HIV POSITIVE MOTHERS’ PERCEPTIONS OF EXCLUSIVE BREASTFEEDING IN POSTNATAL WARD AT A PARTICULAR HOSPITAL, LIMPOPO PROVINCE, SOUTH AFRICA.

by

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DECLARATION

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I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

MM Mafokwane

31/08/2017

SIGNATURE DATE
DEDICATION

This research study is dedicated with sincere love to all my family members, especially my mother Pulane Mafokwane who gave me such great support with prayers all the time.

I also dedicate this to my sister Ellah Mkansi, my elder brother Daniel and the younger brother Martin Mafokwane for their support and prayers.
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ABSTRACT

Exclusive breastfeeding is one of the infant feeding methods recommended by the World Health Organisation (WHO) in the prevention of mother-to-child transmission of Human Immunodeficiency Virus (HIV), especially to HIV positive women of low socio economic status. The purpose of the study was to determine and describe the HIV positive mothers’ perceptions towards exclusive breastfeeding in postnatal ward at a particular hospital in Limpopo Province, South Africa.

Qualitative exploratory research design was used to explore and describe the HIV positive mothers’ perceptions towards exclusive breastfeeding. A grand tour question in an unstructured interview was used to collect data, followed by probing questions according to participants’ responses. Data were collected from 15 HIV positive mothers aged 18 years and above. They opted for exclusive breastfeeding, and voice recorder and field notes were used to capture data. The seven steps of data analysis, adapted from Colaizzi were used. The findings: Although the benefits of exclusive breastfeeding was known by mothers, some participants had limited knowledge on the importance of exclusive breastfeeding. Some health care providers lack up-to-date information on exclusive breastfeeding. Religious and cultural practices interfere with exclusive breastfeeding. Coping strategies with the feeding options emerged as well.

Key concepts: Perceptions, HIV positive mothers, Exclusive breastfeeding.
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CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

In many African societies every pregnant woman is expected to breastfeed her baby as a method of nourishment after birth. In some societies the practice is that, the baby is also introduced to solids such as soft porridge irrespective of the baby’s age or the Human Immunodeficiency (HIV) status of the mother. Most of the South African societies practise this way of infant feeding, where family members interfere in infant feeding, in how the baby should be fed and what the baby should be fed with (Mphego, Madiba & Ntuli 2014:279).

During feedback regarding clinical exposure, student midwives have frequently stated that HIV positive mothers who opted for exclusive breastfeeding do not adhere to their option. This raised a concern and prompted the researcher to conduct a study on the perceptions of HIV positive mothers about exclusive breastfeeding.

1.2 BACKGROUND

Exclusive breastfeeding for six months is one of the options recommended by World Health Organisation (WHO) especially for HIV positive women of low socio economic status. WHO presented infant feeding package in prevention of mother-to-child transmission (PMTCT) where HIV exposed infants should be on exclusive breastfeeding for six months and presently, this has been extended to, at least, one year of the infant’s life (Sankoh, Arthur, Nyinde & Westen 2013:3).
South Africa supports these recommendations by WHO, where the mother should practice exclusive breastfeeding up to six months, followed by introducing complementary food when the baby reached six months of age and breast milk no longer meets its evolving nutritional requirements (Siziba, Jerling & Wentzel-Viljoen 2015: 170). Clinical Guidelines about Prevention of Mother-to-child Transmission (PMTCT) (2010:24) state that all mothers who are HIV either infected on lifelong antiretroviral therapy or not, and had opted for exclusive breastfeeding should do so for (6) six months, thereafter they should introduce appropriate complementary foods.

Siziba et al (2015:170) stated that the initiation of exclusive breastfeeding was found to be high at about 75-97% but it is not maintained in South Africa. Siziba et al (2015:170) indicated that the South Africa Demographic and Health Surveys conducted several studies about exclusively breastfed infants. This was conducted in 1998 and revealed two categories according to ages. The first category, which was 10%, ranged from the ages between 0-3 months, and 1% ranged from age 4-6 months. The infants who were exclusively breastfed were only 10%, and there were very low cumulative exclusive breastfeeding rates of 7% at 0-5 months. In 2003, there were 12% infants aged 0-3; infants aged 4-6 months were only 2%, and very low cumulative exclusive breastfeeding rates of 8% at 0-6 months. In 2008 cumulative exclusive breastfeeding rates increased to 26% in the first six months of the baby’s life, and this rate decreased to only 7% of children aged 6 months in the year 2012 according to South African National Health and Nutrition Examination survey (SANHANES). When looking at these rates, it seems although mothers opted for exclusive breastfeeding infant feeding method, they fail to maintain it.

According to Chinofunga and Matiashe (2013: 548), out of 98% women who initiate and practice breastfeeding, only 5.6% exclusively breastfed up to six months of the baby’s life. This exposes the infants to a high risk of morbidity and mortality. The Zimbabwe National Survey (2010:12) revealed that in Gweru District, 96% of women breastfed up to one month; about 50% practised exclusive breastfeeding up to three months and none of mothers had breastfed their babies up to six months.
Exclusive breastfeeding has been found to be protecting babies against diarrhoea and respiratory tract infections. It also carries lower risk to HIV infection than mixed feeding (breastfeeding combined with formula and solids) especially when the mother is on antiretroviral treatment (National Infant Feeding Policy for Maternity and Neonatal Services 2015:27; Hazemba, Ncama & Sithole 2016:7). Despite these benefits, mothers still doubting the safety of breast milk while on antiretroviral treatment (Hazemba et al 2016:7). This raises a concern as to whether these women had received quality counselling on infant feeding and antiretroviral treatment or not.

Mphego et al (2014: 287) stated that the women’s decision to exclusive breastfeeding was influenced by their desire to protect the babies from HIV infection. The quality of counselling provided to these women on prevention of mother-to-child transmission programmes of HIV played a big role in choosing of exclusive breastfeeding method. Women who had knowledge on mother-to-child transmission (MTCT) adhered to exclusive breastfeeding despite the pressure from the family to mixed feed or give traditional medicines.

Mataya, Mathanga, Chinkhumba, Chibwana, Chikaphupha and Cardiello (2013:8) in the study conducted in Malawi found that some women had a fair understanding of exclusive breastfeeding and its role in prevention of transmission of HIV from mother to child. These women were quite conversant with the services provided in the health facilities in relation to prevention of MTCT of HIV, but its uptake and adherence were hindered by social stigma, discrimination, misconceptions, and fear of rejection by spouses.

