MOTHERS' PERCEPTIONS OF FACTORS CONTRIBUTING TO EXCLUSIVE BREASTFEEDING FOR THE FIRST SIX MONTHS AT MUGODENI GRACE HEALTH CENTRE IN LIMPOPO PROVINCE

BY

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[redacted]

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DEDICATION

This Mini-Dissertation is dedicated to my late father Eric Mahayi, how I so wished you could have lived this far my dear father, but God knows, my mother Asnath Mahayi, my late sister-in-law Rose Mateta, my husband Felix Maponya, my three children Kgaogelo, Molebogeng and Vusi Maponya for their undying support and encouragement throughout my studies. Without them I would not have reached this far. I thank you.

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- My dear participants for the courage to allow me to interview you and bringing out all the information to make this study a success, thank you very much.
- Prof SJ Kubayi, thank you very much for editing my work.

DECLARATION

I declare that **MOTHERS' PERECEPTIONS OF FACTORS CONTRIBUTING TO EXCLUSIVE BREASTFEEDING FOR THE FIRST SIX MONTHS AT MUGODENI GRACE HEALTH CENTRE IN MOPANI DISRICT, LIMPOPO PROVINCE** is my own work. All the sources that I have cited in this work have been well acknowledged and referenced appropriately and is not a duplicate of someone's work. This research was never done previously at this facility.

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NYABANA MARTHA MAPONYA DATE

DEFINITION OF CONCEPTS

Contributing factors

Contributing factors means playing a part in bringing about something (Oxford English Pocket Dictionary, 2015). In this study contributing factors are influences that affect breastfeeding mothers at Mugodeni Grace Community Health Centre to succeed or fail to exclusively breastfeed for six months**.**

Exclusive breastfeeding

Exclusive breastfeeding refers to feeding the baby with only milk from the mothers' breast either directly or expressed, with no other liquids, water, juice or solids with the exception of oral rehydration, drops and syrups, consisting of vitamins, mineral supplements or prescribed medicines, during the first six months of life (Mekuria & Edris, 2015). In this study exclusive breastfeeding is when an infant less than of six months is fed on breast milk and not including other things, be it food or water or other liquids with the exception of vitamins if needed since birth, by mothers at Mugodeni Grace Community Health Centre.

Mother

A mother is defined as a female parent (Oxford English Pocket Dictionary, 2015). In this study mother means a woman who gave birth to a baby and is the one who brought the baby for child health at Mugodeni Grace Health Centre.

Perception

Perception, according the Oxford English Pocket Dictionary (2015), is a way in which something is regarded, understood or interpreted. In this study, perception means the way mothers at Mugodeni Grace Community Health Centre think and view factors that contribute to success and failure to exclusively breastfeed for six months.

ABREVIATIONS

DHIS: District Health Information System

EBF: Exclusive breastfeeding

HIV: Human Immunodeficiency Virus

UNICEF: United Nations International Children's Emergency Fund

WBOT: Ward Based Outreach Team

WHO: World Health Organization

ABSTRACT

BACKGROUND: Exclusive breastfeeding in South Africa to date has not seen progress. The data that is available show that most mothers do initiate breastfeeding immediately after delivery of the baby, but its continuation to the first six months is still a challenge. Although its benefits to the mother and baby are mostly known, it is not translated into positive outcomes as recommended by WHO i.e. to feed the baby with breast milk only, no water, no solids except for medicines that have been prescribed for the first six months.

OBJECTIVES: To explore and describe perceptions of breastfeeding mothers regarding factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health centre.

METHODS: A qualitative, exploratory and descriptive phenomenological method was used in the study, which was conducted at Mugodeni Grace Health Centre. The convenience sampling strategy was used to recruit participants and the sample size was determined by data saturation. Face-to-face in-depth semi-structured interviews were conducted with nine participants in Xitsonga, using an interview guide and were audio taped with the consent of the participants and transcribed verbatim. Data was analysed using Tesch open coding approach.

RESULTS: Three themes and nine subthemes emerged from the data analysis, which includes maternal knowledge of breastfeeding, support systems for exclusive breastfeeding and social and cultural influences leading to non-exclusive breastfeeding

CONCLUSION: Exclusive breastfeeding for the first six months is a societal issue, which need the involvement of society as a whole to perceive it differently for it to be successful, a family-centred approach in which the father has a role to be part of it to assist and support the mother. Continuous support from the family and health facilities by knowledgeable health practitioners is desired. The study revealed that some nurses were practising wrong breastfeeding practices in front of community members. This made mothers to lose confidence in them as people who can be consulted in case of breastfeeding challenges. Cultural beliefs and myths should be handled in a culturally sensitive manner. Working mothers should be taught to negotiate and make a plan for breastfeeding with the employer during pregnancy and to know of their rights at work

regarding breastfeeding. Mothers should be taught to breastfeed for eight to twelve times per day. They should also be taught about the causes of crying in babies and shown practical skills on how to latch and how to calm the crying baby.

Key words: Exclusive breastfeeding, first six months, mothers, Mugodeni Grace CHC

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OVERVIEW OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

Breastfeeding cessation before six months is a common practice in many regions of the world, despite the high rates of initiation of breastfeeding at birth and the evidence that it is beneficial to the health of both the mother and infant. In developed countries that are making efforts to support breastfeeding, the rates of exclusive breastfeeding (EBF) remain low, with some lack of knowledge and information on how to deal with and manage perceptions of lack of sufficient breast milk supply , how to increase or maintain breast milk supply from the breasts, correct positions that are used for breastfeeding, and how to use breast pumps is still lacking amongst breastfeeding mothers (Leuer & Misskey, 2015). Recommendations by the World Health Assembly and United Nations International Children's Emergency Fund (UNICEF), of commencement of breastfeeding within one hour of birth and exclusively breastfeeding of the infant for the first six months improves growth, health and the survival status of new-borns.

EBF is one of the natural and best forms of preventive medicine, with breastfeeding continued for up to two years of age or beyond with appropriate complementary feeding from six months (Binns & Kyung Lee, 2015). EBF plays an important role in determining the optimal health and development of infants, and is associated with a decreasing risk for many early life diseases and conditions, including otitis media, respiratory tract infections, diarrhoea and early childhood obesity (Ago, Bibley, Odiase & Ogbonmwan, 2013).

The intention to increase the rates of EBF globally to at least 50% of infants in the first six months of life was stated in 2014 International Conference on Nutrition in Rome: Declaration on Nutrition and post 2015 Development Agenda. Many breastfeeding women find it difficult globally to sustain EBF beyond three months postpartum (Siziba, Jerling, Hanekom & Wentzel- Viljoen, 2015). EBF is one of the most important interventions of reducing child morbidity and mortality. Cessation before six months has negative effects on the health and survival of the child.

South Africa is said to be one of the five countries in Sub-Saharan Africa that has slow progress in reducing child mortality between 2007 and 2017. According to Statistics South Africa 2017 data release, 2007 was said to be at 47,2/10000, and the infant mortality rate in South Africa was sitting at about 28. 8/1000. Understanding the resources that are available to create an enabling environment for exclusive breastfeeding in South Africa is a matter that requires urgent attention for it to succeed and improve child health (Du Plessis, Peer, English & Honikman, 2016). The aim of this study was to explore the factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre.

1.2 RESEARCH PROBLEM

The researcher, being a manager at Mugodeni Grace Community Health Centre, has noticed through data input forms that the facility had a low uptake of infants that are exclusively breastfed at Hexavalent vaccination third dose. EBF at Hexavalent vaccination third dose is a nutrition indicator on the District Health Information System (DHIS) and is monitored on monthly basis by using data input forms at primary health care to check if mothers are still breastfeeding exclusively. Hexavalent vaccination third dose is given to babies around three months after birth.

A total of 428 babies were seen between April to November 2017 and were given Hexavalent third dose. Only 46 babies (10.7%) were exclusively breastfeeding, which is below the 50% global target agreed by the 2014 International Conference on Nutrition in Rome: Declaration on Nutrition and the post 2015 Development Agenda (Siziba et al., 2015). A diagram illustrating the data is shown below as Table 1.1.

Table 1.1: Exclusive breastfeeding at Hexavalent vaccination third dose rate

April 2017	May 2017	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017
6/53	6/94	9/52	3/56	16/52	0/29	6/39	0/53

Health education about the benefits of EBF was given to mothers during antenatal care and postnatal care, but the EBF remained low. The aim of the study was to explore perceptions by mothers regarding factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre.

1.3 LITERATURE REVIEW

Literature review is described as a summary of research conducted by other researchers on a topic. It surveys scholarly articles, books and sources that are considered relevant to a particular area of research of interest. Its purpose is to ensure that the researcher does not duplicate work that has already been done by other researchers. It provides a starting point for a researcher who is beginning to do research by providing easy access to research on a particular topic, highlights key findings of the research topic and critically discusses the results of the research in an objective manner (Aveyard, 2014). This study reviewed literature on the factors contributing to exclusive breastfeeding for the first six months as perceived by mothers globally, continentally and regionally. The literature will be discussed in detail in Chapter 2.

1.4. PURPOSE OF THE STUDY

The purpose of the study was to explore mothers' perceptions of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Community Health Centre.

1.5 OBJECTIVES OF THE STUDY

The objectives of the study were**:**

- To explore factors contributing to exclusive breastfeeding for the first six months as experienced by mothers at Mugodeni Grace Community Health Centre.
- To describe the factors contributing to exclusive breastfeeding for the first six months as perceived by the mothers.

1.6 RESEARCH QUESTION

In this study, the research question is as follows:

What are mothers' perceptions of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre?

1.7 RESEARCH METHODOLOGY

Polit and Beck (2017) define research methodology as an approach that is used in a study to organise, collect and analyse information systematically. The qualitative

research method has been used. The following describes the research design, setting, population, sampling, data collection, data analysis plan and measures to enhance trustworthiness of the study.

1.8 SIGNIFICANCE OF THE STUDY

The study may assist health professionals to identify gaps and to strengthen health education during the antenatal care period, to prepare them to initiate breastfeeding within one hour after delivery as stated by WHO guidelines so as to achieve the sustainable development goal of good health and wellbeing. The study may enable mothers to establish and sustain exclusive breastfeeding as recommended by WHO and UNICEF with the support of Ward Based Outreach Teams and other stakeholders. It may assist mothers to deal with perceptions of barriers and obstacles to optimal EBF. The study may also assist to increase the prevalence of babies who are exclusively breastfed. It can improve health outcomes of children and their mothers from morbidity and mortality from conditions such as breast cancer. It can protect babies against diarrheal diseases, pneumonia and otitis media and give mothers confidence to breastfeed their babies anytime anywhere without feelings of fear.

1.9 OUTLINE OF THE CHAPTERS

Chapter 1 briefly discusses the outline of the study, the research problem, the purpose, objectives and the significance of the study.

Chapter 2 outlines the literature review in the context of the study.

Chapter 3 focuses on the research methodology and study design employed in this study.

Chapter 4 discusses the findings in relation to the literature control.

Chapter 5 provides a summary of results, limitations, recommendations and conclusion in the context of the aims and objectives of the study.

1.10 CONCLUSION

This chapter provided an outline of the study with emphasis on the introduction, research problem, literature review, purpose of the study, objectives of the study and research question. Chapter 2 includes the review of literature from studies that have been explored on perceptions of mothers on factors that contribute to exclusive breastfeeding for the first six months.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

This chapter discusses literature review and according to Aveyard (2014) is described as a summary of research conducted by other researchers on a topic. It surveys scholarly articles, books and sources that are considered relevant to a particular area of interest. Its purpose is to ensure that the researcher does not duplicate work that has already been done by other researchers. It provides a starting point for a researcher who is beginning to do research by providing easy access to research on a particular topic. It highlights key findings of the research topic and critically discusses the results of the research in an objective manner (Aveyard, 2014). This section presents a review of literature by the researcher on the factors contributing to exclusive breastfeeding for the first six months globally, continentally and regionally, leading to a low rate of infants that are exclusively breastfed for the first six months.

2.2 GLOBAL PERSPECTIVES ON EXCLUSIVE BREASTFEEDING FOR THE FIRST SIX MONTHS

EBF for the first six months and the introduction of safe, age appropriate and nutritionally adequate complementary foods along with breastfeeding until the child is two years of age or older is not practised globally, over 85% of mothers globally do not implement WHO recommendation leading to low EBF worldwide (Gupta, Perrine & Chen, 2017). Despite the global commitment to promoting exclusive breastfeeding targets have not been met effectively. The World Health Assembly has endorsed six new Nutrition goals for 2025 one of which is to increase the global prevalence of EBF in the first six months of life to at least 50% from the current rate of 38%(Du Plessis et al, 2016).

WHO and UNICEF's recommendations that breastfeeding be initiated immediately and preferably within 60 minutes of delivery of the baby to assist mothers to continue with exclusive breastfeeding. in a study conducted in Iran, only 37% of children were exclusively breastfed until the age of six months. Levels in Eastern Mediterranean region, America, Australia and Iran were 36%, 16% and 28% respectively, all of which were below the global target of 50%. The study revealed that according to mothers,

the decision to exclusively breastfeed and its continuation depends on several factors such as cultural and social factors, spousal support, family support and support by health care providers (Kohan, Heidan & Keshvavi, 2016).

A study conducted in Hong Kong shows that the country was far below the WHO exclusive breastfeeding recommendations for the first six months of the baby‘s life. Although new mothers in Hong Kong were beginning to choose to breastfeed their babies, but the duration was for a short period. Few mothers exclusively breastfed, and many stopped breastfeeding at three months after delivery with a high rate of infant formula supplementation, which is not good for the health of the babies. Most of the reasons of the for early weaning were common globally including perceptions of lack of sufficient milk supply, sore nipples and return to work. Having an antenatal intention to breast feed is an important predictor of the initiation and duration of breastfeeding. Women were encouraged to attend many antenatal care sessions that would empower them to have self-efficacy and promote longer duration of exclusive breastfeeding (Sun, Chen, Yin, Wu and Gao, 2017). Contrary to a study conducted in Vietnam, where mothers had good awareness and knowledge of EBF, but failed to comply with EBF for the first six months, meaning that knowledge is not always transferred into good practice in terms of breastfeeding. The study revealed that some mothers perceived that they were having insufficient breastfeeding support from health workers, after caesarean deliveries as there were many of these types of delivery. Babies were given formula feeds instead of being given to their mothers to initiate breast feeding after the caesarean. The health workers in this regard contributed to the mothers not exclusively breastfeeding. (Nguyen, Hajeebhoy, Edward and Frongillo 2014).

In a study conducted in the Ayeyarwaddy region of Myanmar, with its low exclusive breastfeeding rates, women had knowledge of exclusive breastfeeding from campaigns that were done previously in Myanmar about exclusive breastfeeding, but they could not put it into practice due to lack of social support, they fed babies with water and mashed up rice before the babies could reach six months of age, because they were made to believe that breast milk alone is not sufficient for baby’s nutritional needs. Social support is one of the most influential factors on breastfeeding intention, initiation and duration. The study recommended that other family members be

educated about the benefits of breastfeeding so as to be able to support mothers during breastfeeding (Thet, Khang, Diamond-Smith, Sudhinaraset & Aung, 2016).

