile ukuba urhoxe nanini na ufuna.

Usenokukhetha ukuba ungayipenduli nayiphi na imibuzo ebuzwayo kolu phando. Ukuba kukho into ekwenza ungakhululeki ukuxoxa nceda uxele.

Ingcaciso noshicilelo oluthe lwaqokelelwa ngethuba lophando luyakuba yimfihlo, kwaye ziyakutshatyalaliswa ekugqityweni kophando.

Xa uvuma ukuthatha inxaxheba, nceda ungenise iphepha lakho lolwazi ngesivumelwano kwaphambi kokuba ndenze udliwano-ndlebe kunye nawe.

Ndifundile ingcaciso ngolu phando kwiphepha lenkcazelo okanye ndiyifundelwe.  
Ndilifumene nethuba lokubuzo imibuzo kwaye ndazifumana neempendulo ndakholiseka.

Ndiyavuma ukuthatha inxaxheba ngokuthanda kwam, kwaye ndiyaqonda ukuba ndinelungelo lokuluyeka udliwano-ndlebe nanini na ndifuna. Ndiyaqonda ukuba ndisenokukhetha ukungayiphenduli eminye imibuzo ebuzwayo kolu phando.

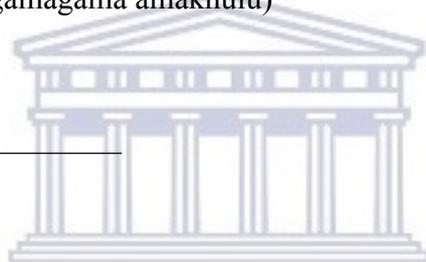
\_\_\_\_\_ Ndiyavuma kwenziwe ushicilelo ngethuba lokuthatha kwam inxaxheba kolu phando.

\_\_\_\_\_ Andikuvumeli ukushicilelwa ngethuba lokuthatha inxaxheba kwam kolu phando.

\_\_\_\_\_  
Ukutyikitya kwam igama lam kuchaza ukuthi ndinomnqweno wokuthatha inxaxheba kolu phando.

\_\_\_\_\_  
Igama lomthathi-nxaxheba (ngamagama amakhulu)

\_\_\_\_\_  
Utyikityo lomthathi-nxaxheba



\_\_\_\_\_  
Umhla wotyikityo

\_\_\_\_\_  
Igama lomphandi ngolwazi lwesivumelwano (ngamagama amakhulu)

\_\_\_\_\_  
Utyikityo lomphandi ngolwazi lwesivumelwano

\_\_\_\_\_  
Umhla

\_\_\_\_\_  
Igama lonompilo okhokelayo (ngamagama amakhulu)

\_\_\_\_\_  
Utyikityo lonompilo okhokelayo



UNIVERSITY *of the*  
WESTERN CAPE