Another factor that hindered women from adhering to exclusive breastfeeding was socio-cultural barriers, although these women knew that exclusive breastfeeding would prevent their children from contracting HIV. Culturally, a Malawian woman is expected to breastfeed for two years or longer. Early weaning makes relatives and neighbours question the mother as to why she is not breastfeeding (Mataya et al 2013:8).
In Zambia, which is one of the poor countries, breastfeeding period goes up to two years and any cessation of breastfeeding or introduction of alternate feeding poses a great concern at the community, and discrimination is still high in that country (Jackson, Sitali & Kelakazola 2014: 41).

In the study conducted in Swaziland, Shongwe and Mkhonta (2015: 9599) state that participants expressed difficulty with exclusive breastfeeding as the in – laws or partners would pressurise them to give their babies feeds other than breastfeeding only, mainly because their HIV status was never disclosed to the family members including their husbands. These women feared discrimination and loss of their marriage if they could disclose their HIV status. On the other hand, this study revealed that continuous teaching and counselling offered by nurses during child-welfare clinic visits motivated the mothers to continue breastfeeding.

In the study conducted at Athens in United States of America, the researchers found that the mothers who succeeded in breastfeeding their infants for more than six months, are those who got support from people that have successfully breastfed their own children (Powell, Davis & Anderson 2014: 261).

Powell et al (2014: 263) stated that the participants reported they got insufficient information on breastfeeding from nurses and clinician. Some informants shared a perceived lack of honesty on the clinician’s part about possible difficulties and problems that could arise during breastfeeding. Some doctors used scare tactics such as threatening to push formula feeding if the baby does not gain enough weight, instead of explaining fully the logistics and information on breastfeeding to the mother. This means nurses need to do more with regard to the promotion of exclusive breastfeeding as a way of preventing mother-to-child transmission of HIV.
1.3 STATEMENT OF THE RESEARCH PROBLEM

Grove, Gray and Burns (2015: 131); Brink et al (2012: 61) define problem statement as an area of concern in which there is a gap in the knowledge base needed for nursing practice or a situation in need of solution, improvement or alteration or in which there is discrepancy between the way things are and the way they ought to be.

Most of mothers opt for exclusive breastfeeding after realising that they are HIV positive. Throughout their stay in the postnatal ward, they are counselled and the benefits of exclusive breastfeeding are emphasised. On discharge, these mothers are encouraged to continue with exclusive breastfeeding for a period of six months; but they stop breastfeeding before the recommended six months period; which means mothers do not adhere to exclusive breastfeeding. The non-adherence to exclusive breastfeeding by HIV positive mothers is always stated by midwifery students when giving feedback from their clinical exposure.

Despite the health education and counselling done by health care providers (nurses, doctors including dieticians) to HIV positive mothers; they do not adhere to their options. This raised a concern and prompted the researcher to conduct a study on the perceptions of HIV positive mothers towards exclusive breastfeeding in postnatal ward at a particular hospital Limpopo Province.

1.4 DEFINITION OF KEY CONCEPTS

Perceptions: an idea, a belief or an image one have as a result of how he/she see or understand something or the ability to understand the true nature of something (Hornby 2015: 1087).

In this study, perceptions refer to feelings, attitudes, experiences and understanding of exclusive breastfeeding by HIV positive mothers.
**Human Immunodeficiency Virus:** is a virus that causes a progressive disease that ultimately results in the development of acquired immunodeficiency virus (AIDS) (Olds, Davidson, London & Ladewing 2012: 1170; Marshall & Raynor 2014:280).

In this study, Human Immunodeficiency virus refers to a virus that destroys the immune system of HIV infected breastfeeding mothers.

**Exclusive breastfeeding:** an infant receives only breast milk and no other solids or liquids, not even water with exception of drops or syrup containing vitamins, mineral supplements or medicines (National Infant Feeding Policy for Maternity and Neonatal Services 2015: 5).

In this study, exclusive breastfeeding refers to giving infant only breast milk after birth for six (6) months of life in exception of prescribed medicines.

### 1.5 PURPOSE

Research purpose is a concise, clear statement of the specific goal or aim of the study, and is generated from the problem. It summarizes the overall study goal, identifies key concepts and the population. It also describes the scope of the research effort, and it specifies the information that needs to be addressed by the research process (Grove et al 2015: 131; Brink, van der Walt & van Rensburg 2017: 54).

The purpose of the study is to explore the HIV positive mothers’ perceptions towards exclusive breastfeeding in postnatal ward at a particular hospital, Limpopo Province.

### 1.6 OBJECTIVES OF THE STUDY

Objectives are clear, concise, declarative statement expressed to direct a study; focuses on identifying and describing variables and relationships among variables (Grove et al 2015:145). According to Polit and Beck (2017: 69) objectives are specific accomplishment the researcher hopes to achieve by conducting a study.
The objectives of the study are as follows:

To explore how HIV positive mothers in postnatal ward at a particular hospital, Limpopo Province perceive exclusive breastfeeding.

To describe the perceptions the mothers have towards exclusive breastfeeding.

1.7 RESEARCH QUESTIONS

Grove at al (2015: 147) define a research question as a concise interrogative statement developed to direct a study. Research question is the specific query researchers want to answer in addressing the research problem (Polit & Beck 2017: 69).

One grand tour question was used to investigate the HIV positive mothers’ perceptions with regard to exclusive breastfeeding. The grand tour question that the HIV positive mothers were asked was: Describe your understanding with regard to the exclusive breastfeeding. This is a statement]. Follow up questions were used dependent on the participant’s responses and in line with the objectives.

1.8 ASPECTS RELATING TO RESEARCH DESIGN

1.8.1 The research design

Grove et al (201520) define qualitative research as a systematic, subjective methodological approach used to describe life experiences and give them meaning. According to Brink et al (2017: 121) qualitative approach is a broad range of research method used to study phenomena of social action and of which researchers do not have an understanding thereof.

The qualitative exploratory research design was used, to explore and describe the HIV positive mothers’ perceptions towards exclusive breastfeeding. The researcher used exploratory with the intention of understanding and establish research priorities and
where resources should be allocated with regard to HIV positive mothers. The nature, context and boundaries of the phenomena were poorly understood and defined (Brink et al 2017: 120). The researcher focused on what was described by HIV positive mothers as their perceptions towards exclusive breastfeeding.

1.8.2 Research methods
In the research methodology the following population and sample will be discussed.

1.8.2.1 Population and sample
The population is the entire group of persons or objects that is of interest to the researcher, in other words that meet the criteria that the researcher is interested in studying (Grove et al 2015:46; Brink et al 2017: 131).

In this study, the population were all HIV positive mothers who opted for exclusive breastfeeding available during data collection in postnatal ward of a certain hospital, in Limpopo Province.