2.3 CONTINENTAL PERSPECTIVES ON EXCLUSIVE BREASTFEEDING FORTHE FIRST SIX MONTHS

Many studies about exclusive breastfeeding have been conducted in many African countries, and similarly the rates of exclusive breastfeeding were found to be low. Sociocultural beliefs were found to be contributing to barriers to exclusive breastfeeding. A study conducted in Nairobi, Kenya in two slums area identified that Mothers perceived colostrum as dirty because it is curdled milk and therefore not suitable for feeding the baby, so they expressed for the first two days and discarded the milk. This practice was condemned as it was robing the babies of the best nutrition (Wanjohi, Griffiths & Wekosah, 2014). This encouraged feeding the baby with prelacteal feeds. Their perception was that a baby is born naturally hungry so he or she must be fed with prelacteal feeds during the first two days while they were throwing away colostrum. When the mother started to breastfeed, they had perceptions that it was not enough for the baby to grow (Wanjohi, Griffiths.Wekesah&Muriuki, 2014). This is similar to studies conducted in Zimbabwe, Myanmar and Nigeria, which showed that it is a common perception that mothers have insufficient milk to feed their babies.

Socio-cultural influences play a role in determining EBF practice and can deter exclusive breast feeding for the first six months. In Kwale, Kenya the babies were given herbal tea and ritual concoctions which were perceived to treat common illnesses of new-born babies like vomiting perceived to be due to excessive breastfeeding. Others were treating abdominal colic with gripe water. Constipation was perceived to be due to lack of drinking water, which led to mothers giving water to babies of less than six months and thus disregarding exclusive breast feeding for the first six months (Matsuyama, Karama, Tanaka and Kaneko 2013).

A study in Zimbabwe has found beliefs, myths and misconceptions around breastfeeding to have an influence on exclusive breastfeeding. A woman was advised to stop breastfeeding if she falls pregnant. Breast engorgement was said to be caused by baby burping while latching on the breast. Mixed messages regarding HIV and breastfeeding by health professionals made them to doubt the safety of breastfeeding

and influenced HIV positive mothers not to breastfeed their babies and thereby discouraging exclusive breastfeeding (Nduna, Marai & Van Wyk, 2015). A study conducted in Kilimanjaro, region of Tanzania revealed that EBF was rarely practiced due to lack of support from family members or health care professionals, peer pressure, mothers body image and pressure to use artificial feeding have led to early cessation of EBF.Fear of breast sagging is a common challenge among young mothers. Social and cultural barriers are more common in developing countries (Mgongo, Hashim,Stray-Pedersen ,Vangen, Msuya & Wandel, 2019).

2.4 NATIONAL PERSPECTIVES ON EXCLUSIVE BREASTFEEDING FOR THE FIRST SIX MONTHS

According to statistics South Africa 2017 data release, South Africa is said to be one of the countries with the lowest exclusive breastfeeding rates of as low as 8% (Siziba, Jerling, Hanekom & Wetzel- Viljoen, 2015) and an infant mortality rate of 32.8/1000. In a study conducted in four provinces, North West, Free State, Eastern Cape and Gauteng by Siziba et al. (2015), the rate of EBF was at 12% and the barriers to exclusively breastfeed their babies included mothers' HIV status, poor health of the mother, and perception of insufficient production of breast milk by the mothers which forced them to introduce complementary feeds before six months, which has become the norm in many countries. This study is similar to studies conducted in other Sub-Saharan countries.

A study conducted in Soshanguve, Gauteng Province by Mokone (2017) reported EBF prevalence of 13 % at five to six months. The study further reported an EBF of less than one month of 80%, which declined to 13% at five to six months. This was low and below the global target of 50% of infants that are exclusively breastfed. The study further reported that babies were fed with tea or fruit juice as early as three weeks, leading to poor growth and stunting before the age of six months. This study was similar to a study conducted in Johannesburg among women with and without HIV. It was reported that the breastfeeding initiation rate at birth was very high but very few women exclusively breastfed at six months. Women indicated that it was very difficult to breastfeed exclusively for the first six months (Mnyani, Tait, Armstrong, Blaauw, Chersich, Buchman, Peters & Mcintyre, 2016).

Cultural factors like in other Sub-Saharan countries were the most contributing factors of mixed feeding, which seems to be the norm in South Africa. Influence from the elders in the family as well as confusing and different messages by health care workers left women living with HIV not knowing the safe infant feeding practices. EBF was associated with being HIV positive. In order to avoid the stigma, women with or without HIV chose to mix feed (Mnyani et al., 2016). Some of the reasons for the fading away of the breastfeeding culture in South Africa is said to be the aggressive marketing of breast milk substitutes by the infant feeding industry on radio and television, and lack of clarity by health care workers in the context of HIV/ AIDS about the safe infant feeding practices. In this study, it was reported that most teenage mothers of less than 17 years have stopped breastfeeding at the time of the study. The reasons given were that they had to return to school. They were also influenced by the marketing of breast milk substitutes on radio and television. They opted to feeding their babies with formula milk, and could not withstand peer pressure as they watched their peers feeding their babies with formula milk even if they could not afford it (Pillay et al., 2018).

The South African health review reported in 2016 that data suggests that most mothers initiate breast feeding at birth, however it has been observed that very few of babies were exclusively breastfed during the first six months of their life, and many were already given complementary foods at two and three months and in some cases within a few days after birth. This low state of nutrition in babies will predispose the people in South Africa to poor health outcomes in both the infants, young children years as well as adulthood life (Du Plessis, Peer, English & Honikman, 2016). In view of the low rates of exclusive breast feeding South Africa has committed to the most of the relevant international agreements and instruments that recognise and promote breastfeeding and compliant resolutions, legislative instruments and policies to fast track compliance, e.g. The Tshwane Declaration of Support for Breast feeding (2011), were implemented but history still tell us that there has been little improvement on the national rates of EBF (Du Plessis et al, 2016).

2.5 CONCLUSION

Chapter 2 discussed the literature review in order to gain more knowledge about findings from other researchers on factors contributing to exclusive breastfeeding for the first six months. The literature explored these factors, described perceptions of

mothers and revealed that the rate of exclusive breastfeeding is still low globally, continentally and nationally. Factors contributing to this are common, involving health systems, individuals, the family, the work environment and the community at large. Knowledge of mothers about exclusive breastfeeding has been found to play an important role for health systems to educate mothers on exclusive breastfeeding. Some mothers with the relevant information were still not practising exclusive breastfeeding. The negative influences from the family, the community and the work environment were found to be playing a leading role in impeding exclusive breastfeeding.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter 2 reviewed the literature that explored perspectives of perceptions of mothers on factors contributing to exclusive breastfeeding for the first six months globally, continentally and nationally. The purpose of this chapter is to describe the research methodology that has been used in this study. Polit and Beck (2017) define research methodology as an approach that is used in a study to collect, organise and analyse information in a systematic way. This chapter describes and discusses the research design, setting, population, sampling, data collection and data analysis and measures to enhance trustworthiness of the study in detail.

3.2 RESEARCH DESIGN

A research design is a plan to address a research question. It explains the strategies that the researcher will utilise to produce evidence that will bring out the study's integrity, accuracy and believability. It also indicates when, and how often data will be collected (Polit & Beck, 2017)**.** In this study, the researcher used phenomenological research design, which is a qualitative descriptive research design that is used to gain more knowledge about lived experiences of human beings (Polit & Beck, 2017). The researcher wanted to gain in-depth understanding in the context of the participants themselves about their perceptions of factors contributing to exclusive breastfeeding for the first six months.

3.3 STUDY SITE

The study was conducted at Mugodeni Grace Health Centre, situated in Mugodeni Grace Local area in Greater Tzaneen sub-district under Mopani district of Limpopo Province in South Africa. Mopani District consists of five sub-districts which have been named according to the local municipalities, namely Ba-Phalaborwa, Greater Giyani, Greater Letaba, Greater Tzaneen and Maruleng sub-districts. Greater Tzaneen has five local areas namely, Mugodeni Grace, Shilubane, Julesburg, Tzaneen and Nkowankowa.

Mugodeni Grace Health Centre is built on stand no 20186 in Ward 5 of Greater Tzaneen Municipality at Musiphani village under Valoyi Traditional Authority in Mamitwa area. It is about 50km North East of Tzaneen. The language which is mainly spoken is Xitsonga with few people speaking Sepedi and foreign nationals' language like Shona and others. The family organisation is the extended family, nuclear and single parenting. Mugodeni Grace Health Centre catchment area consists of six villages which are Mgwazeni, Musiphani, Shongani, Maweni and Maluvana and Nkambako. See catchment area map below as Figure 1.

The population is estimated to be 13526 with 3429 households (Greater Tzaneen municipality, 2018). Besides the staff nurses, the health centre has one dietician, two data capturers and five Ward Based Outreach Teams. The health centre provides 24-hour service in the form of night duty; services rendered include maternal and child health services, and chronic and acute care through open and booking system.

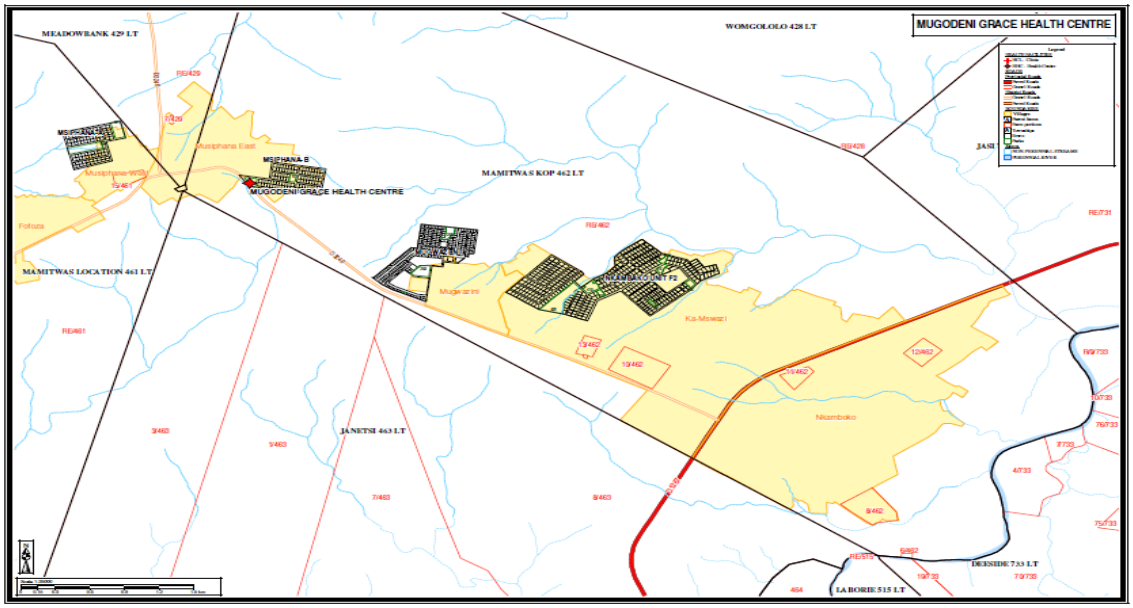

Figure 1: Map showing Mugodeni Grace Health Centre catchment area

3.4 STUDY POPULATION

Population according to Polit & Beck (2017) is a collection of objects, individuals or events that have the some common characteristics that the researcher has an interest in studying. The population of the study included breastfeeding mothers with infants less than six months old recruited face to face during immunisation visits and willing

to participate in the study. Between April – November 2017, 428 breastfeeding mothers with their infants were seen when they were coming for Hexavalent third dose.

3.5 SAMPLING

Sampling is the process of selecting people to represent an entire population so that generalisations about the population can be made. The researcher used convenience sampling which according to Setia (2016) is when the researcher recruit participants who are easily available in the setting. Mothers were informed about the study and those who agreed to participate were evaluated for eligibility and those who met the criteria were recruited for the study. Qualitative researchers determine the sample size by data saturation which is a point where there was no longer new information produced by the participants during data collection (Polit & Beck, 2017).

- **Inclusion Criteria**

Breastfeeding mothers bringing their babies for routine immunisation who were able to speak the local languages with infants up to six months of age were included because they were able to recall factors contributing to failure or success to exclusive breastfeeding and the period in which they started feeding their babies with other food or milk or factors that enabled them to continue exclusive breastfeeding.

- **Exclusion Criteria**

Breastfeeding mothers with sick babies less than six months of age were excluded because they had to go home immediately to take care of their sick babies. Mothers with language barriers such as inability to express themselves in English, Xitsonga or Sepedi were excluded from the study.

3.6 DATA COLLECTION

Data collection in qualitative research is defined by Polit and Beck (2017) as the gathering of relevant information to address a research problem. In this study, the researcher collected data using face to face in-depth, semi-structured interviews conducted in Xitsonga lasting for 30 to 60 minutes to explore and describe the barriers and facilitators for exclusive breast feeding for the first six months. The interviews were audio taped with the consent of the participants. The researcher collected data once-off from the participants . An interview guide was used in order to ensure that the topic under study was covered and is taken from literature review (Jia Choo and Ryan,

2016) the interview guide consisted of two sections. Section A for demographic data e.g. age, parity, employment status, educational status and age of infants. Section B consisted of the central question which is: "*What do you think are factors that contribute to mothers practising exclusive breastfeeding to their infants for the first six months?"* Follow-up questions were also included in Section B. The English interview guide was translated into Xitsonga and Sepedi for those who did not understand English by the researcher as she is fluent in both languages. The interview guide is attached as Annexure A1 in English, A2 Xitsonga and A3 Sepedi. All the interviews were conducted and audio taped with the consent of participants. Field notes were collected as suggested by Jia Choo and Ryan (2016).

3.7 DATA ANALYSIS

Data analysis in qualitative research is organising data in small units so that it can be meaningful when it is interpreted. It starts during data collection and the steps do not follow a linear movement, it involves moving forwards and backwards between the phases (Nowell et al 2017). Data analysis in this case was carried out using Teschs's open coding approach as stated in Creswell (2013). Audio tape recordings were transcribed verbatim in Xitsonga and were translated into English by the researcher in order for them to be meaningful as suggested by Mgolozeli and Shilubane (2015).

- The first step in analysing qualitative data according to Teschs's approach is to read the transcriptions and to write down ideas as they come.
- The next step was to try and make sense of the ideas after reading.
- The third step was to list all the themes and put similar ones together.
- The fourth step was to name using codes.
- The fifth step was to look for similar themes in the descriptions.
- Step 6 was to arrange categories alphabetically
- Step 7 was to assemble the categories in one place and to start the analysis.
- Step 8 was to recode the available data where necessary.