The target population were 15 HIV positive mothers who opted for exclusive breastfeeding. The participants were identified by checking HIV status of each delivered mother in the delivery register. The researcher compiled a list of the post-delivery mothers who were found to be HIV positive and opted for exclusive breastfeeding. The participants were approached one by one in the private side ward to request their voluntary participation in the study. The venue and time for the interview was stated during appointment request to those who agreed to participate in the study. The participants’ autonomy was respected as they had the right to refuse to participate or withdraw after having signed the informed consent form.
According to Brink et al (2017: 132) sampling is defined as the researcher’s process of selecting the sample from a population in order to obtain information regarding phenomena in a way that represents the population of interest.

Purposive sampling was used to select the participants who were information-rich and from whom the researcher could obtain in-depth information about the study at hand (Grove et al 2015: 270). The researcher used purposive sampling because the HIV positive mothers who opted for exclusive breastfeeding were the only participants that could provide the essential information required to answer the research question.

The researcher sampled the 15 HIV positive mothers who opted for exclusive breastfeeding readily available during the time of data collection.

**Inclusion criteria**

The HIV positive mothers who opted for exclusive breastfeeding were aged 18 years and above were included in the study as they were the relevant population for the study.

**Exclusion criteria**

The following were the exclusion criteria applied: all HIV negative mothers who opted for exclusive breastfeeding, all HIV positive mothers who opted for other infant feeding methods, and all HIV positive mothers who opted for exclusive breastfeeding aged below 18 years.

**1.8.2.2 Data collection**

Data collection is the precise, systematic gathering of information relevant to research purpose or specific objectives, or hypothesis of the study (Burns & Grove 2015: 502; Polit & Beck 2017:725).
A grand tour question was used to collect data over two weeks. A broad question was asked in an unstructured interview to gain a general overview of a phenomenon, based on which more focused questions were subsequently asked (Polit & Beck 2017:725).

The researcher asked questions and probed according to the responses of the participants. In-depth interviews were conducted with individual participants to gather data. Data were collected using a voice recorder to capture responses, and field notes were taken to support the recorded information. The researcher collected data daily for three weeks until data saturation was reached.

1.8.2.3 Data analysis

Grove et al (2015: 502) describe data analysis as a technique used to reduce, organise and give meaning to information. The process of data analysis involves making sense of text and image data (Botma, Greeff, Mulaudzi & Wright 2016: 220).

Data analysis involves organising what the researcher has seen, heard and read so that the researcher can make sense of the data collected. Data analysis was done by listening to voice recorder/audiotape and checking on field notes taken during data collection. Data analysis was done concurrently with data collection. The researcher produced information by gathering data in specific segments.

This study used the thematic data analysis. The data were transcribed and categorised into themes for the purpose of presentation using an adapted Colaizzi (1978) seven steps of analysis as cited in Shosha (2010:35).

Step 1: Acquiring a Sense of Each Transcript
In this step the researcher read and re-read each transcript in order to obtain a general sense about the whole content. The researcher put aside any preconceived ideas or thoughts about the phenomena under the study, to prevent contamination of the findings.

**Step 2: Extracting Significant Statements**

In this step, the researcher extracted the significant statements that pertain to the phenomenon under the study from each transcript. The researcher recorded these statements on a separate sheet noting their pages and lines numbers.

**Step 3: Formulating meanings**

The researcher formulated meanings from these significant statements. Each underlying meaning was coded in one category as they reflect an exhaustive description. Then the researcher compared formulated meanings with the original meanings maintaining the consistency of description.

**Step 4: Theme clusters**

The formulated meanings were sorted into categories, cluster of sub-themes and themes. All formulated meanings were grouped into categories that reflect a unique structure of clusters of themes. Each cluster of theme was coded to include all formulated meanings related to that group of meanings. Thereafter, groups of clusters of themes that reflect a particular vision issue were incorporated together to form a distinctive main theme. Each formulated meaning fell only in one theme cluster that was distinguished in meaning from other structures.
Step 5: Exhaustive description

The findings of the study were integrated into an exhaustive description of the phenomenon. All emergent themes were defined into an exhaustive description. After merging all the study themes, the whole structure of the phenomenon “HIV positive mothers’ perceptions of exclusive breastfeeding” has been extracted.

Step 6: Statement of identification

The fundamental structure of the phenomenon was described. The researcher checked in the findings for the redundant, misused or overestimation descriptions and then eliminated them from the overall structure.

Step 7: Participant verification

The validation of findings in the study was sought from the research participants, through member checking, where the participants were given an opportunity to react to their responses when analysed data were referred back to them for review, validation and commentary, as well as corrections on the themes and categories. The researcher also ensured credibility of the study through persistent observation by consistently pursuing interpretations in various ways.

1.8.3 Trustworthiness

Brink et al (2017: 172) explain trustworthiness as a way of ensuring data quality or rigour in qualitative research.

This was assured by documenting accurately and comprehensively, by checking for correctness, thus matching response with code assigned to a participant.
1.8.3.1 Credibility
Credibility alludes to confidence in the truth of data and the interpretation thereof (Brink et al 2017: 172). The researcher ensured credibility by member checking, persistent observation and literature control. Member checking was employed to validate the obtained data through discussion with the participants, where they were given an opportunity to react to their responses when analysed data was referred back to them for review, validation and commentary, as well as corrections on the themes and categories. The researcher also ensured credibility through persistent observation by consistently pursuing interpretations in various ways.

1.8.3.2 Conformability
Conformability refers to the potential for congruency of data in terms of accuracy, relevance or meaning. The data reflect the voice of the participants, and not the researcher’ biases or perceptions (Brink et al 2017: 173). The researcher looked for a second opinion to ensure accuracy and relevancy of data.

1.8.3.3 Dependability
Dependability refers to the provision of evidence such that if it were to be repeated with the same or similar participants in the same or similar context, its findings would be similar. The term thus refers to the stability of data over time (Brink et al 2017: 172). One question was asked to all participants in a similar way to give a similar meaning so as to get the same response from the participants if it were to be repeated on the same participants. The researcher used probing in a way that it did not change the meaning of the question.

Code-recode strategy
During the code-recode strategy, the researcher coded the same data twice by giving at least one or two weeks’ gestation period between each coding. The results from the two
codings were compared to see if the results were the same or different. This helped the researcher to understand more deeply the patterns of the data; and improve the knowing of the participants narrations.

### 1.8.3.4 Transferability
Transferability refers to the ability to apply the findings in other contexts or to other participants. The researcher was not primarily interested in generating findings, rather in defining observations within the specific context in which they occur (Brink et al 2017: 173). The findings of this study could not be generalised as the study was conducted in one setting meaning postnatal ward of a certain hospital in Limpopo Province, South Africa.