The researcher submitted the transcripts to an independent coder of qualitative data for confirmation and comparison of the themes. A consensus meeting was then held with the independent coder.

3.8 MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness is defined by Nowell, Norries and White (2017) as truthfulness and worthy of being given attention by readers of the research findings, and is described in four categories which will follow next.

3.8.1 Credibility

The credibility of the study as defined by Nowell et al. (2017) is the believability of the study findings. Credibility was ensured through prolonged engagement with the participants. The researcher had prolonged interviews with the participants for a duration of 30 to 60 minutes, and took field notes from the participants. Triangulation was used through different data collection methods such as interviews, field notes and audio tapes to record the interviews and member checking with the participants during data collection by probing and paraphrasing to correct obvious errors by the participants as suggested by Nowell et al. (2017). The researcher was also supervised by an experienced supervisor in qualitative research.

3.8.2 Transferability

Transferability of a study is ensuring that the study can be comparable to other settings. Qualitative researchers strive for findings to be used in other situations. The researcher used thick descriptions of the findings which are supported by the direct quotations from the interviews findings to ensure that other researchers can be able to use the findings to their own settings (Nowell et al. 2017).

3.8.3 Dependability

Dependability refers to consistency wherever findings are replicated with the same subjects, which is difficult to achieve in qualitative research. The researcher ensured that the research is done in a logical manner and was documented in detail in order for the research to be replicable. It was established using an audit trail, whereby the researcher accounts for all the activities to show how the data was collected and analysed. The researcher kept all the records safely as suggested by Anney (2014).

3.8.4 Confirmability

Confirmability refers to establishing that the results of the study are a reflection of the data and interpretations of the findings from the research participants and not the

imagination of the researcher (Galloway, 2013). The researcher submitted the transcripts to an independent coder (attached as Annexure B). Discussions were held and a final agreement was reached. A letter from the independent coder is attached as Annexure C

3.9 BIAS

Bias, according to Oxford English Pocket Dictionary (2015), is a way of being unfair in favour of another person or something, and giving a misrepresentation. In research, some issues can give false results which are not a true reflection of the results if not managed well. Bias occurs in different stages of the research process (Smith & Noble, 2014).

- Data collection bias occurs when data collection is influenced by the researcher's personal beliefs.
- Data analysis bias occurs when the researcher confirms personal experiences and overlook data which is not consistent with personal beliefs.

  The researcher avoided data collection bias by open ended questions during the interviews. Data analysis bias was avoided by the use of an independent coder to analyse the transcripts and to reach consensus.
- Social desirability bias which according to Latkin, Edward, Davey-Rothwell & Tobin (2017) is the tendency to under-report undesirable behaviour and attitude by the participants or to over report attributes that are of interest to the researcher. It may lead to inaccurate and study conclusions that are not correct. It is usually intended to avoid embarrassment and or repercussions from disclosing information that is not desirable and to maintain a positive self-image. The researcher minimised the possibility of social desirability bias by probing and paraphrasing during data collection and reinforcing the issue of confidentiality.
- Selection bias can manifest during the process of recruitment of participants and the inclusion criteria (Smith & Noble, 2014).

3.10 ETHICAL CONSIDERATIONS

Researchers are ethically bound to adhere to the prescribed norms and standards that should be followed when conducting research. Ethical considerations safeguard the participants against any violation of their rights, dignity and any form of harm, hence a code of ethics has been developed to guide the researcher to conduct herself ethically

(Polit & Beck, 2017). Ethically, no research can be conducted without approval by the responsible bodies. This section will outline the procedure that will be followed to get the necessary authorisation. It also looks at ethical issues that will be considered during the study such as anonymity and confidentiality, privacy and protecting the rights of participants as well as minimising potential risk and harm to the participants.

3.10.1 Respect for human dignity

The participants had self-determination; they were informed that they have the right to choose whether they want to participate in the study or not. They were not forced to participate and could withdraw from the study at any time they feel like without being punished in anyway as suggested by Polit & Beck (2017).

3.10.2 Protecting the rights of participants

This involves the right to fair treatment and the right to privacy. The selection of participants was done in a fair and relevant manner in line with the research topic. The study participants' privacy was respected. The researcher did not probe into their private matters and information was kept confidential. The participants were assured that the interview would be conducted in a private room, and that their real names would not be used during and after the study. The recordings were kept by the researcher in a lockable cabinet and a password-locked computer as suggested by Polit and Beck (2017).

3.10.3 Beneficence

This involves protecting the participants from any form of physical or psychological harm and doing only what is good. In this study, there may be psychological harm which was minimised by asking questions in a polite manner that took into consideration the sensitivity of some questions and intrusion of the participants' psyche according to Polit and Beck (2017).

3.10.4 Informed consent

The purpose of the study was explained to the participants to enable them to participate voluntarily. They were informed that they can refuse to answer questions that they do not feel comfortable to answer and they will be recorded during the interviews. Consent form was given to sign only if they were willing to participate in the

study. The participants were told that they can withdraw from the study at any time if they wish to do so and they will not be punished in any way for doing so according to Polit and Beck (2017). An information leaflet was translated from English and is attached as Annexure E1 to Xitsonga and Sepedi and are attached as Annexures E2 and E3, respectively. The consent form was translated from English and is attached as Annexure F1 into Xitsonga and Sepedi' attached as Annexures F2 and F3, respectively.

3.10.5 Protecting the rights of the institution

Permission to collect data was requested and granted from Limpopo Department of Health and Mopani District. The letters are attached as Annexures D1, letter to request for permission from Limpopo Department of Health, and is attached as Annexure D2 is the letter requesting permission from Mopani District. Letter for permission from the province is attached as Annexure D3, and letter for permission from the district as Annexure D4.

3.10.6 Scientific integrity of the research

Ethical clearance was obtained from Turfloop Research Ethics Committee (TREC). Ethical clearance is attached as Annexure G. The researcher is a professional nurse and adheres to the ethical principles of the South African Nursing Council, which is a professional governing body for nurses.

3.11 CONCLUSION

Chapter 3 discussed the research methodology that has been followed when conducting the research, the site of the study, the population, sampling, data collection, and data analysis, measures to ensure trustworthiness, bias and ethical considerations. Chapter 4 discusses the findings of the study and literature control.

CHAPTER 4
SUMMARY, FINDINGS AND LITERATURE CONTROL

4.1 INTRODUCTION

The previous chapter discussed the research methodology that was followed when conducting the study, the site of the study, population, sampling, data collection, data analysis, measures to ensure trustworthiness and ethical considerations.This chapter discusses the findings and literature control in support of the findings of the study. The findings emerged during data analysis using Teschs's open coding data analysis method as described by Creswell (2013). The following themes emerged from data analysis: knowledge of breastfeeding by the infant's mother, support system for exclusive breastfeeding, and social and cultural influences.

4.2 DEMOGRAPHIC PROFILE OF PARTICIPANTS

The study sample comprised of nine participants, one was between 15 and 19 years old, one participant was between 20 and 24 years old, four were between 25 and 29 years old and three were between 35 and 39 years old. Out of all the nine participants, three were primiparous and six were multiparous. Only two participants were employed, one was self-employed, three were unemployed, three were students and four of them passed grade 12, two passed grade 11 and three passed grade 10. All infants were aged between two and six months old. Table 4.1 summarises the demographic profile of the participants. Literature found that younger, less educated women without prior breastfeeding experience were the most likely to practise early cessation of exclusive breastfeeding (Rozga, Kerver & Olson 2014). According to Rollins, Bandari, Hajeebhoy, Horton, Lutter, Martines, Piwoz, Richter and Victora (2016), work can lead a mother who is returning from work to early weaning or stop breastfeeding. According to Pillay et al. (2018) returning to school can also contribute to early weaning or stopping of breastfeeding.

Table 4.2. Demographic Profile of Participants

Age of the mother	Parity	Occupational status	Highest educational standard	Age of infant
15-19	Primiparous	Student	Grade 10	5 months
20- 24	Multiparous	Unemployed	Grade 10	4 months
25-29	Primiparous	Unemployed	Grade 11	4 months
25- 29	Primiparous	Unemployed	Grade 12	3 months
25-29	Multiparous	Employed	Grade 11	2 months
25-29	Multiparous	Part time student	Grade 12	2 months
35-39	Multiparous	Employed	Grade 12	6 months
35-39	Multiparous	Self employed	Grade 12	4 months
35-39	Multiparous	Student	Grade 10	6 months

4.3 THEMES AND SUBTHEMES

Data analysis yielded three themes and nine subthemes as summarised in Table 4.3

THEMES	SUBTHEMES
1. Maternal knowledge on exclusive breastfeeding	1.1 Varied maternal knowledge on exclusive breastfeeding 1.2 Health education content on exclusive breastfeeding 1.3 Recommendations on exclusive breastfeeding from the mothers
2. Social support for exclusive breastfeeding	2.1 support from health systems 2.2 Positive support from family 2.3 Negative support from family 2.4 Lack of supportive work environment
3. Social and cultural influences on exclusive breastfeeding	3.1 Cultural beliefs about the causes of crying in babies 3.2 Social influences leading to non-exclusive breastfeeding

4.3.1 Theme 1: Maternal knowledge on exclusive breastfeeding

In this study, most mothers knew that the baby is supposed to be breastfed and that breast milk is the sole food for the baby. All those who were well-informed about breastfeeding were eager to breastfeed their babies and were willing to share their knowledge with other members of the family and friends in different settings like the church. The following sub themes emerged:

4.3.1.1 Subtheme 1.1: Varied maternal knowledge on exclusive breastfeeding

Knowledge of exclusive breastfeeding varied amongst the mothers. This knowledge plays an important role in the success of exclusive breastfeeding for the first six months. Some knew what it means, others missed the information, but accepted that they were once taught at various health facilities. Those who were well informed knew about advantages of exclusive breastfeeding and consequences of not complying such as that the baby will have abdominal problems. Others wrote notes during health education on the expression of breast milk and its storage.

Participant 1 (18 years, primiparous and a scholar) said: "I g*ot a lot of education at the clinic, they taught us not to mix feed, they said if you breast feed give breast milk only and if you give formula give it alone because if you mix feed your baby might get HIV if the mother is HIV positive."*

Participant 2 (29 years, primiparous and unemployed) added: "At the clinic t*hey told me that if you get a baby, you must breastfeed the baby for the first six months, you should not give water or formula to the baby, and you must breastfeed only, and give solids only when the baby is six months old.*"

Participant 3 (36 years and a scholar) added: *"I visited the clinic before falling pregnant they were teaching us about the importance of early antenatal care booking. When I fell pregnant I did book early as well, I received many health talks including about exclusive breast feeding for the first six months from very early in pregnancy until now. I am proud of this clinic and the information that I got, as I visited the clinic regularly".*

The study is consistent with findings by Ghanbanejad, Abedini and Taqipoor (2015), who revealed that the promotion of mothers' knowledge during pregnancy and after delivery is the most important factor that can increase the duration of breastfeeding. The study is supported by Chaudhary, Shah and Raja (2011), who revealed that lack of adequate and appropriate knowledge can be a barrier to exclusive breastfeeding. Mothers who did not get any advice regarding breastfeeding during their prenatal care visits were practising mix feeding and inappropriate feeding positions and attachment. The study is in contradiction with findings of a quantitative study conducted in Mahwelereng local area in Limpopo Province by Frans, Malema and Matlala (2015), which revealed that in spite of good breastfeeding knowledge the mothers could not

practise exclusive breastfeeding because they believed that breastfeeding alone is not sufficient for optimal feeding of their babies. Similar findings in a study by Tarrant et al. (2016), which was conducted in the Ayeyarwaddy region in Myanmar, found that mothers did not practise exclusive breastfeeding. Even after campaigns that were conducted to improve their knowledge on exclusive breastfeeding, they could not put their knowledge into practice.

4.3.1.2 Subtheme 1.2: Health education content on exclusive breastfeeding

The study revealed that mothers received varied content on health education during pregnancy and after delivery with information gaps from the content of health education on exclusive breastfeeding knowledge. This resulted in these mothers not knowing what to do when confronted with breastfeeding challenges, leading to them to apply their own mind and early cessation of exclusive breastfeeding. On the other hand, some got information that enabled them to continue with exclusive breastfeeding.

Participant 1 said: *"At the hospital they were not talking about breastfeeding, they taught us about pregnancy and told us that we must always be clean, they did not want cutex*."

Participant 8 (36 years, multiparous and self-employed) added: *"At the clinic they taught us that the baby's food is in the in breast only, and the types of breast milk that we have and that the first milk that comes out after delivery of the baby is the best milk and should not be discarded, in breast milk there is water for quenching the thirst for the baby and there is food for the baby that is needed to strengthen and assist the baby to grow".*

Participant 9 (29 years, multiparous and employed fulltime) added: "*I got health education from the clinic only about exclusive breastfeeding and was not taught about prevention of cracked nipples and I did not know what to do, I decided to go to the clinic to be seen by the dietician who assisted me".*

Participant 7 (26 years, multiparous and unemployed) added: *"At the clinic they taught us that diet is also important to assist with milk production mom connect was teaching us about what type of food to eat and while breastfeeding. They taught us not to change breasts while feeding the baby even if the other breast is leaking feed the baby*

until the baby is satisfied, this will protect and make the baby to grow well and prevent diseases."

The study findings are supported by Leurer and Misskey (2015), who revealed that information gaps can contribute to cessation of breastfeeding, including perceived insufficient milk supply, latching difficulties and nipple discomfort. Support should focus on these key content areas and on feedback from mothers to check if they have understood what they have been taught. The findings are similar to those by Odeny (2014), who revealed that lack of relevant information can be a major hindrance to exclusive breastfeeding. It can predispose mothers to be easily influenced by negative influences that do not support EBF from the family and the community at large. According to Frota, Lopes and Lima (2016), the person giving health education must consider the quality of information and the level of understanding of the recipients of the information.

4.3.1.3 Subtheme1.3: Recommendations on exclusive breastfeeding from the mothers

The study revealed recommendations from mothers with their different experiences in which they believed that they can assist other mothers in successful exclusive breastfeeding. The mothers also highlighted that support from health services is needed through reminders, health talks and continued health education. There is a need for doctors to participate in giving information to mothers on the importance of exclusive breastfeeding. This is highlighted by some of the following quotes from the mothers:

Participant 1 said: *"Doctors and everybody in the hospitals must always remind mothers to exclusively breastfeed their babies they must also tell the mothers what will happen to their children if they do not breastfeed exclusively so this will make mothers to be afraid to give their babies other food before six months*".

Participant 6 (36 years and employed fulltime) added: *"What I can advise mothers is that breastfeeding is good for the baby, it is cheap. Those working mothers who are fortunate to hear my advice must express breast milk in a cup and put it in a refrigerator, when the baby is still very young sometimes the milk is too much so they must not express and discard or leave breast milk to soil their clothes, they must pour it in a cup and refrigerate it so that they can later warm the milk and feed the baby and*

checking which milk was stored first and warm it. It is very cheap to breastfeed than to give formula."