### Purposive sampling
The researcher focused on key informants, who were particularly knowledgeable about the issue under investigation. Purposive sampling allows the researcher to decide on why she or he wants to use a specific category of informants in the study and it provides greater in-depth findings than other probability samplings methods.

### 1.8.4 Ethical considerations
The researcher obtained permission from the Limpopo Department of Health Researcher Committee to conduct a study in one of the hospital, in Limpopo Province. Permission was also requested from the Chief Executive Officer and Nurse Manager of a particular hospital, Limpopo Province to conduct the study in their institution, maternity postnatal ward. The following ethical principles were observed:

#### 1.8.4.1 Informed consent
Participants were requested to participate in the study. The following information was provided to the potential participants: research topic, purpose, the benefit of the study
and that participation in the study was voluntary, if one felt like withdrawing from participating even after giving informed consent may do so without any coercion or penalty.

**1.8.4.2 Privacy and Confidentiality**
The participants’ rights to both privacy and confidentiality were protected. The interviewer and the interviewee were in a private room during data collection. No names or person’s identification were reflected on the records for data, only codes were used. Participants were informed that the findings of the study would not be published without their consent.

**1.8.4.3 Autonomy**
Autonomy means that every person has the right to self-determination. This implies that an individual has the right to decide whether to participate in a study, without the risk of penalty or prejudicial treatment (Brink et al 2017: 35).

Participants were assured of freedom to refuse to participate in research study or if agreed they may withdraw from the research study without any penalty. The decision to participate in the study was voluntary (Brink et al 2017: 35). The participants had the right to refuse to participate or give information even after signing informed consent form.

**1.8.4.4 Beneficence**
The researcher secured the well-being of the participants who had the right to protection from discomfort and harm, be it psychological, spiritual, emotional, economic or legal (Brink et al 2017: 35). Questions and probing were asked in a way that did not emotionally hurt the participants. Participants’ culture was also respected by being non-judgemental towards them.
1.8.4.5 Justice

Fairness to all participants was practiced and promises were fulfilled e.g. the researcher adhered to agreed time for meeting as promised. The participants were assured that their names would not be mentioned anywhere the research project. Anonymity was ensured by allocating each participant a code name, and his or her identity remained anonymous. Their responses and records were kept confidential. The information discussed during the study would not be accessed by any other person who was not part of the research project (Brink et al 2017: 37).

1.9 SIGNIFICANCE

The study should have the potential to contribute to health sciences knowledge, the health of community and the profession in a meaningful way (Brink et al 2017: 64).

The Provincial Department of Health in Limpopo would revise its policies and guidelines on exclusive breastfeeding based on the outcome of this research study.

The institution will benefit from the findings of this study as it will be able to review and update its infant feeding policies, thus improve the practicality of communicating the policy to all staff members and clients/ or patients.

Participants and community will benefit from the research as misconceptions about exclusive breastfeeding will be clarified, and the participants will be able to deal positively with their fears with regard to this infant feeding method.

The nursing personnel/midwives and doctors will benefit as the recommendations from the study will serve as guide on how to assist the mothers to overcome their fears, misconceptions and concerns towards exclusive breastfeeding.
1.10 SCOPE AND LIMITATIONS

The study was conducted in maternity postnatal ward at a particular hospital, which is one of the tertiary hospitals in Limpopo Province that is a referral hospital for complicated obstetric cases including the sick neonates. However, there was a limitation to generalisations of the findings because the purposive sample of participants was drawn from a single site that was postnatal ward at a particular hospital, Limpopo Province. Perceptions of HIV positive mothers towards exclusive breastfeeding from other areas of Limpopo and other Provinces in South Africa remain unknown.

1.11 STRUCTURE OF THE DESSERTATION

Chapter 1 discusses the background of exclusive breastfeeding as one of infant feeding method recommended by the World Health Organisation (WHO) in the prevention of mother-to-child transmission of Human Immunodeficiency Virus (HIV), especially to HIV positive women of low socio economic status.

Chapter 2 discusses the literature review on exploring and describe the HIV positive mothers’ perceptions towards exclusive breastfeeding in postnatal ward at a particular hospital Limpopo Province, South Africa.

Chapter 3 discusses the methodology, including research design, sampling, methods used in data collection, analysis of data, and validity of the study.

Chapter 4 presents and analyses data and description of the research findings.

Chapter 5 gives the conclusions to the study, interpretation of the research findings and recommendations.

1.12 CONCLUSION

This chapter gave an overview of key areas, which will be discussed in the subsequent four chapters, namely: explanation of the research design used; the instruments used to
collect data, that is, voice recorder/audiotape and taking field notes, and an unstructured interview; an how data were categorised thematically.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter will deal with the overview of literature relevant to the topic under the study, which is the HIV positive mother’s perceptions of exclusive breastfeeding.

The relevant journals were accessed in the internet through Sabinet, Science direct and scholar google search. The key words used during literature search were Perceptions, HIV positive mothers, Exclusive breastfeeding.

2.2 PROMOTION OF EXCLUSIVE BREASTFEEDING

The World Health Organisation (WHO) and United Nations Children’s Fund promote breastfeeding as the best source of nourishment for infant babies and young children. HIV positive mothers should practice exclusive breastfeeding for six months, and this has been extended to two years of age or longer as cited in Madiba (2015: 25) and Shongwe & Mkhonta (2015: 9594). Exclusive breastfeeding is defined as feeding the infant with only breast milk, without supplements such as fluids or solids except liquid medicines and vitamin/mineral supplements prescribed by the medical doctor (Shongwe & Mkhonta 2015: 9594).

South Africa supports the recommendations by WHO, where the mother should practice exclusive breastfeeding up to six months, followed by introducing complementary food when breast milk no longer meets the baby’s nutritional requirements (Siziba, Jerling & Wentzel-Veljoen 2015:170).
In 2011, the Tshwane Declaration of Support for Breastfeeding as cited in (Madiba 2015:26) recommended the removal of free commercial infant formula as part of prevention of mother-to-child transmission of HIV programme and promotion of exclusive breastfeeding in order to optimise child survival in all health facilities in South Africa. Despite these efforts to promote exclusive breastfeeding in South Africa, the practice of exclusive breastfeeding remains low (Madiba 2015:26).

The Infant Feeding Policy for Maternity and Neonatal Services (2015: 10, 11) explains that exclusive breastfeeding should be a normal practice. The newborn infants should not be given any food or drinks other than breast milk, unless it is medically indicated. It is stated that all breastfeeding mothers should be offered assistance and support with the first feed till they acquire the skills of positioning and attachment for effective feeding by the midwife or other trained personnel such as community voluntary providers of breastfeeding.