Participant 7 added: *"Working mothers should wake up early in the morning to be able to breastfeed their babies before going to work and they must also express the breast and put the milk in a refrigerator so that the baby can be fed while at work".*

Participant 3 (37 years, multiparous and a student), added: *"I think that grannies can understand if taught so I would appeal to all mothers to share the information that we get from the clinic with our mothers and grannies so that they can also learn about the benefits of exclusive breast feeding*."

Participant 5 (29 years, multiparous and a student) added: "*It would be good for the fathers and grannies also to be taught why are babies supposed to be fed with breast milk only for the first six months of life so that they can also hear it from the nurses"*.

The study is supported by a study in the Eastern Mediterranean region by Kohan et al. (2016), which revealed that from the perspective of participants, key family members should be given health education to empower them with practical skills to help mothers in the care of infants in order to support them to solve challenges experienced during breastfeeding to promote breastfeeding continuity. Such family members include grandmothers, spouses and siblings. According to Minas and Ganga-Limando (2016) action should not only be about health information, but also to look at ways of improving the primiparous mothers' breastfeeding self-efficacy to empower them to be confident in their ability to breastfeed exclusively. The findings are supported by a study conducted at the state of Qatar by Hendaus, Alhammadi, Khan and Hamad (2018), which emphasised the involvement of doctors to contribute greatly to breastfeeding counselling.

4.3.2 Theme 2: Support systems for exclusive breastfeeding

Support systems is a key determinant of exclusive breastfeeding duration. The following subthemes emerged.

4.3.2.1 Subtheme 2.1: Support from health systems

Support by health workers plays an important role in providing infant feeding information and support. The study revealed that nurses and dieticians supported

women with knowledge, but some experienced challenges which they were not equipped to deal with. This is what mothers in this study had to say about the experiences of support by health workers.

Participant 1 said: *"There is something called breast pump which I bought from the chemist, which I use to express the breast milk and put in the cup that the dietician gave me which I then pour inside the bottle put it in the refrigerator and they take out the breast milk from the refrigerator and put it in direct sunshine to warm it before they feed the baby with a bottle".*

Participant 3 added: "*Yes, they taught us that a baby must be exclusively breastfed for the first six months, I was also meeting with mentor mothers and was getting more information from them and from the professional nurses they were also giving us information. They were telling us to exclusively breastfeeding for the first six months no other food."*

Participant 6 added:" *I don't know but if your neighbour is a nurse and you see her giving her baby solids before the baby is six months old I end up giving up as well saying that if a nurse cannot breastfeed exclusively for the first six months I do not see the importance of exclusive breastfeeding for the first six months".*

Participant 5 added: "*Yes I did receive health education from the clinic, the nurses start teaching us during pregnancy that after giving birth we must breastfeed the baby for the first six months even after delivery the nurses continued to teach us. There are community care givers who move around the villages and teach us as well that the baby must be breastfed exclusively but mostly is the clinic that emphasises that the baby must be exclusively breastfed for the first six months"*.

Participant 9 (29, multiparous and employed fulltime) added: *"Yes I had challenges after breastfeeding the baby for one month my nipples cracked and blood was coming out so I could not breastfeed the baby and I was afraid that the baby will come into contact with my blood, I went to the clinic to see a dietician who advised me to give the baby formula and he also gave me a cup to feed the baby".*

The findings are similar to those by Jama et al. (2017), where some health workers gave mothers advice which does not support exclusive breastfeeding, which is communicated verbally or by their practices. There are strategies to improve health

workers' competency by improving infant feeding knowledge and skills in breast feeding counselling so as to enable pregnant women to overcome common breastfeeding challenges in order to improve their confidence (Jama et al., 2017). The study is consistent with Haroon, Das, Salam, Imdad and Bhutta (2013), which revealed that facility-based and community-based interventions increased the rates of EBF.

4.3.2.2Subtheme 2.2: Positive support from family

Most mothers were supported by their families to continue with exclusive breastfeeding. This is what mothers had to say regarding their experiences of support by their families:

Participant 1 said: *"No my mother knows that the baby is not supposed to be given water or solids, I first asked her when I was coming from the hospital that when is the baby supposed to eat and she said after six months and she feeds the baby with expressed milk only while i am at school*."

Participant 4 (23 years, multiparous and unemployed) added: "*Yes my mother in law supports me to breastfeed, she was also taught at the hospital about the benefits of excusive breast feeding, she was there when they discharged me, she knows and I believe that she won't make any mistakes of giving other food and water to the baby*."

Participant 7 added: *"My mother did not say the baby needs other food she only said that I must give the baby breast milk only because it is the only food and water for the baby and nothing else and she is supporting me every day".*

As recommended in a study by Kohan et al. (2016), support is very important. If the husband and family believe in breastfeeding and have been empowered with adequate knowledge and skills to support mothers in breastfeeding, their support can be effective in increasing the duration of breastfeeding. Such support should be taught and emphasised.

4.3.2.3 Sub-theme 2.3: Negative support from family

Some mothers in the study revealed their lack of support from their families. But some of them succumbed to the pressure from their families to give their babies food, and persevered to continue with exclusive breastfeeding. They were even afraid of leaving

their babies with members of the family due to lack of trust. The study also revealed that some mothers could not continue with exclusive breastfeeding due to pressure from their families. They resorted to mixed feeding. One mother stated that the father of the baby was taking the side of granny, who was insisting that the baby be given food when she was crying. Mothers had this to say:

Participant 2 said: " *My parents said I must give my baby food and I told them I cannot, I was hurt I told them I don't know which type of soft porridge must I give I will go and ask at the hospital when the baby is six months old they will tell me how to feed the baby*".

Participant 5 added: "*My grandmother is always telling me to give the baby solids and this is disturbing my mind because is not what I want to do for my baby and I became confused not knowing what to do and become tempted when the grandmother insist that the baby be fed*."

Participant 6 added: *"They were always shouting at me saying can you spend six months without eating, breast milk is eroding inside the baby s tummy*"

Participant 4 added: *"I didn't get it anywhere is my mother who gave the baby water while I was away when the baby was crying."*

The findings are similar to those by Mgolozeli and Shilubane (2015), which was conducted at Maloma village in Limpopo Province, revealing that lack of support contributed to mix feeding practices. According to Tampah- Naah, Kumi-Kyereme and Amo-Adjei (2013), family members such as grandmothers challenged mothers' exclusive breastfeeding decisions by giving the babies water and food after bathing them. The babies were supposed to be exclusively breastfed

4.3.2.4 Sub-theme 2.4: Lack of supportive work environment

The mothers expressed various concerns regarding lack of support at work. The lack of facilities for expressing breast milk at work prevented one mother in the study to exclusively breastfeed her baby and indicated that it is expensive for her to buy formula and pampers. Another mother in the study indicated that if maternity leave could be extended to six months it would also assist mothers to be with the baby and exclusively breastfeed. One mother who was self-employed did not experience any challenge as

she was able to give her baby attention all the time and exclusively breastfeeding. This is what the mothers had to say:

Participant 6 said: *"If there was a place to express the breast milk at work, it would have assisted me to exclusively breastfeed until six months, you know it was painful for me to stop my child from breastfeeding because I could see that it is going to give me a challenge because you must pay the baby care taker, buy formula and buy pampers I would have saved money by giving expressed breast milk on*ly".

Participant 8 added: *"I did not experience any challenges because I am self-employed and working from home. I am able to take care of my baby, there are people who assist me but when the baby cries, i am always available for the baby to give him attention. Mothers who are working can express the milk that will be used to feed the baby and the baby care taker should also be taught to use the expressed breast milk only."*

Participant 5 also added: *"What I think is as i am not working it is good for me to breastfeed, and even if I was working I would also be with the baby for the first six months because if I leave the baby with someone, even if I have expressed the breast milk they can give the baby solids before six months. So the best thing is for the mother to stay with the baby for six months before going to work. It is a challenge because the child minder can also give solids to the baby, if I can leave the baby and go to work before six months".*

The study is supported by Rollins et al. (2016), which revealed that the work place environment can be a determinant of breastfeeding cessation. Some employers and fellow employees reported feeling uncomfortable when mothers breastfeed at work. Women's work is a leading contributor of failure to breastfeed or early weaning. Breastfeeding can be continued after returning to work, where the work place environment is supportive through the availability of maternity leave up to six months, or child care, and where breastfeeding or expressing is allowed. Providing lactation rooms and breastfeeding breaks can reduce barriers for working mothers to exclusively breastfeed.

The findings are similar to those by Xuan and Nhan (2018), where working mothers indicated their concern for lack of facilities for breastfeeding at work, such as private rooms for pumping breast milk and refrigerators for storing the milk. According to

Martin-Wiesner (2018), there is legislation in South Africa which is not implemented even in government departments. The Code of Good Practice, which is issued in terms of the Basic Conditions of Employment Amendment Act 7 of 2018 which provides the right to breastfeeding breaks in the workplace which the courts and Commissions for Conciliation, Mediation and Arbitration could enforce if approached by workers representative organisations.

4.3.3 Theme 3: Social and cultural influences

The theme social and cultural influences emerged when mothers included their experiences as influenced by the environment in which they live and the people around them. Two subthemes emerged from the people around them.

4.3.3.1 Sub-theme 3.1: Cultural beliefs about the causes of crying in babies

One mother in this study raised the issue of her mother giving the baby water to quench thirst when she was crying in her absence. Grandmothers play an important role in influencing infant feeding practices. Below is some of the words by mothers in the current study.

Participant 5 said: *"On the other hand we have grannies who always tell us that the baby must be given food to eat before six months because the baby cannot be satisfied with breast milk only. When the baby cries the father would say that the baby is not satisfied I must give the baby soft porridge because is what the grandmother says, so he doesn't want his child to die of hunger. Ya it is a challenge that I have experienced with the father of my baby. My Grandmother said it is their culture that the baby must eat solids while on breast milk this is how they have been doing since long and that is how they grew up. When a young baby cries in our culture it is due to hunger, the baby must be fed and sleep the whole day and wake up again when hungry, that's what they know that when a baby cries is due to hunger so the baby must be fed so that he or she can stop crying because the baby is experiencing pains on the tummy when hungry, that is how grannies are."*

Participant 4 added: *"They believe that when a baby cries for a long time it is always due to thirst and hunger so the baby must be given water to drink to quench the thirst."*

Participant 3 also added: *"If we come in the afternoon we will miss the health talks about how to breastfeed our babies and if you arrive at home when the baby cries they*

will say the baby is hungry because they believe that baby cry due to hunger and tell you to give the baby soft porridge before six months. The baby is not hungry for food but is hungry for the mother's attention."

The findings of this study are similar to those of the study conducted in rural Zimbabwe by Nduna et al. (2015), where grandmothers and mothers-in-law gave babies water to drink. The quenching of thirst and culture disregard the fact that breast milk provides enough fluid for the baby. Another study with similar results was conducted at Enugu in Nigeria by Bisi- Onyemaechi, Chikani, Ubesie, Chime and Mbanefo (2017), which found the belief that breast milk alone cannot be enough food for babies less than six months of age. This resulted in the continuous crying of the baby.

According to Neifert and Bunik (2017), mothers and care givers mistaken and attribute many infant health and behaviour symptoms like unexplained crying to insufficient breast milk. The perception is that crying, night wakening and other normal infant behaviours are due to hunger. This contributes to early introduction of solids and formula. A similar situation has been found by Tedder (2015), in which mothers often resorted to changing from breastfeeding to formula feeding in the hope of reducing infant crying. It is further said that parents need to be taught about strategies of assisting them to calm a crying baby and to breastfeed the babies eight to twelve times per day.

4.3.3.2 Sub theme 3.2: Social influence leading to nonexclusive breastfeeding

Social and cultural factors are important in the success of breastfeeding (Kohan et al., 2014). The study revealed that mothers experienced both positive and negative influences from the family and the community. This is what some participants had to say:

Participant 7 said: *"The first milk which comes out on the first day is yellow in colour, some people say it is dirty and discard it, it is not dirty and should not be discarded because , it contains water for the baby and quenches the baby's thirst".*

Participant 6 added: *"Another thing that is challenging some mothers is the noncompliance to exclusive breastfeeding by some nurses who give their babies solids before six months which discourages mothers to exclusively breastfeed their*

babies and not see the importance of exclusive breastfeeding for the first six months and saying if nurses cant comply why then should I not feed my baby with solids".

Participant 9 added: *"My husband doesn't have a problem he knows, he was also taught at the clinic about exclusive breastfeeding for the first six months and I told him that I want to exclusively breastfeed the baby because with the first baby I was misled by people to give food before six months but with this one I was determined to do the right thing for the baby but unfortunately I could not."*

This study is supported by a study conducted in Nairobi, Kenya in two slums area identified barriers for EBF as sociocultural beliefs. Mothers perceived colostrum as dirty because it was curdled milk and therefore not suitable for feeding the baby. So they expressed for the first two days and discarded the milk. This practice was condemned as it was robing the babies of the best nutrition (Wanjohi, Griffiths & Wekosah, 2014). This encouraged feeding the baby with prelacteal feeds. According to Jama et al. (2017), such negative influence can only be resisted if the mother is empowered with self-efficacy. But sometimes the mother is defeated and does what the family or the community expects from them, leading to nonexclusive breastfeeding. The study is supported by Aubel and Alvarez (2011), who revealed that young mothers are reluctant to ignore advice given to them by their elders, where both maternal and paternal grandmothers teach first time mothers all aspects of child care. The findings are similar those by Kimani-Murage, Wekesah, Wanjohi, Kyobutungi, Exeh, Musoke, Norris, Madise and Griffiths (2016), who found that infant feeding practices for young mothers were influenced by peer pressure and their own mothers, who may not be well-informed about the benefits of exclusive breastfeeding. Similar findings by Goosen, McLachlan and Schubi (2014) indicate that one health worker admitted to having being overcome by negative influences where, in spite of the knowledge she had on exclusive breastfeeding, followed her grandmother's advice. Mothers who intended to breastfeed chose not to disrespect and disappoint their relatives by following their negative exclusive breastfeeding advices

Health care workers have a duty to support and promote exclusive breast feeding for the first six months through their knowledge and practice of exclusive breast feeding and the community is looking at them as role models. A study conducted by Dachew

& Bifftu (2014), revealed a low rate (35.9% of exclusive breast feeding among nurses and midwives, though they had adequate knowledge on exclusive breast feeding.

4.4 CONCLUSION

This chapter focused on research findings and literature control. The findings were categorised according to the main themes and sub themes, namely: varied maternal knowledge on exclusive breastfeeding, health education content on breastfeeding, recommendations from breastfeeding mothers, positive support from health services, positive support from family and friends, negative family support leading to mixed or formula feeding, lack of supportive work environment, cultural perceptions about the causes of crying in babies, and social influences leading to non-exclusive breastfeeding. Chapter 5 focuses on summary, strengths, limitations, conclusion and recommendations of the study.