Clinical Guidelines: Prevention of Mother-to-Child Transmission of HIV (2010:24) state that all mothers who are HIV either infected on lifelong antiretroviral therapy or not, opted for exclusive breastfeeding should do so for (6) six months of the baby’s age thereafter they should introduce appropriate complementary foods.

2.3 THE RATES AT WHICH EXCLUSIVE BREASTFEEDING IS PRACTICED GLOBALLY

Siziba et al (2015: 170) stated that in South Africa breastfeeding is found to be high at about 75-97% but it is not maintained. Siziba et al (2015:170) indicated that, the South Africa Demographic and Health Surveys conducted several studies about exclusive breastfeeding of infants. A similar study carried out by the same organisation in 1998 revealed two categories according to ages of infant who were exclusively breastfed. The first category age ranged from 0-3, months were 10%, second category age 4-6 months were only 1%. The infants who were exclusively breastfed were only 10%, and very low
cumulative exclusive breastfeeding rates 7% at in infants aged 0-5 months. In 2003 infants on breastfeeding and aged 0-3 months were 12%, those aged 4-6 months were only 2%, and very low cumulative exclusive breastfeeding rates of 8% at 0-6 months (Siziba et al 2015:170). In 2008 cumulative exclusive breastfeeding rate increased to 26% in the first months of the baby's life, this rate decreased to only 7% infants aged 6 months in the year 2012 according to the South African National Health and Nutrition Examination Survey (SANHANES) (Siziba et al 2015: 171). These rates reveal that although mothers initiate exclusive breastfeeding as their infant feeding method of choice early in infant’s life, they do not maintain it up to six months or longer.

Exclusive breastfeeding can potentially prevent more than 800,000 deaths in the developing world annually. Despite this fact only 39% of infants below six months of age are exclusively breastfed globally (Cao, Celik, Ergun, Swann & Viljoen 2015: 32).

In South Africa the challenge is not poor initiation rates of the exclusive breastfeeding of about 88%, but there is lack of exclusive breastfeeding practices during the first six months of life where the rates are 6.8% – 8.3% (Department of Health South Africa 2002; Department of Health South Africa 2007:1) as cited in (Goosen, McLachlan & Schubl 2014: 14). In Limpopo Province, exclusive breastfeeding rate declined from 44% at one month of age to 10% at three month of age. In rural areas in KwaZulu- Natal 76% of mothers who initiated exclusive breastfeeding, it was found that at fourteen weeks postpartum were practising mixed feeding. In the low-income area of Worcester exclusive breastfeeding rate was 6% in 2011 (Goosen et al 2014: 14).

According to Kafulafula, Hutchinson, Gennaro, Guttmacher and Kumitawa (2013:2) the rates of exclusive breastfeeding amongst the HIV positive mothers in sub-Saharan Africa range from 19%-48% at 4 months of the baby’s life. The 2010 Malawian Demographic and Health Survey estimated rates of exclusive breastfeeding were 71% in infants less than six months in the general population of mothers. Although there were a high Malawian
National exclusive breastfeeding rates, studies of mothers in the general population in some parts of that country, the exclusive breastfeeding rates were low with the highest being 39.1% in two months and 7.5% in six months of the baby’s life (Kafulafula et al 2013:2). Vaahtera, Kulmala, Hietamen, Ndekha, Cullin and Salin (2001:328) as cited in Kafulafula et al (2013:2) state that exclusive breastfeeding rates were very low at 2% in infants aged 3 months. The median duration of exclusive breastfeeding was 2.5 months in Malawi and 1.3 months in Blantyre districts. Currently the exclusive breastfeeding median duration has increased from 2.5 to 3.7 months in Malawi, but falls short of WHO’s recommendations and the Malawi national goals.

In the study conducted in Midlands Province in Zimbabwe, it was found that although there was compelling evidence that exclusive breastfeeding prevents diarrhoea and pneumonia, the global rates of exclusive breastfeeding remain stagnant in developing world growing from 32% in 1995 to 39% in 2010 (Gabida, Chemhuru, Tshimanga, Gombe, Takundwa & Bangure 2015:2). Globally, it is estimated that 94 countries reported under WHO Nutrition Data Bank that out of 65% of the world’s infant population ≤ 12 months 35% are exclusive breastfed between zero and four months of age. Therefore, one in every three infants is exclusively breastfed in the developing world (Gabida et al 2015: 2). This indicates that exclusive breastfeeding rates are still not practised as recommended by WHO despite the global strategies set by United Nations Children’s Fund (UNICEF) such as baby friendly hospital initiative (BFHI) and the international code of marketing of breast milk substitutes (Gabida et al 2015: 2).

In Zimbabwe only 5.8%, infants were exclusively breastfed by the year 2010. This raised a great concern nationally. In the same year, in the Midlands’s province, only 6% infants were exclusively breastfed, whereas in Gweru, Kwekwe and Gokwe South districts there were 0% exclusive breastfeeding rates. The target exclusive breastfeeding rates were at least 70% according to Millennium Development goals. If the infants in Midlands and Gweru districts were exclusively breastfed, 94% and 100% respectively, could have been protected from infectious diseases such as diarrhoea and pneumonia, which are the
number one and two causes of under-five morbidity and mortality in Zimbabwe (Gabida et al 2015: 4).

Sargsyan, Movsesyan, Melkumova and Babloyan (2016:25) found that the prevalence of exclusive breastfeeding rates amongst infants under six months of age was 35%, and predominant breastfeeding age under six months age was 62%. At the age of six months infants still breastfed, the rate was 61% and at one year was 44%. The median duration of breastfeeding was 11 months. The duration of breastfeeding was shorter in urban areas, where the mothers were to recommence regular work sooner. Looking at the exclusive breastfeeding rates of 61% in Armenia in infant's aged six months, most of sub-Saharan African countries including South Africa are not performing in terms of practising exclusive breastfeeding in the health facilities. The healthcare providers need to work very hard in the implementation of the developed strategies to promote the exclusive breastfeeding practice by all mothers who opted for this infant feeding method, especially the HIV positive mothers in order to reduce morbidity and mortality rates of infants under five years old.

The United States Department of Health and Human Services developed the objectives to increase the breastfeeding goals by 2020 from that of 2010. The 2020 objectives targeted to increase the proportion of mothers who initiate breastfeeding from 75% to 81.9%, while 60.6% continue breastfeeding at 6 months. The previous target was 50% and at 1 year from 25% to 34.1%, and exclusive breastfeeding at 3 months from 33.6% to 46.2% (Powell et al 2014:260).

Zhu, Zhang, Ling and Wan (2016:2) stated that in China the prevalence of exclusive breastfeeding in the cross-sectional Survey of 2354 central and Western China was found to be only 28.7% in infants under 6 months. In a recent study, exclusive breastfeeding rates were found to be only 6.8% at 6 months of the infant’s age. This rate is lower than the set goal of increasing the exclusive breastfeeding rates to 50% by 2025 at 6 months.
of the infant’s age. Looking at these rates, in China like sub-Saharan African countries, the healthcare providers need to work very hard in the promotion of exclusive breastfeeding in order to reduce infant morbidity and mortality rates (Zhu et al 2016:2).

2.4 THE BENEFITS OF EXCLUSIVE BREASTFEEDING TO THE MOTHER AND THE BABY

According to Shongwe and Mkhonta (2015: 9596) exclusive breastfeeding delays menstruation after delivery, as such it delays the next pregnancy. The mothers expressed the feelings of satisfaction with exclusive breastfeeding. They reported that breastfeeding makes them feel as real women because they were well accepted by the society.

The mothers reported that breastfeeding brings comfort to the baby, who feels calm on the breast, and the mothers reported that breast milk protects babies from illnesses (Shongwe & Mkhonta 2015: 9597).

According to Sankoh et al (2014:3) exclusive breastfeeding brings about many benefits in terms of reducing morbidity and mortality in children and is the preferred method of infant feeding as recommended by WHO. The infants born to HIV positive mothers had a higher risk of dying if formula fed than if they are breastfed in Uganda (Sankoh et al 2014:3).

Maartens and Lewin (2014:265) stated that the risk of transmitting HIV-1 through exclusive breastfeeding is low as compared to mixed feeding which doubles the risk. The exclusive breastfeeding plays a crucial role in reducing transmission of HIV-1 in resource-limited settings, where it is practiced together with the administration of antiretroviral monotherapy to infants or continuing combination antiretroviral therapy until weaning in mothers who do not qualify for ongoing antiretroviral therapy.
A higher morbidity was found among HIV-infected infants who were never breastfed during the first 15 months of life than those who were breastfed. In the non-randomised cohort intervention study, it was found that formula feeding in the first six months of life increased the risk of mother-to-child HIV transmission (MTCT) with infants who mixed formula and breastfed 11 times than those who received breast milk only (Sankoh et al 2014:3). This shows that all infants whether born from HIV-infected or non HIV-infected mothers will benefit from exclusive breastfeeding (Sankoh et al 2014:3).

The benefit of breastfeeding is that breast milk provides nutrients to the baby, antibodies to fight some common childhood illnesses and decreases the risk of food allergies. Breast milk contains long chain polyunsaturated fatty acids that are essential for brain development and offers protection against a host of environmental insults of which the baby never exposed to before (WHO 2003:7) as cited in (Chinofunga & Matiashe 2013:547). This indicates that the babies who are exclusively breastfed for at least the first six months of their life are protected from many childhood illnesses including communicable diseases such as chicken pox, mumps and measles.

2.5 THE PERCEPTIONS OF HIV POSITIVE MOTHERS ON EXCLUSIVE BREASTFEEDING

Madiba (2015:26) stated that HIV positive mothers who believed that, they produce insufficient breast milk, ended up initiating mixed feeding practice as early as the first month of the baby’s life. On the other hand non-disclosure to partner and family members, pressure from family members, maternal employment and cultural practices, contributed to early mixed feeding practice of these mothers.
About 58% of mothers who opted for exclusive breastfeeding did so because they believed breast milk would make their babies to grow better. Besides, formula-feeding method is expensive (Madiba 2015: 33).

Mataya et al (2013:4) stated that most mothers, both breastfeeding and non-breastfeeding viewed exclusive breastfeeding policy positively. One of the HIV positive participants reported that she learned that children who are breastfed exclusively, are not infected by HIV. She followed instructions and indeed her child tested negative.

Some of the mothers did not adhere to exclusive breastfeeding as they believed that breast milk alone was not adequate food for the baby, and it was culturally unacceptable not to give the baby supplemental food called phala in Malawi (Mataya et al 2013:5). Supplemental food that is given to babies is called phala in Malawi (Mataya et al 2013:5).

In the same study conducted in Malawi, Mataya et al (2013: 7) found that there were misconceptions about exclusive breastfeeding, the mothers were afraid to breastfeed their babies immediately after birth because they believed that colostrum is not good for the babies. Many mothers believed that as long as the breast milk is still produced, the baby should be breastfed for two years, and culturally baby must suckle for not less than two years as is regarded as a taboo.

Some women believe that if a mother goes somewhere and comes back late, she should not breastfeed the baby for the whole night until the next morning because by time she comes back home the breast milk would be sour. While others believe that if the mother could drink kachasu, it will kill the HIV making the breastfeeding safe for the baby (Mataya et al 2013:7). Kachasu seems to be either traditional beer or medicine in Malawi, as some of the participants believed that if they could drink it, it will make the virus drunk too as such the HIV virus cannot be transmitted from mother to child (Mataya et al 2013: 8). This
shows that there is still a lot to be done by the healthcare provider to educate the community about HIV and the emphases should include that there is no cure currently, although there is only antiretroviral therapy that suppress the replication of the HIV, which result with low viral load in the individual’s blood stream.

In Moretele District North Pretoria, mothers considered as the appropriate age of introducing food to their infants to be three months (Goosen et al 2014: 14).

Chinofunga and Matiashe (2013:550) found that some participants had a negative attitude towards exclusive breastfeeding where some reported that religion forbids exclusive breastfeeding, while some just said that they hate breastfeeding.

2.6 KNOWLEDGE ABOUT PMTCT BY HIV POSITIVE MOTHERS

According to Mphego et al (2014: 287) HIV positive mothers who had knowledge about mother-to-child, transmission of HIV adhered to exclusive breastfeeding method despite the pressures they received from family members to mixed feeds or give traditional medicines. The researchers stated that, mothers experienced pressures from the family members to give solids food, water based fluids, formula, complementary as well as traditional medicines to their babies. These mothers were also pressurized to perform various cultural practices on their babies in order to clean the baby’s stomach. Some mothers acknowledged that early feeding and performance of cultural practices contradict the PMTCT recommendations. As such, they adhered to six months exclusive breastfeeding without any interference from those cultural practices (Mphego et al 2014: 287).

Zhu et al (2016: 5) in China found that the primigravidae mothers that displayed increased breastfeeding knowledge, attitude, subjective norm and breastfeeding control, opted to
practice breastfeeding that resulted in obvious higher rates of exclusive breastfeeding at day 3 and 6 weeks postpartum.

The mothers who had knowledge on sufficient nutrition provided by exclusive breastfeeding, practised exclusive breastfeeding while still in the hospital and at home after discharge. The beliefs the mothers had on the importance of breastfeeding to their babies and to themselves seemed to be essential to the decision of breastfeeding. The mothers with sufficient knowledge on breastfeeding were the ones who assumed a positive attitude towards practising exclusive breastfeeding (Zhu et al 2016: 5).