CHAPTER 5
SUMMARY, RECOMMENDATIONS, STRENGTHS, LIMITATIONS AND CONCLUSIONS

5.1 INTRODUCTION

The previous chapter focused on research findings and literature control. The findings were categorised according to the main themes and sub themes, namely: varied maternal knowledge on exclusive breastfeeding, health education content on breastfeeding, recommendations from breastfeeding mothers, positive support from health services, positive support from family and friends, negative family support leading to mixed or formula feeding, lack of supportive work environment, cultural perceptions about the causes of crying in babies, and social influences leading to non-exclusive breastfeeding.

In this chapter, the conclusion of the study, limitations of the study and recommendations based on the research objectives were met. The main aim of the study was to explore the factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre in Mopani District, Limpopo Province, using the qualitative research method and employing the phenomenological research design to address the research question.

- The objectives of the study were to explore and factors contributing to exclusive breastfeeding for the first six months.
- To describe the factors contributing to exclusive breastfeeding for the first six months.

The objectives of the study were met because the mothers were able to give their perceptions of factors contributing to exclusive breastfeeding. These factors include maternal knowledge (see Chapter 4); the kind of support they received from the health system, positive and negative; how they managed to resist negative influences from family and the community; and their recommendations that can assist in the interventions needed to promote exclusive breastfeeding for the first six months.

5.2 SUMMARY

This chapter draws conclusions on the objectives of the study and recommendations on the findings of the analysis of qualitative data. The researcher summarised the findings of the study. The study generated three themes from the data because of recurring regularities. The themes were discussed through literature control. Factors contributing to exclusive breastfeeding reflected on the emerged themes. Some women, with support from health services and positive support from the family, succeeded in exclusive breastfeeding, and resisted negative pressure. Recommendations from breastfeeding mothers will assist working mothers to exclusively breastfeed their infants for the first six months by expressing breast milk and putting it in refrigerator for use while they are at work. The participation of all stakeholders, including doctors and other health workers to educate mothers on the importance of exclusive breastfeeding at every contact with mothers. Nurses as role models should desist from preaching exclusive breastfeeding, and practise what the grannies advise them to do in spite of their knowledge.

5.3 RECOMMENDATIONS

The following recommendations were made:

Practice

- Strengthening breastfeeding counselling during antenatal and post-natal sessions to mothers.
- Making use of the family-centred approach during breastfeeding counselling by including fathers and educating grandmothers and the community at large about the importance of exclusive breastfeeding; avoiding traditional practices that do not support exclusive breastfeeding up to six months; and reconciling cultural norms with WHO recommendations.
- Health workers to be updated with skills to manage mothers' breastfeeding problems and to practice what they are teaching the mothers to do.
- Special attention given to first time mothers with practical skills on the correct way of feeding the baby and obtaining feedback and continuous support for school going mothers.

- Doctors should also participate in the promotion, protection and support for breastfeeding by providing counselling during prenatal and postnatal care at every contact with the mothers.
- Mother to mother support should be promoted by the health facilities
- Better support for working mothers, including extending paid maternity leave from four to six months, working part-time arrangements, facilities for expressing and storing breast milk, and breaks for mothers to breastfeed at work.
- Empowering mothers and fathers to anticipate increased crying of the baby from two weeks after birth; that it is normal for the baby to cry; and teach them on effective strategies to calm a crying baby; and the mother to breastfeed the baby on demand.

Education

- Training of health care workers on the ten steps of successful breastfeeding to enhance exclusive breastfeeding and promote its success.

Research

- Further research is needed to explore perceptions of fathers and grannies regarding exclusive breastfeeding.

5.4. STRENGTHS AND LIMITATIONS

5.4.1Strengths

- The researcher interviewed all mothers who took part in the study, using their language, which is Xitsonga. They were able to express themselves in their own language and gave their perspectives on factors that contribute to exclusive breastfeeding.
- The fact that there are solutions to all the negative influences of exclusive breast feeding, gives a picture that exclusive breast feeding for the first six months is possible for most mothers.
- Data saturation was reached with nine participants selected by convenience sampling.

- The recommendations will be used to improve the low exclusive breast feeding rate in this community.

5.4.2 Limitations

- Social desirability bias in the study could have been introduced by the participants by telling the researcher what they think she wanted to hear and hiding their actual breast feeding practices because she is working in that facility.
- Personal values of the researcher can affect data collection and interpretation of results as she is the manager at the study site.

5.5 CONCLUSION

This chapter outlined the conclusion, limitations and recommendations of the study. Key findings were presented on the perceptions of mothers on the factors contributing to exclusive breast feeding as emerged from the study. It is considered that the implementation of the recommendations for the improvement in education of health care workers, the content of health education and practice particularly for working mothers and school going mothers will have an impact on improving the babies that are exclusively breastfed for the first six months.

LIST OF REFERENCES

Agho, K.E., Dibley, M.J., Odiase, J.I. & Ogbonmwan, S.M., 2011. Determinants of exclusive breastfeeding in Nigeria. *BMC Pregnancy and Childbirth*, *11*(1), 2.

Anney, V.N., 2014. Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies* (5):2, 272-281

Aubel, J. and Alvarez, M., 2011. The roles and influence of grandmothers and men:

Evidence supporting a family-focused approach to optimal infant and young child

nutrition. Washington, DC*: Infant and Young Child Nutrition Project/PATH*, 2011.

Aveyard, H.2014. guide Doing a literature review in health and social care, a practical 2nd edition, Berkshire Great Britain

Binns, C. and Lee, M.K., 2019. Breastfeeding and Public Health Impacts. In Oxford Research Encyclopaedia of *Global Public Health*

Bisi-Onyemaechi, A.I., Chikani, U.N., Ubesie, A.C., Chime, P.C. and Mbanefo, N.R, 2017. Factors associated with low rate of exclusive breastfeeding among mothers in Enugu, Nigeria*. International Journal of Research in Medical Sciences*

Chaudhary, R.N., Shah, T. and Raja, S., 2011. Knowledge and practice of mothers

regarding breast feeding: a hospital based study*. Health Renaissance*, 9(3).

Creswell, J. W. 2013. Qualitative inquiry & research design: Choosing among five approaches 4th edition, Thousand Oaks, CA: Sage Publications

Dachew, B. A., & Bifftu, B. B.2014. Breastfeeding practice and associated factors

among female nurses and midwives at North Gondar Zone, Northwest Ethiopia: a

cross-sectional institution based study. *International breastfeeding journal*, *9*, 11.

Dodgson, J.E. 2010. Breastfeeding and weaning practices among Hong Kong mothers: a prospective study*. BMC Pregnancy and Childbirth,* 10(1):27.

Doherty, T, Sanders, D, Jackson, D, Swanevelder, S, Lombard, C, Zembe, W. Chopra, M, Goga, A., Colvin, M, Fadnes, L.T. & Engebretsen, I.M. 2012. Early cessation of

breastfeeding amongst women in South Africa: an area needing urgent attention to improve child health. *BMC Pediatrics,* 12(1): 105.

Du Plessis, L., Peer, N., English, R. and Honikman, S., 2016. Breastfeeding in South Africa: are we making progress*? South African Health Review*, 2016(1)

Frans, R.A., Malema, R.N. and Matlala, S.F., 2015. Knowledge and practices of mothers regarding exclusive breastfeeding in the Mahwelereng local area of the Limpopo Province, South Africa*. African Journal for Physical Health Education,*

Recreation and Dance, December (supplement 1: 4), 812-825

Frota, M.A., Lopes, M.F., Lima, K.F., Sales, C.D.O.C.B. and da Silva, C.A.B., 2016 Interfaces of the discontinuation of breastfeeding. *Acta Scientiarum. Health Sciences,* 38(1).

Galloway, H.J. 2013. *A Social* Work *Empowerment Programme for Foster Parents* of Sexually Abused Children*,* Doctoral dissertation, North-West University, Potchefstroom Campus.

Ghanbarnejad, A., Abedini, S. and Taqipoor, L., 2014. Exclusive breastfeeding and its related factors among infants in Bandar Abbas City, Iran*. Journal of Babol University of Medical Sciences, 16(1).*

Greater Tzaneen Municipality. 2018. Final approved IDP 2018-2019 budget. available from http:// www.greatertzaneen.gov.za/ budget documents accessed 21November 2018

Goosen, C., McLachlan, M.H. and Schubl, C., 2014. Factors impeding exclusive breastfeeding in a low-income area of the Western Cape province of South Africa. *Africa Journal of Nursing and Midwifery,* 16(1).

Gupta, P.M., Perrine, C.G., Chen, J., Elam-Evans, L.D. and Flores-Ayala, R., 2017. Monitoring the World Health Organization global target 2025 for exclusive breastfeeding: Experience from the United States*. Journal of Human Lactation,* 33(3)

Haroon, S., Das, J.K., Salam, R.A., Imdad, A. and Bhutta, Z.A., 2013. Breastfeeding promotion interventions and breastfeeding practices: a systematic review. *BMC Public Health,* 13(S3).

Hendaus, M.A., Alhammadi, A.H., Khan, S., Osman, S. and Hamad, A., 2018

Breastfeeding rates and barriers: a report from the state of Qatar. *International Journal of Women's Health, 10*

Jama, N.A., Wilford, A., Masango, Z., Haskins, L., Coutsoudis, A., Spies, L. and 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(1).*

Jia Choo, P & Ryan, K. 2016. First time mothers experiences of breastfeeding in Singapore. Proceedings of Singapore Healthcare 25(1): 5-12

Kimani-Murage, E.W., Wekesah, F., Wanjohi, M., Kyobutungi, C., Ezeh, A.C., Musoke, R.N., Norris, S.A., Madise, N.J. & Griffiths, P*., 2015.* Factors affecting actualisation of the WHO breastfeeding recommendations in urban poor settings in Kenya*. Maternal & Child Nutrition, 11(3).*

Kohan, S, Heidari, Z & Keshvari, M. 2016. Iranian Women's Experiences of Breastfeeding Support: a Qualitative Study*. International Journal of Paediatrics,* 4(10): 3587-3600.

Latkin, C. A., Edwards, C., Davey-Rothwell, M. A., & Tobin, K. E. 2017. The relationship between social desirability bias and self-reports of health, substance use, and social network factors among urban substance users in Baltimore Maryland*. Addictive Behaviors*, *73*, 133

Leurer, M.D. & Misskey, E. 2015. "Be positive as well as realistic": a qualitative description analysis of information gaps experienced by breastfeeding mothers *International Breastfeeding Journal*, *10*(1): 10.

Martin-Wiesner, Patricia. 2018. A Policy-Friendly Environment for Breastfeeding: A review of South Africa's progress in systematising its international and national responsibilities to protect, promote and support breastfeeding. Johannesburg: DST-NRF Centre of Excellence in Human Development. URL: https://www.wits.ac.za/coe-human/coe-research-grants/coe-research-andadvocacyon-breastfeeding /breastfeeding policy review.

Matsuyama, A, Karama, M, Tanaka, J & Kaneko, S. 2013. Perceptions of caregivers about health and nutritional problems and feeding practices of infants*:* a

qualitative study on exclusive breast-feeding in Kwale, Kenya. BMC Public Health, 13(1): 525.

Mekuria, G & Edris, M., 2015. Exclusive breastfeeding and associated factors among mothers in Debre Markos, Northwest Ethiopia: a cross-sectional study. *International Breastfeeding Journal,* 10(1:1

Mgongo, M, Hussein, T.H & Stray-Pedersen, B & Vangen, Siri & Msuya, S.E & Wandel, M. 2019. Facilitators and Barriers to Breastfeeding and Exclusive Breastfeeding in Kilimanjaro Region, Tanzania: A Qualitative Study*. International Journal of Pediatric 1-7. 10.*

Mokone, M. S. 2017. Infant feeding practices and factors associated among mothers of infants 1 to 12 months in Soshanguve clinics. Thesis M.Sc. Dietetics-Sefako Makgatho Health Sciences University.

Mgolozeli, S.E. & Shilubane, H.N. 2015. Factors contributing to mixed feeding practices amongst mothers and caregivers of neonates at Maloma village, Limpopo Province, South Africa. African *Journal for Physical, Health Education, Recreation and Dance,* December (Supplement 1:1), 84-94

Minas, A.G. & Ganga-Limando, M., 2016. Social-cognitive predictors of exclusive breastfeeding among primiparous mothers in Addis Ababa, Ethiopia. PloS One*, 11(10*

Mnyani, C.N, Tait, C.L., Armstrong, J, Blaauw, D, Chersich, M. F, Buchmann, E, Peters, R.P & McIntyre, J.A. 2016. Infant feeding knowledge, perceptions and practices among women with and without HIV in Johannesburg, South Africa: a survey in healthcare facilities*. International Breastfeeding Journal*, 12(1): 17.

Nduna, T, Marais, D & van Wyk, B. 2015. An explorative qualitative study of experiences and challenges to exclusive breastfeeding among mothers in rural Zimbabwe*. ICAN: Infant, Child, & Adolescent Nutrition,* 7(1).

Nguyen, P.H., Hajeebhoy, N. & Frongillo, E.A. 2014. Gaps between Breastfeeding Awareness and Practices in Vietnamese Result from Inadequate support in Health Facilities and Social Norms, 2. *The Journal of Nutrition*, 144(1).

Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J., 2017. Thematic analysis Striving to meet the trustworthiness criteria*. International Journal of Qualitative*

Methods, 16(1).

Odeny, B.M., 2014. Influencing women's attitudes and intentions to enhance exclusive breastfeeding in Kenya: Value of health education and peer counselling (Doctoral dissertation).

Oxford English Pocket Dictionary, 2015. Sv “Bias, Contributing factor. Mother and Perception” 4th edition, Oxford University Press, United Kingdom.

Palinkas, L. A, Horwitz, S. M, Green, C. A, Wisdom, J. P, Duan & Hoagwood, K. 2015. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Administration and Policy in Mental Health, 42(5)

Pillay, S, Sibanda, W, Ghuman, M. R & Coutsoudis, A. 2018. Infant feeding practices of teenage mothers attending a well-baby clinic in a public hospital in Umlazi, KwaZulu Natal, South Africa*, South African Journal of Clinical Nutrition,* 31(1).

Polit, D & Beck, CT.2017. Nursing Research: *Generating and assessing evidence* For nursing practice 9th edition China: Lippincott Williams & Wilkins

Rollins, N.C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C.K., Martines, J.C, Piwoz, E.G., Richter, L.M., Victora, C.G. and Group, T.L.B.S., 2016. Why invest, and what it will take to improve breastfeeding practices? The Lancet*, 387(10017)*

Rozga, M.R., Kerver, J.M. & Olson, B.H., 2015. Self-reported reasons for breastfeeding cessation among low-income women enrolled in a peer counselling breastfeeding support program*. Journal of Human Lactation, 31(1)*

Setia M.S*, 2016.* Methodology Series Module 3: Cross-sectional Studies*. Indian Journal of Dermatology, 61(3)*.