Zhu et al (2016:6) stated that lack of breastfeeding skill delayed mothers to initiate breastfeeding post-delivery. In this study, the rates of exclusive breastfeeding in Day 3 postpartum were low in the control group compared to the experimental group who watched video on exclusive breastfeeding and initiation of breastfeeding rate was higher at Day 3 post-delivery. Breastfeeding skills improved as time went on, and most of the mothers were skilled at 6 weeks. The overall results in this particular study, suggested that interventions targeted at increasing breastfeeding knowledge, attitude, subjective norm and breastfeeding control could contribute to better breastfeeding outcomes (Zhu et al 2016:6).

A knowledge gap on how to take care of new-born babies by mothers, led them to give babies some traditional herbs to treat abdominal pains, diarrhoea, chest infections dehydration and oral thrush, as they perceived crying of the baby means hunger and abdominal pains (Hazemba, Ncama & Ahmed 2015:114).

In the study conducted in Durban South Africa, it was found that there are many factors involved in HIV knowledge and prevention among women residing in urban communities of low-socioeconomic standing. The women in these communities had knowledge about
HIV/AIDS transmission modes and prevention strategies, but there were many misconceptions regarding the mode of transmission. It was difficult to these women to specify how mother-to-child transmission of HIV occurs (Haffejee, Ports & Mosave 2016: 177).

These women could not tell correctly whether breast milk of HIV positive mother could have been infected by the HIV or not. They were not aware that in Africa the current measure is to promote exclusive breastfeeding, as mix feeding is associated with bowel damage, impaired mucosal integrity that may facilitate entry of the virus into the infant’s tissues from breast milk (Haffejee et al 2016: 176). Educational programmes highlighting PMTCT are thus required to dispel misconceptions around these issues. There is a need to develop creative ways of disseminating information with regard to PMTCT (Haffejee et al 2016: 176).

### 2.7 SUPPORT FROM FAMILY MEMBERS, FRIENDS AND HEALTHCARE PROVIDERS

National Infant Feeding Policy for Maternity and Neonatal Service (2015:16) states that breastfeeding mothers, babies and visitors attending health service should be provided with… and supported to feed their babies in all public areas of the facility. A place should be made available for mothers who need to breastfeed in privacy. Managers and co-workers of an organisation should provide breastfeeding mothers with lactation breaks and facilities.

Shongwe and Mkhonta (2015: 9601) explain that some of the mothers got support on exclusive breastfeeding from their male partners, especially those mothers who disclosed their HIV status to their partners. These mothers preferred to disclose their HIV status to other family members through their partners. In the same study, the researchers found that in the case of single mothers, they got support from their biological mothers who encouraged them to practice exclusive breastfeeding. The study revealed that sharing
personal experiences during community gathering and antenatal clinic visits motivated the mothers to practise exclusive breastfeeding.

Mothers reported that continuous teaching and counselling offered by nurses during child-welfare visits motivated them to continue breastfeeding. Therefore, continuous teaching of the mothers on exclusive breastfeeding and proper attachment to the breast by healthcare providers assist mothers to adhere to exclusive breastfeeding as their chosen method of infant feeding (Shongwe & Mkhonta 2015:9601).

Powell et al (2014:262) in the study conducted at Athens in United States of America, stated that mothers who succeeded in exclusive breastfeeding got support and encouragement from the other mothers and friends who also breastfed their own children successfully for more than six months. These mothers shared their fears, struggles on exclusive breastfeeding and find common ways of making exclusive breastfeeding successful. Other mothers reported that knowing people who have breastfed before or are still breastfeeding assisted them to talk with them about exclusive breastfeeding even before they become pregnant, this helped them to succeed in exclusive breastfeeding their own infants.

The mothers who were unsuccessful in practising exclusive breastfeeding reported that they had no role model in breastfeeding in their lives. It means a breastfeeding support group could be of great help in terms of promoting exclusive breastfeeding up to six months or more of the infant’ life. Some of these informants were not breastfed by their own mothers and there was no one to encourage them to breastfeed (Powell et al 214:262).

Powell et al (2014: 262) stated that some of the informants reported that they had no support from their supervisors in the working environment on exclusive breastfeeding. As
such, the working environment contributed to unsuccessful exclusive breastfeeding. In that same study, the participants highlighted that support from friends, male partner and family members are the cornerstone to successful exclusive breastfeeding. It is important for health care practitioners to support and involve the family members in breastfeeding education during clinical visits (Powell et al 2014: 263).

The participants in the study done at Athens-Clark country area mentioned the need for the clinicians, lactation consultants and counsellors to be honest about the expectations towards exclusive breastfeeding. Some of the participants reported that, the clinicians displayed lack of honesty about the possible difficulties and problems that could be encountered during breastfeeding. These participants reported that they had been told about the benefit of exclusive breastfeeding only during antenatal classes, and after delivery when the mother started breastfeeding at times they encountered the problems such as poor attachments, nipple cracks. As such the mother end up abandoning breastfeeding earlier than the recommended six months because of lack of knowledge on how to deal with the problem (Powell et al 2014:263). These shows the need for the healthcare provider to give the advantages, the possible problems that may arise as well as how to overcome those problems during exclusive breastfeeding.

On the role of hospital and clinical staff pertaining to the mother's breastfeeding practice, majority of the mothers reported lack of support from the hospital and clinical staff. The clinicians educate the mothers on breastfeeding but do not offer necessary support of it, as some of these clinicians use scary tactics such as if the mother does not breastfeed the baby enough, the doctor is going to push a formula (Powell et al 2014: 264).

In some instances, the healthcare providers give contradicting messages to post-delivery mothers. One participant was given counselling on exclusive breastfeeding during antenatal classes, but post-delivery, the nurse asked her the type of formula was she going to give the baby. The message was conflicting with exclusive breastfeeding
messages as such the mother became confused, not knowing as to whether to breastfeed or formula feeding the baby (Powell et al 2014: 263).

Zhu et al (2016:5) stated that in the Chinese culture, the family members, the partner or grandmother play an important role in the decision of breastfeeding. Their encouragement, suggestion and breastfeeding skill assistance make the mother feel supported; thereby a higher score of subjective norms and better breastfeeding outcome will result.

Tuthill, Chan and Butler (2015:22) in their study where they reviewed the current research on infant-feeding counselling to HIV-positive women in sub-Saharan Africa, found that at times HIV positive mothers get contradicting messages from healthcare providers who offer prevention of mother-to-child HIV transmission (PMTCT) counselling. During antenatal care, the pregnant women are counselled on exclusive breastfeeding as a method of PMTCT, but after delivery the midwife would give the mother formula to feed her baby. The contradicting messages by healthcare providers affect how HIV positive mothers perceive exclusive breastfeeding.