Siziba, L.P, Jerling, J, Hanekom, S.M & Wentzel-Viljoen, E. 2015. Low rates of exclusive breastfeeding are still evident in four South African provinces*. South African Journal of Clinical Nutrition,* 28(4).

Smith, J, & Noble, H. 2014. Bias in research. *Evidence-Based Nursing,* 17(4).

Sun, K., Chen, M., Yin, Y., Wu, L. & Gao, L., 2017. Why Chinese mothers stop breastfeeding: mothers’ self-reported reasons for stopping during the first six months. *Journal of Child Health Care, 21(3)*

Tampah-Naah, A.M. & Kumi-Kyereme, A., 2013. Determinants of exclusive breastfeeding among mothers in Ghana: a cross-sectional study*. International Breastfeeding Journal, 8(1).*

Tarrant*,* M, Fong, D, Wu, K.M, Lee, I.L., Wong, E.M, Sham, A., Lam, C *& Thet, M.M,* Khaing, E.E, Diamond-Smith, N, Sudhinaraset, M, Oo, S & Aung, T. 2016. Barriers to exclusive breastfeeding in the Ayeyarwaddy Region in Myanmar: Qualitative findings from mothers, grandmothers and husbands. *Appetite,* 96.

Tedder, J., 2015. The roadmap to breastfeeding success: teaching child development to extend breastfeeding duration. *The Journal of Perinatal Education*

Vijayalakshmi, P, Poreddi, Sushela, T, & Mythili, D. 2015. Knowledge, attitudes, and Breastfeeding practices of postnatal mothers: A cross sectional survey, *International Journal of Health Sciences*, 9(4): 36.

Wanjohi, M., Griffiths, P., Wekesah, F., Muriuki, P., Muhia, N., Musoke, R.N., Fouts, H.N., Madise, N.J. & Kimani-Murage, E.W. 2016. Sociocultural factors influencing breastfeeding practices in two slums in Nairobi, Kenya. *International Breastfeeding Journal,* 12(1): 5.

Xuan, N.T.T. & Nguyen, N.T., *2018.* breastfeeding experiences of working mothers in Vietnam*. Belitung Nursing Journal, 4(3).*

World Health Organization and UNICEF, 2014. Global *nutrition targets 2025: breastfeeding Policy Brief. WHO.*

ANNEXURE A1: INTERVIEW GUIDE

Section A: Biographic Data

1. Age:
2 Parity:
3 Occupation:
4 Highest educational standard:
5 Age of the baby:

Section B: Questions

Central question: In your view what do you think are the factors contributing to exclusive breastfeeding for the first six months?

Follow-up Question

- Could you please tell me for how long have you been breastfeeding your baby?
- Do you breastfeed exclusively, meaning you are giving only breast milk, no water and no supplements?
- How do you feel about it?
- Did you receive any advice, education or support on breastfeeding from clinic, friends or family?
- Do you experience any difficulty in breastfeeding (social, emotional, cultural, religion, psychological, environmental, work, family and friends how do you feel about it?
- Are there any forbidding factors that stop you from breastfeeding?
- Are there any more things that you wanted to share with me?

ANNEXURE A2: INTERVIEW GUIDE IN XITSONGA

Pulani ya swivutiso leswi nga ta vutisiwa

Xiyenge xo sungula

Vu titivisi

- Malembe
- Vutswari
- Ta ntirho
- Tidyongo leti u nga tifikelela to hetelela.
- Tinhweti ta nwana

Xiyenge xa B

Xivutiso nkulu

Ku ya hi vonele ra nwina I yini leswi nga kotisaka vamhani ku mamisa vana va vona vele ntsena ku ringana tinhweti ta tsevu?

Swivutiso leswi nga vutisiwaka

- Nwana wa wena u nwi mamisa nkarhi wo tani hi kwini ku fika sweswi?
- Xana u mamisa vele ntsena ke? , aku na mirhi yi nwana ya le thlelo leyi u nwi nwisaka yona xana
- U ti twa njhani loko u mamisa vele ntsena?
- Xana u kumile tidyondzo mayelana no mamisa e kliniki, kumbe eka vanghana, kumbe va ndyangu ke?
- Xana unga va u hlangane na swi rhalanganyi leswi nga ku tsandzisa ku mamisa ke? ku ngava eka vanhu lava u hanyaka na vona, emoyeni, eka nzhavuko, ekerekeni, entirhweni, eka vamuti kumbe vanghana xana u twe njhani hi swona?
- Xana I yini leswi nga ku sivela ku mamisa nwana vele xana?
- Xana swi kona leswi u tsakelaka leswaku hi burisana hi swona ke

ANNEXURE A3: INTERVIEW GUIDE IN SEPEDI

Polani ya dipotšišo: kakanyo ya bomma mabapi le tše di ka dirang gore Bomma ba nyantšhe bana ba bona letswele fela di kgwedi tše tshela

Seripa sa Pele (A)

Bophelo ka kakaretšo

- Mengwaga:
- Botsoadi/Pelego:
- Mmereko:
- Mmphato wa godimo wo o phasitšego wa mafelelo:

Seripa sa Bobedi (B)

Potšišo kgolo

Ka kakanyo tša gago ke dife dilo tšeo di dirang gore bomma ba kgone go nyantšha bana ba bona letswele fela tekano ya kgwedi tše tshela?

Dipotšišo tše di ka latelago

- Potšiso ya go latela, ke kgopela gore o mpotše gore o nyantšhitše ngwana kgwedi tše kae?
- A o mamiša ngwana letswele fela naa, Ga o mofe meetse le dihlare?
- O e kwa bjang ge o mamisa letswele fela?
- A o hweditse melaetša go ba dithuto ka go mamiša ngwana gotšwa kliniking, goba bagwereng, goba ba lapa la gago?
- A o hwetša mathata ge o mamiša ngwana naa? (e ka ba mmoyeng wa gago, gotšwa bathong ka bophara, dikerekeng, mmerekong, setšo sa ka gae, ka gae goba bagwera?
- O na le tše di ilago di dira gore o seke wa nyantšha?
- Go na le dilo tše dingwe tše o nyakago go bolela ka tšona?

ANNEXURE B: INTERVIEW TRANSCRIPTS

PARTICIPANT 1: Student, 18 years, Primiparous.

Researcher	In your view what are the factors contributing to exclusive breastfeeding for the first six months?
Participant	Doctors and everybody in the hospitals of the country must always remind mothers for how long are they supposed to exclusively breastfeed their babies before giving other solids, and they must tell the mothers what will happen to the baby if they do not exclusively breastfeed, this will make mothers to be afraid of giving their babies other food before six months and they must always know that the baby is supposed to be exclusively breastfed for how long before giving other food.
Researcher	Ok I hear you, for how long have you been breastfeeding your baby till now?
Participant	I have been breastfeeding the baby for the past five months.
Researcher	Are you breastfeeding exclusively?
Participant	No, I am also giving the baby a bottle.
Researcher	How do you feel about it if the baby is not breastfeeding only?
Participant	I feel good about it because the dietician gave me a cup to express so the baby is getting milk while I am at school.
Researcher	Oh you are giving expressed breast milk and not formula.
Participant	Yes.
Researcher	Ok, do you give water or soft porridge?
Participant	Not yet.
Researcher	Who is looking after your child when you are at school?
Participant	My Mother is looking after my child.
Researcher	Is your mother not giving other foods when you are at school
Participant	No my mother knows that the baby is not supposed to be given water or solids, I first asked her when I was coming from the

	hospital that when is the baby supposed to eat and she said after six months and she feeds the baby with expressed milk only while I am at school.
Researcher	So your baby is being exclusively breastfed.
Participant	There is something called breast pump which I bought from the chemist, which I use to express the breast milk and put in the cup that the dietician gave me, I then pour inside the bottle put in the refrigerator and they take the breast milk out of the refrigerator and put it in direct sunshine to warm it before they feed the baby with a bottle.
Researcher	Did you receive any advice, education or support on breastfeeding from the clinic, friends or family?
Participant	I got a lot of education from the clinic, they taught us not to mix feed, they said if you breastfeed give breast milk only if you give formula give it alone. Because if you give formula the teat of bottle scratches the tongue of the baby and if you breastfeed the baby may be affected and get mother to child transmission of HIV and other STI's. Friends just told me that the baby must be breastfed and my Mother said I must breastfeed the baby and eat well so that I do not lose weight during breastfeeding. I must always test for HIV, so that I can safely breastfeed the baby.
Researcher	According to you what does it assist to breastfeed the baby?
Participant	To exclusively breastfeed the baby it assist to have good vitamins and good health. And the baby will not experience abdominal pains and prevent many diseases.
Researcher	So was your baby not crying to such an extent that they said was hungry?
Participant	No, she was not crying but when I am visiting my grandmother when the baby cries she would say it is due to hunger.
Researcher	Your grandmother?
Participant	Yes she would say the baby is hungry but, because my mother knows when the baby is supposed to eat she would tell my

	grandmother that the baby is not hungry, she is expanding some parts of her body.
Researcher	Did you experience any difficulty that prevented you from breastfeeding?
Participant	I was not taking a lot of what people were saying that if you breastfeed a baby who Is not eating, the baby will suck you and you will lose a lot of weight I was not listening to people I was taking only what I was told at the clinic because they are the ones that assist us when we have challenges I only know that the baby is supposed to be breastfed.
Researcher	Are there any forbidding factors that stop you from breastfeeding?
Participant	No, I was not forbidden to breastfeed the baby I am breastfeeding.
Researcher	Do you breastfeed your baby when you come back from school?
Participant	I breastfeed when I come back from school and even before I sleep I breastfeed the baby.
Researcher	Are there any more things that you wanted to share with me concerning breastfeeding?
Participant	Yes, I would like us to talk about diseases or complication of using feeding bottles.
Researcher	Ok tell me, What are the disadvantages of using feeding bottles
Participant	Some people do not clean the bottles, they sometimes after feeding the baby they just rinse the bottle with water only, and feed the baby. There are different types of germs inside the bottle, and after feeding they do not put the cap on the teat to protect it and later they feed the baby again without cleaning the teat it causes the baby to be sick with different diseases and sometimes the doctors at the hospital are unable to know the cause of the illness and the mother forgets that she fed the baby with a dirty bottle full of different germs. They tell themselves that the germs are not visible but, they do affect the baby inside the

	tummy and can make the baby to be sick and sometimes the baby dies due to small things.
Researcher	What advice would you give to mothers who are unable to breastfeed exclusively?
	Mothers who are unable to exclusively breastfeed must look at the health of their babies and love their babies as they love themselves. They must breastfeed their children exclusively because if they don't they will be hurting their babies and them as well because it is their baby. If a mother is loving his or her baby she must always do what is good for the baby so that when she look at her baby the baby must have good health. Mothers must listen to what they are told to do at the hospitals because it is important. Others undermine what they are told because when they arrive at the village they say nurses give their own babies food when they arrive at home. So we must not take what people say we must do what is good for the baby so many parents who are unable to exclusively breastfeed their babies is because they listen to other people when the baby cries, cause some babies cry a lot they say the baby is hungry I was told that it is not because of hunger they said the baby is opening up some parts of the body and is growing so parents think that the baby is hungry and give the baby solids and fail to reach the six months.
Researcher	Did you experience any challenge of insufficient breast milk?
	No, mine was too much and dripping from the breasts. When I was given advice that a baby must be given expressed breast milk I bought a breast pump and used it to express so my breast were no longer dripping milk. At first I did not know about it after delivery when I returned to school the first week the baby was given formula so I came to the clinic and the dietician taught us and gave me a cup to use for expressing the breast milk .I told them at home and they understood it and I changed from formula to giving breast milk only and gave the formula to someone who was using it.

Researcher	So ok it means after the birth of your baby there was mixing.
Participant	Yes.
Researcher	For how long?
Participant	For a week because I came back from the hospital and the following Saturday I came to the clinic.
Researcher	Did you forget what you were taught about?
Participant	I was taught after delivery at the clinic before then I did not know
Researcher	Were you not taught about exclusive breastfeeding during pregnancy, did they not include it? Oh so were only taught after delivery.
Participant	Yes there was no dietician there were only nurses and doctors
Researcher	They were not talking about it.
Participant	Yes at the hospital they were not talking about breastfeeding , they only told us that we must always be clean, they do not want cutex and sometimes ear rings when we go to the hospital.
Researcher	Oh you got this teachings after delivery when you were pregnant you were not taught?
Participant	About exclusive breastfeeding yes.
Researcher	About exclusive breastfeeding, when you were pregnant?
Participant	They were teaching me about pregnancy.
Researcher	They only taught you about pregnancy never taught you about exclusive breastfeeding, ok.
Participant	Yes.
Researcher	Ok thank you for your time.

PARTICIPANT 5: Student, 29 years, multiparous

.

Researcher	Can you please share with me according to your view what are the factors contributing to exclusive breastfeeding for the first six months?
Participant	I breastfeed the baby, I don't mix with formula only breast milk, because it is good for the baby to be breastfed. Breastfeeding protects the baby against many diseases and make the baby to grow well, when you feed the baby with solids before six months the abdomen becomes distended and baby might

	develop difficulty in passing stools. If the baby is breastfed only there is no difficulty in passing stools. It is important to breastfeed the baby without water or solids for the first six months, because before six months the abdomen is soft and delicate and cannot accommodate food only breast milk is suitable for the baby.
Researcher	I can hear what you are telling me that breast milk is good but what I want to know is, according to your perception what are the factors that can assist mothers to breastfeed exclusively for the first six months, what can assist the mothers to exclusively breast their babies for the first six months?
Participant	Ok, what can assist us as mothers?
Researcher	Yes, to be able to reach the six months of exclusive breastfeeding.
Participant	What I think is as I am not working it is good for me to breastfeed and if I am working I should also be with the baby for the first six months because if I leave baby with someone even if I have expressed the breast milk they can give the b solids before the six months.. So the best thing is for the mother to stay with the baby for six months before going to work, It is a challenge because the child mi can also give solids to the baby if I can leave the baby and go to work before si months. On the other hand we have grannies who always tell us that the baby n be given food to eat before six months because the baby cannot be satisfied wi breast milk only. My grandmother is always telling me to give the baby solids ar this is disturbing my mind because is not what I want to do for my baby and I became confused not knowing what to do and become tempted when the grandmother insist that the baby be fed, but if I can be with the baby I cannot gi solids I will breastfeed the baby exclusively for the first six months. Another challenge is lack of support from the father of the baby because when they teac about exclusive breastfeeding the father of the baby is not there so, he would in that the baby be given solids because he did not hear the nurses when they tau us and when the baby cries he would say that the baby is not satisfied I must gi the baby soft porridge because is what the grandmother says, so he doesn't wa his child to die of hunger. Ya is a challenge that I have experienced with the fath my baby, he doesn't know that a baby is not supposed to be given solids and w before six months. The most problematic is my grandmother because she want baby to be given water and solids before six months when I visit her, but becau

	am not staying with her I am able to continue with exclusive breastfeeding. Ano thing that can assist is for the. Mother to stay at home with the baby for six mon because even if you can leave expressed breast milk in the refrigerator you can never be sure of what will happen during your absence.
Researcher	Ok I hear what you are saying what did your grandmother say about this?
Participant	She said is culture that the baby must eat solids while on breast milk this is how they have been doing since long and that is how they grew up .When a baby cries is due to hunger, the baby must be fed and sleep the whole day and wake up again when hungry, that's what they know that when a baby cries is due to hunger so the baby must be fed so that he or she can stop crying because the baby is experiencing pains on the tummy when hungry, that is how grannies are.
Researcher	Oh they say the baby is having pains on the tummy and must not be breastfed only.
Participant	Yes they say the baby is experiencing pains on the tummy that is why the baby is crying and the food will stop the pains.
Researcher	Did you receive any advice, education from the clinic Or friends about exclusive breastfeeding.
Participant	Yes I did receive health education from the clinic, the nurses start teaching us during pregnancy that after giving birth we must breastfeed the baby for the first six months even after delivery the nurses continue teaching us. There are community care givers who move around the villages and teach us as well that the baby must be breastfed exclusively but mostly is the clinic that emphasises that the baby must be exclusively breastfed for the first six months.
Researcher	How long have you been breastfeeding your baby till now.
Participant	My baby is two months old, I am breastfeeding her since birth and haven't given her anything to eat except breast milk. I will give solids after six months that is my intention.
Researcher	Are you exclusively breastfeeding, no water?
Participant	Yes I am not giving water only breast milk.
Researcher	How do you feel when you breastfeed exclusively.

Participant	I enjoy to breastfeed my baby a lot and I can see that the baby is always enjoying the breast milk and it makes me feel good I enjoy it. When I look at my baby he looks fresh and the breast milk is good for her , I don't see any problem and my baby seems to be satisfied after feeding with the breast milk and if the baby cries it may be due to wanting to sleep and some other discomfort like wet or soiled nappy but not hunger.
Researcher	Did you get any support or education concerning exclusive breastfeeding for the first six months from family and friends?
Participant	I received education about exclusive breastfeeding from my mother and not from friends. Friends will tell you that they gave their babies solids at the age of one week due to crying.
Researcher	Where does your mother say she was thought?
Participant	She said she was thought at the clinic.
Researcher	Oh she was also thought at the clinic.
Participant	Yes.
Researcher	So she passed the knowledge to you.
Participant	Yes.
Researcher	I heard you talking about your grandmother, are you not teaching her when you come back from the clinic?
Participant	My grandmother does not want to hear anything she says the hospitals are fooling us they don't know anything about feeding a baby more than we the old people who have been living for long.The hospitals are new they don't know anything and does not agree when I tell her she totally disagrees and would tell you that a baby must be fed with solids it is our culture.
Researcher	They say is culture.
Participant	Yes
Researcher	Do you experience any breastfeeding difficulties?
Participant	I did not experience any challenges except when I visited my grandmother my baby was one month old when she said the baby is not growing because she is not being fed with solids the baby must be fed, that is the challenge I had and I was emotionally disturbed. When I looked at the baby I became convinced that the baby is not growing but on the other hand I decided to wait and see what happens going forward,

	but afterwards I saw the baby growing well ,it was a challenge because she was insisting that the baby must be given solids and I refused .
Researcher	Did your grandmother eventually understand you?
Participant	Yes, she only understands because I am refusing she said if she can remain with the baby she will give the baby food and I will find the baby satisfied and asleep. I am even afraid to leave the baby with her because she will give food to the baby.
Researcher	Are there any more things that you wanted to share with me that I did not ask about concerning exclusive breastfeeding for the first six months?
Participant	Yes you did not ask me if I'm not experiencing challenges during breastfeeding. What I know is that giving the baby food can make baby not to pass stools for some days but, I have observed my baby experiencing that as well not passing stools for up to four days but feeding on breast milk only.
Researcher	Was the baby crying?
Participant	No.
Researcher	It means the abdomen is working well
Participant	The baby was not crying but I was just concerned because I am breastfeeding only.
Researcher	I think it is nothing serious because the baby is not crying it does happen with breastfed babies.
Participant	Ok thanks.
Researcher	What about the father of the baby the health education that you get from the clinic don't you share with him?
Participant	I do share with him but when the baby starts crying he says I must give the baby food because the baby is hungry, I think he also need to be taught by the nurses, he does not take what I tell him he insist that the baby is hungry.
Researcher	Oh he wants to be told by the nurses.
Participant	He must be told by the nurses it is good that he also know that the baby is not supposed to be given water and solids because he says what the granny is saying.
Researcher	Is he also disagreeing that the baby must be breastfed only for the first six months

Participant	Yes he doesn't agree, Grannies and fathers should also be taught by the nurse so that they can hear for themselves.
Researcher	Have you tried to invite him to accompany you to the clinic
Participant	My husband does not want to go to the clinic he would say he need a letter to call him to come to the clinic if not he will not come, it means i am the one who is saying he must go to the clinic.
Researcher	What about the community health workers don't they teach him when they do home visits?
Participant	He is not available at home because of work.
Researcher	Oh ,he is not available because the community health workers only work during the week and not during the weekend
Participant	Yes they find them due to work but the community home based carer can teach us very well they need to target grandmothers and fathers
Researcher	In your view if I hear you well you saying that if fathers and grandmothers can be taught would it be good.
Participant	It would be good for the fathers and grannies also to be taught why are babies supposed to be fed with breast milk only for the first six months.
Researcher	Oh ok thank you for your time.

PARTICIPANT 6: Employed, 36 years, multiparous.

Researcher	What in your view can contribute to exclusive breastfeeding for the first six months?
Participant	According to me ,you as nurses should continue educating expectant mothers the importance of exclusive breastfeeding for the first six months, another thing that makes mothers stop exclusive breastfeeding is our parents, which means that the health education that you give should also be given to them when they come to the clinic so that they may know the importance of exclusive breastfeeding for the first six months
Researcher	Oh our parents at home do not understand
Participant	Yes they don't understand why a baby should be fed on breast milk only for the first six months .Another thing that is challenging some

	mothers is the noncompliance to exclusive breastfeeding by some nurses who give their babies solids before six months which discourages mothers to exclusively breastfeed their babies and not see the importance of exclusive breastfeeding for the first six months and saying if nurses cant then why should I not feed my baby with solids
Researcher	What do you think can be done to close this gap of nurses not complying with exclusive breastfeeding?
Participant	I don't know but if your neighbour is a nurse and you see her giving her baby solids before the baby is six months old I end up giving up as well saying that if a nurse cannot breastfeed exclusively for the first six months I do not see the importance of exclusive breastfeeding for the first six months.
Researcher	Can you please tell me for how long have you been breastfeeding your baby?
Participant	I breastfed my baby for two months
Researcher	You were breastfeeding only without giving water.
Participant	Yes no water ,no solids They were always shouting at me saying can you spend six months without eating ,breast milk is eroding inside the baby s tummy only breast milk.
Researcher	Were you pushed by the noncompliance of nurses?
Participant	No ,it was not the issue of nurses but my parents at home,
Researcher	Ok ,it was not the issue of nurses, it was parents and what were they saying?
Participant	They were always shouting at me saying can you spend six months without eating, only breast milk.
Researcher	How did they explain it?
Participant	Who, the parents were always saying can you spend each and every day without eating anything
Researcher	Was the baby crying a lot?
Participant	No my baby was not crying a lot.
Researcher	Oh the baby was not crying a lot

Participant	Yes but others are pushed by a baby who is crying a lot to give solids before six months.
Researcher	So you were tired of being shouted at on daily basis
Participant	Yes
Research	So you just told yourself that it is better to give the baby solids ?
Participant	Yes, but another challenge was that I was about to go back to work and asked myself what will happen to the baby when I go back to work . I was bound to start giving formula so that I can see if the baby is tolerating it .the formula that I was advised to give my baby made him to have a running stomach, so I eventually introduced him to solids thinking that there is nothing left in his tummy.
Researcher	Did you continue with this formula that was causing the running stomach for the baby?
Participant	No, I changed it.
Researcher	Did you not receive health education that you should breastfeed exclusively?
Participant	Yah, I received it.
Researcher	Did they not tell you what to do when it is time to go back to work?
Participant	I remember when I was going to deliver the baby, after delivery just before you are discharged they called us in a private room one by one and they asked me if i was working and i replied yes, they asked me how are you going to feed the baby? I told them i will feed the baby with breast milk only until i return to work, and when i go back to work I will switch to formula because they told us not to mix feed with breast and formula because it is not good for the baby.
Researcher	How long did your maternity leave last?
Participant	My maternity leave was four months i spent three months with the baby and one month I was still expecting.
Researcher	Ok , one month you used it during pregnancy.
Participant	Yes.
Researcher	Ok so your baby was introduced to solids before you returned to work.
Participant	Yes.

Researcher	You have already explained that you got the pressure to introduce solids to the baby from the family, your mother not understanding that the baby must be exclusively breastfed and they were saying breast milk can erode inside the baby's tummy. What about your friends did you get any advice from them?
Participant	I did not like seeking advice from friends, I had told myself that I would breastfeed the baby exclusively until I return to work
Researcher	Can you please explain to me what you told the nurses how you intend to feed your baby when you return to work?
Participant	I told them I will breastfeed the baby until I return to work after three months.
Researcher	Are you going home daily after work or not?
Participant	I go back home every day.
Researcher	Ok you are travelling daily.
Participant	Yes They also taught me about expressing the breast milk but my baby was refusing to drink the milk from a cup. I bought a breast. pump inside the package there was a feeding bottle which I used to feed the baby. so I used the pump to pump the breast milk, but the milk was not sufficient to sustain the baby until I return from work which means they should add formula. I was taught not to mix formula and breast milk. I finally decided to stop expressing and give the baby formula since I could not express enough breast milk and did not want to mix feed.
Researcher	Is there any accommodation for breastfeeding mothers at your work place where you can express the breast milk so that you can take it along home after work?
Participant	No , there is no breastfeeding accommodation at my work place.
Researcher	Ok, it is not available.
Participant	If there was a place to express the breast milk at work, it would have assisted me to exclusively breastfeed until six months, you know it was painful for me to stop my child from breastfeeding because I could see that it is going to give me a challenge because you must

	pay the baby care taker, buy formula and buy pampers I would have saved money by giving expressed breast milk only.
Researcher	The challenges that you encountered was lack of support from the family to breastfeed the baby exclusively and you did not have sufficient breast milk?
Participant	Yes..
Researcher	When you come back from work were you pumping and keeping the milk or were you discarding the milk?
Participant	I was not discarding the milk, I was putting it in the bottle.
Researcher	When you came back from work ,were you not continuing with breastfeeding?
Participant	I was breastfeeding as well.
Researcher	Ok.
Participant	Another challenge the baby was refusing the bottle while I was at work, he could differentiate between a nipple and a teat so I decided to stop breastfeeding and give only the formula.
Researcher	By the way you said you introduced solids at what age?
Participant	At the age of two months
Researcher	What about water?
Participant	I rarely give water to the baby.
Researcher	Were there any forbidding factors forbidding you to exclusively breastfeed the baby?
Participant	No.
Researcher	Are there any more things that you want to share with me?
Participant	What I observed during the time I was breastfeeding exclusively my baby looked fresh and did not have any challenges, and I was enjoying to breastfeed my baby. I did not have any one to support me. I could not get help when I was experiencing conflict with my mother. To be honest it was very much painful for me to stop my baby from breastfeeding
Researcher	Did you not think about going to the clinic?
Participant	I did not think about it but some other day I came to see the dietician here at the health centre and he gave me cups to express the milk

	and put it the refrigerator so that they can feed the baby while I was at work.
Researcher	What advice can you give to mothers out there?
Participant	What I can advise mothers is that breastfeeding is good for the baby, it is cheap. Those working mothers who are fortunate to hear my advice they must express breast milk in a cup and put it in a refrigerator , when the baby is still very young sometimes the milk is too much so they must not express and discard or leave breast milk to soil their clothes. They must pour it in a cup and refrigerate it so that they can later warm the milk and feed the baby and checking which milk was stored first and warm it. It is very cheap to breastfeed than to give formula.
Researcher	I heard some people saying that when you eat hot food and drink hot tea it stimulates milk production have you ever tried it during the time you were experiencing insufficient milk?
Participant	Yes I tried it, it does help.
Researcher	Ok thank you for your time

PARTICIPANT 9: Employed, 29 years, multiparous.

Researcher	In your view what do you think are the factors contributing to exclusive breastfeeding for the first six months?
Participant	As mothers we should decide and make a commitment to breastfeed our babies so that we see what happens, and we are not supposed to listen to what people are telling us. When a baby is in utero there is no food that the baby is eating so the baby can survive with best milk only for the first six months according to my view I think it can assist us if we can make that commitment we should not give gripe water and water and we must breastfeed only.
Researcher	How long have you been breastfeeding your baby till now?
Participant	I breastfed exclusively for one month and towards the end of the second month I started feeding the baby with formula only using a bottle.

Researcher	Did you get advice concerning breastfeeding and preventing cracked nipples at the clinic, family or friends?
Participant	I got health education from the clinic only about exclusive breastfeeding and was not taught about prevention of cracked nipples.
Researcher	What did they say?
Participant	They taught us that if you are a mother who is HIV positive if you opt to breastfeed it must be breastfeeding only, if you choose to give formula let it be formula only, no mixing and no water because breast milk contains water and food for the baby.
Researcher	What about friends?
Participant	I have never discussed this with friends.
Researcher	Oh ,you don't talk about it with friends and what about family?
Participant	My family knows that we are supposed to give breast milk only or formula no mixing of feeds because the baby may be affected with HIV.
Researcher	Did you experience any challenges that prevented you from exclusive breastfeeding for the first six months?
Participant	Yes I had challenges after breastfeeding the baby for one month. My nipples cracked and blood was coming out so I could not breastfeed the baby and I was afraid that the baby will come into contact with my blood I went to the clinic to see a dietician who advised me to feed the baby with formula, and he also gave me a cup to feed the baby.
Researcher	Oh, so you are feeding your baby with formula milk using a cup and no other foods.
Participant	I am using a bottle because the baby did not want to drink from a cup
Researcher	What happened to your cracked nipples did you get any remedy for them?
Participant	Yes I consulted the doctor and was healed.
Researcher	Can you please tell me more about the challenge that you had?
Participant	My nipples were very painful even when I tried to breastfeed they were very sore, and could not bear the pain and I also looked at my

	status of health it is not good so because there was blood coming out from nipples I was afraid it will affect the baby to be HIV positive, so that is the reason why I could not continue with breastfeeding the baby and started feeding the baby with formula.
Researcher	How do you feel about it if you are not breastfeeding the baby?
Participant	I don't feel good but I believe breastfeeding is more important than feeding the baby with formula. using a bottle. When you compare a breastfed baby and formula fed they are not the same a breastfed baby looks fresh. That is the problem that I came across that prevented me to exclusively breastfeed my baby.
Researcher	Did you receive any health education concerning exclusive breastfeeding during pregnancy?
Participant	They were teaching us that if you breast your baby it must be breastfeeding only and if you feed the baby with formula it must be the formula alone no mixing it is risky for the baby more especially if you are HIV positive.
Researcher	What do family members say about it?
Participant	They have accepted it and I am busy teaching them that the baby will start eating solids when she is six months old and they can see the baby growing without being given other foods.
Researcher	Have you ever leave your baby with family members?
Participant	No ,I have never left the baby with someone else, I am always with my baby wherever I go because I am not sure if they will not feed her if she cries, and my baby doesn't cry a lot because when a baby cries we always say it is because of hunger I feed my baby and when she is satisfied she sleeps .
Researcher	What does the father of the baby say?
Participant	He doesn't have a problem he knows he was also taught at the clinic about exclusive breastfeeding for the first six months, and I told him that I want to exclusively breastfeed the baby because with the first baby I was misled by people to give food before six months but with this one I was determined to do the right thing for the baby but unfortunately I could not

Researcher	Is there any other thing you will like to share with me regarding exclusive breastfeeding for the first six months?
Participant	There is nothing more to share.
Researcher	Ok, thank you for sharing your experience with me, all we shared is confidential.

ANNEXURE C: LETTER FROM THE INDEPENDENT CODER

TO WHOM IT MAY CONCERN

14 October 2019

RE: Confirmation of independent coding

This letter serves to confirm that I conducted extensive independent coding for Martha Maponya. Results (transcripts) of her research were analysed and codes, subthemes and themes were developed.

We then exchanged the themes, subthemes and codes with Martha and met to discuss. The discussion involved comparing what had been developed and what she had until we agreed on final themes and subthemes.

Yours sincerely

Linda Shuro

Independent coder, MPH, PHD Student

ROUNDSADDLE
11 BOSBOK AVENUE, FAUNA PARK POLOKWANE
TEL: 083 244 3371; EMAIL: lindashuro@gmail.com

ANNEXURE D1: PERMISSION REQUEST TO THE PROVINCE

1739 Tshukudu Street
Lenyenye
0857
13/03/2019

The Research Coordinator Limpopo
Department of health
Polokwane

Re: Request for permission to undertake a research study on Mothers' perceptions of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre in Limpopo Province.

Dear Madam

My name is Nyabana Martha Maponya, I hereby wish to request for permission to conduct research at Mugodeni Grace Health centre. I am currently registered with the University of Limpopo as a part time student for Masters in Public Health. I am required to do research as partial fulfilment of Masters of Public Health and my topic is "Perceptions of mothers on the factors contributing to exclusive breastfeeding for six months at Mugodeni Grace Health Centre". The aim of the study is to explore the perceptions of mothers regarding the factors contributing to exclusive breastfeeding for six months. I have enclosed a proposal/protocol and ethical clearance from TREC.

Your favourable response will be highly appreciated.

Yours Sincerely,

Nyabana Martha Maponya
Email mnmaponya61@gmail.com cell 0736831346

ANNEXURE D2: PERMISSION REQUEST TO THE DITRICT

1739 Tshukudu Street
Lenyenye
0857
03/04/2018

The District Executive Manager
Mopani District
Giyani

Re: Request for permission to undertake a research study on Mothers' perceptions of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre in Limpopo Province.

Dear Madam

My name is Nyabana Martha Maponya, I hereby wish to request for permission to conduct research at Mugodeni Grace Health centre. I am currently registered with the University of Limpopo as a part time student for Masters in Public Health. I am required to do research as partial fulfilment of Masters of Public Health and my topic is "Perceptions of mothers on the factors contributing to exclusive breastfeeding for six months at Mugodeni Grace Health Centre". The aim of the study is to explore the perceptions of mothers regarding the factors contributing to exclusive breastfeeding for six months. I have enclosed a proposal/protocol and ethical clearance from TREC.

Your favourable response will be highly appreciated.

Yours Sincerely,

Nyabana Martha Maponya
Email mnmaponya61@gmail.com cell: 0736831346

ANNEXURE D3: PERMSSION FROM THE PROVINCE

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Ref: LP_201903_~~007~~ 005
Enquiries: Stander SS
Tel: 015 293 6650
Email: research.limpopo@gmail.com

Maponya NM

University of Limpopo
Private Bag x 1106
Sovenga
0727

Greetings,

RE: MOTHERS PERCEPTION OF FACTORS CONTRIBUTING TO EXCLUSIVE BREASTFEEDING FOR THE FIRST SIX MONTHS AT MUGODENI GRACE HEALTH CENTER IN LIMPOPO PROVINCE

Permission to conduct the above mentioned study is hereby granted.

1. Kindly be informed that:-
   - Research must be loaded on the NHRD site (http://nhrd.hst.org.za) by the researcher.
   - Further arrangement should be made with the targeted institutions, after consultation with the District Executive Manager.
   - In the course of your study there should be no action that disrupts the services, or incur any cost on the Department.
   - After completion of the study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
   - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   - The above approval is valid for a 1 year period.
   - If the proposal has been amended, a new approval should be sought from the Department of Health.
   - Kindly note, that the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated.

Head of Department

02/04/2019
Date

Private Bag X9302 Polokwane
Fidel Castro Ruz House. 18 College Street. Polokwane 0700. Tel: 015 293 6000/12. Fax: 015 293 6211.

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ANNEXURE D4: PERMISSION FROM THE DISTRICT

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
MOPANI DISTRICT

Ref: S4/2/2
Enq: Mohadi Isiraele
Tel: 015 811 6543

To Maponya NM
University of Limpopo

Re: PERMISSION TO CONDUCT RESEARCH IN MOPANI HEALTH FACILITIES: YOURSELF

1. The matter cited above bears reference
2. This serves to respond to the request submitted to research on the topic: **"Mothers perception of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre in Limpopo Province."**
3. It is with pleasure to inform you about the decision to permit you to conduct research at Mugodeni Grace Health Centre within Mopani District.
4. You will be required to furnish PHC authorities with this letter for purposes of access and assistance.
5. You are further advised to observe ethical standards necessary to keep the integrity of the facilities.
6. The Mopani District wishes you well in your endeavour to generate knowledge.

Director: Corporate Services
Date: 2019/10/22

ANNEXURE E1: PARTICIPANT'S INFORMATION LEAFLET

Title: "Mothers' perceptions of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre in Limpopo Province"

My name is Nyabana Martha Maponya I am a part time student registered for Master in Public Health at the University of Limpopo. I am currently conducting research as part of my studies. The study also aims to utilise its findings to offer recommendations to improve and enhance exclusive breastfeeding for the first six months after birth, which is very good for the baby and the mother as well.

The study will be conducted in the form of one-on-one interview and data to be collected will be recorded with your permission since it will help the researcher to review and analyse it for an improved quality of data. All the information recorded and discussed will be respected and be kept confidential as much as possible. Your demographic or personal details such as name, surname, and date of birth are not required since you will be anonymous for this study.

There is no danger or harm to participate in the study. Furthermore, the results of this study will be used for the researcher's dissertation. Should you wish to withdraw from the study at any time please feel free to do so, you will be requested to sign a consent form to withdraw with no coercion. For more information about this study, please feel free to contact me during office hours at 073 683 1346.

Should you be interested to participate in this study, please sign the consent form.

ANNEXURE E 2: PARTICIPANT LEAFLET IN XITSONGA

Nhloko mhaka: Papila ra xitiviso e ka lava tekaka xiphemu xa vulavisisi bya ku vulavurisana na vamanana hi mavonele ya vona mayelana na leswi nga va kotisaka ku mamisa vana va vona vele ntsena ku ringana tinhweti ta tsevu

Vito ra mina hi mina Nyabana Martha Maponya ndzi mudyondzi wa nkarhinyana wa univesiti ya Limpopo ndzi yisa tidyondzo ta mina emahlweni. Ndzi le ku endleni ka vulavisisi hinhloko mhaka leyi nga tsariwa laha henhla. Xikongomelo nkulu xa vulavisisi lebyi I ku humelerisiwi miehleketo yo antswisa ndlela leyi vana va nga kota ku mamisiwa vele ntsena ku ringana tinhweti ta tsevu leswi nga lulamela rihanyo ra vona na vamanana wa vona. Vulavisisi lebyi byi ta endliwa hi ndlela yak u vulavurisana haunwe unwe, hi ku nyikiwa mpfumelelo wa nwina wu ta tekiwa hi xiteka marito leswaku mulavisisi a ta kota ku ya hlela mimbulambrisano leyi. Ku vulavurisana hinkwako ku ta endleriwa e exihundleni Mavito ya nwina a ya nge humelerisiwi e rivaleni.

A ku nga vi na switandzhaku kumbe ku vavisiwa e mirini nale moyeni ku yisa emahlweni mbuyelo wu ta tirhisiwa hi mudzondzi e ka tidyondzo ta yena. Loko u tshika u ri na ku navela ku tshika ku va xiphemu xa milavisiso leyi u pfumeleriwile handle ko tshinyiwa ku tshika nkarhi unwana na unwana, loko u ri na swivutitiso mayelana na vukambisisi lebyi mi nga ni fonela eka rinqingho leri 0736831346, loko u tsakela ku va na xiave eka milavisiso leyi u ta sayina fomo ya nyika mpfumelelo.

ANNEXURE E 3: PARTICIPANT'S INFORMATION LEAFLET IN SEPEDI

THLOGO: kakanyo ya bomma mabapi le tše di ka dirang gore Bomma ba nyantšhe bana ba bona letswele fela di kgwedi tše tshela

Leina laka ke Nyabana Martha Maponya, ke tsweletsa dithuto tsaka Pele bjale ka mmoithoti wa lebakanyana univesitini ya Limpopo.Ke dira di patlisiso mabapi le thuto ye ke ithutelago yona

Dipatlisesong tse maikesetso a tsona ke gore re kgwetswe maano le bokgoni bja gore maseya a kgone go nyantshiwa letswele tekano ya kgwedi tse tshela ye e loketseng bana le bomma. Puledisano ye e tla dirwa motho ale tee, ka tumelelo ya lena kgo tloba le sekgatisa mantsoe go tlo thusa monyakisisi go hlathola dikakanyo tsa lena tse di tlago mo fa tsona le gona ka sephereng. Maena le sefani di ka se tshwelele kgakala.

Agona kotsi efe kapa efe ge wena o tsea karolo mo dipatlisesong tsena, dipatliseso tse di shomesa ke mmoithoti univesiting. Ge o ka nyaka go lesa go tsea karolo wa dumelelwa nako ye ngwe le ye ngwe. Ge o nyaka go tsea karolo o tla saina foromo.

Ge ona le diputseso o ka letsetsa nomoro ye ka nako ya mmereko yona ke 073 683 1346

ANNEXURE F1: CONSENT FORM

Title: "Mothers' perceptions of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre in Limpopo Province"

I…….....on……..this

day…….of……2018/2019 hereby consent to take participate in the research study. The purpose and objectives of the research have been made known to me and I fully understand them. I agree to participate as

an anonymous and won't be able to provide my personal details. All the information to be given will be kept private and confidential. As such, I am willing and volunteering to participate without being forced and I can withdraw from this study should I wish to do so at any time.

Participant's
Name/Surname…….Date……Signature

Researcher's

Name/Surname…….Date……Signature

ANNEXURE F 2: CONSENT FORM IN XITSONGA

Mina ----------Hi siku ra ----------2018/2019 ni nyika mpfumelelo wa ku va xiphemu xa minkambisiso leyi. Xikongomelo nkulu na nkoka wa swona ni hlamuseriwile hi wona, na swona ndza switwisisa, Ndzi nyika mpfumelelo wa ku va xiphemu xa vulavisisi lebyi hi ndlela yak u ni nga tiveki na swona wu ta endleriwa exihundleni, hi kwalaho ndza switsakela ni nga susumetiwanga hi munhu nakona ndzi na mpfumelelo wa tshika ku va xiphemu xa vukambisisi loko ni swi tsakela nkarhi wihi kumbe wihi

Muteka xiphemu

Mavito na Xivongo----------siku----------Nsayino

Mukambisisi

Mavito na Xivongo----------siku----------Nsayino

ANNEXURE F 3: CONSENT FORM IN SEPEDI

Nna ---------- ka letsatsi ----------la ----------2018/2019 ke fana ka tumelelo ya go tsea karolo ya di nyakisiso. Lebaka lago tsweletsa patlisiso ena kea yi tseba ke thlaloseditwe ka ga yona le gona kea kwisisa, kea dumela go tsea karolo ke sa tsebegi le gona nka se fane ka maina aka, Puledisano yena e tlaba sephiri, ka gona kea eneela go tsea karolo le tumelelo ya go ka tlogela go tsea karolo nako efe g e ke rata go dira jwalo nako efe kapa efe.

Motsea karolo

Maena le sefani----------letsatsi ----------Gosayina

Monyakisisi

Maena le sefani----------Letsatsi----------Gosayina

ANNEXURE G: ETHICAL CLEARANCE LETTER

University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email: anastasia.ngobe@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE

ETHICS CLEARANCE CERTIFICATE

MEETING: 06 February 2019

PROJECT NUMBER: TREC/15/2019: PG

PROJECT:

Title: Mothers' perceptions of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre in Limpopo province.

Researcher: NM Maponya
Supervisor: Dr SF Matlala
Co-Supervisor/s: N/A
School : Health Care Sciences
Degree: Master of Public Health

PROF P MASOKO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE

The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: REC-0310111-031

Note:

i) **This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned date. Application for annual renewal (or annual review) need to be received by TREC one month before lapse of this period.**

ii) **Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee, together with the Application for Amendment form.**

iv) **PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.**

Finding solutions for Africa

ANNEXURE H EDITORIAL LETTER

University of Limpopo
Department of Linguistics, Translation and Interpreting
School of Languages and Communication Studies
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Tel: (015) 268 3707, Fax: (015) 268 2868, email:kubayij@yahoo.com

13 December 2019

Dear Sir/Madam

SUBJECT: EDITING OF DISSERTATION

This is to certify that the dissertation entitled 'Mothers' perceptions of factors contributing to exclusive breastfeeding for the first six months at Mugodeni Grace Health Centre in Limpopo Province' by Maponya NM (201717180) has been edited, and that unless further tampered with, I am content with the quality of the dissertation in terms of its adherence to editorial principles of consistency, cohesion and clarity of thought.

Kind regards

Prof. SJ Kubayi (DLitt et Phil - Unisa)
Associate Professor
SATI Membership No. 1002606

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