Tuthill et al (2015:18) stated that some healthcare providers believed that breastfeeding is not the safe infant feeding option for HIV positive mothers, this conflict with WHO's recommendations, which state that HIV positive mothers should exclusive breastfeed their infants for six months, and now is extended for a year or more as long as the viral load is low due to antiretroviral therapy the mothers are taking.

In the same study, the healthcare providers stated that many women learn about their HIV status during antenatal visit, in which they are counselled on exclusive breastfeeding as infant feeding option, as such they receive too much information at one session. The other concern to healthcare providers was the changing infant feeding policies and
guidelines in a relatively short period that would lead to losing their trust by HIV positive mothers (Tuthill et al 2015: 18).

Vaga, Moland, Evjen-Olsen & Blystad (2014:24) conducted a study in two different hospitals and the results in Hospital A revealed that the HIV positive mothers were strictly told to breastfeed exclusively until the baby is six months old, and no any other alternative infant feeding method was included in counselling process according to the hospital policy.

In Hospital, B HIV positive mothers expressed that they were presented with information that was unclear pertaining exclusive breastfeeding, and these messages did not relieve these mothers from their fears of infecting their infants through infected breast milk. One nurse told the woman to give the baby cow’s milk while the other said the woman should practice exclusive breastfeeding. The mother ended up not breastfeeding at all, while others breastfed only for three months (Vaga et al 2014:27).

2.8 THE HINDERS FROM ADHERING TO EXCLUSIVE BREASTFEEDING

In the study conducted in Mpumalanga Province by Mphego et al (2014: 288) found that although some participants received support from their family members, other participants received criticisms and rejection of exclusive breastfeeding from their family members. The family reacted negatively on exclusive breastfeeding because of lack understanding of the concept “exclusive breastfeeding”. One other thing is that in African culture mixed feeding is highly acceptable. The other factor is that the family members of HIV positive mothers are excluded from counselling and education about PMTCT. It is very much important to provide adequate information on PMTCT interventions to the general population, family and male partners of HIV positive pregnant women (Mphego et al 2014:288).
The family beliefs and cultural practices about infant feeding, make it difficult for mothers to adhere to exclusive breastfeeding as their initial feeding options, hence raising a child in the African context is a family matter. The other thing is that, exclusive breastfeeding is viewed as a way of declaring one’s own HIV positive status because the community associate exclusive breastfeeding with HIV positive status (Laar & Govender 2011:131 ) as cited in (Mphego et al 2014: 280).

In the study conducted in Malawi by Mataya et al (2013: 8) it was found that some of the participants cited socio-cultural barriers to exclusive breastfeeding although they knew this would prevent their babies from contracting HIV. In Malawi, women are expected to breastfeed for two years or longer. Early weaning makes relatives and neighbours to question the mother as to why she is not breastfeeding. Most of the African societies perform cultural and traditional practices on their babies in order to protect them from evil spirit, as is a norm for an example “go bea hlogwana”, which is making small cuts on the baby’s scalp and fontanel with sharp blade, then followed by applying traditional medicine on the incisions. Afterwards they give the baby a traditional mixture of...to drink. This practice interferes with exclusive breastfeeding (Madiba & Langa 2014:271).

In the study conducted at Vungu, it was found that in Gweru Rural District in Zimbabwe traditional beliefs discourage mothers from practising exclusive breastfeeding as well were the mothers believed that colostrum is dirty, some used traditional medicine for sunken fontanel (Chinofunga & Matiashe 2013:549).

Hazemba et al (2015:113) in their study conducted in Zambia found that fear and insecurity led the mothers to adhere to cultural practices that conflict with exclusive breastfeeding messages from healthcare providers.
It is stated that the Minister of Health in Malawi and Non-governmental organisations addressed this issue through behavioural change communication messages. The scaling up of antiretroviral treatment programmes will enhance adherence to exclusive breastfeeding in Malawi (Mataya et al 2013:8).

A study conducted in South Africa revealed that fear to disclose the HIV status and stigma by HIV positive mothers to their partners and family members, weakened their ability to resist entrenchment of family and community norms that encourage early introduction of fluids and solids (Doherty, Chopra, Nkonki, Jackson & Greiner 2006:90) as cited in (Shongwe & Mkhonta 2015:9601).

The other factor that hindered initiation of exclusive breastfeeding is that mothers believed that they had insufficient breast milk, as such, they introduced solid food earlier than six months of the baby’s age. Some mothers said that due to poverty, they experienced poor production of breast milk due to inadequate nutrition, hence they introduced solids food early within six months of the baby’s age (Shongwe & Mkhonta 2015: 9602).

Cao et al (2015:33) stated that there are factors that prevent access to exclusive breastfeeding using the mother’s own breast milk in many of developing parts of the world such as maternal death during birth, maternal illness e.g. TB-meningitis and lack of rooming in, in public hospitals as such the baby could be fed by breast milk from the breast milk bank if there is any.

**2.9 CONCLUSION**

According to the literature review, most of the mothers in different studies had misconceptions about exclusive breastfeeding and factors such socio cultural beliefs, traditional practices, contradicting messages by healthcare providers and lack of knowledge by the HIV positive mothers pertaining PMTCT and exclusive breastfeeding
contributed to the way HIV positive mothers perceived exclusive breast feeding, as such most of them abandoned this infant feeding method before the recommended six months of the baby’s life. The strategies to promote exclusive breastfeeding should be strictly implemented by the healthcare providers to correct the misconceptions, socio-cultural and traditional beliefs that interfere with the practice of exclusive breastfeeding. The healthcare providers should be work shopped on the new developments on PMTCT to prevent giving contradicting messages on HIV positive and exclusive breastfeeding.
CHAPTER 3

RESEARCH DESIGN AND METHOD

3.1 INTRODUCTION

In this chapter the researcher discussed the research design, research methods, which covers: population, sample, sampling technique, data collection, and data analysis, lastly trustworthiness as well as ethical considerations.

3.2 RESEARCH DESIGN

Grove et al (2015:63) define research design as a blue print for the conduct of a study that maximizes control over factors that could interfere with the study’s desired outcome. Research design is the overall plan for addressing a research question, including specification for enhancing the study’s integrity (Polit & Beck 2012: 741). According to Brink et al (2012:217) research design is the overall plan for gathering data in a study.

Qualitative research is a systematic, subjective methodological approach used to describe life experiences and give them meaning (Polit & Beck 2017:745). According to Brink et al (2017:121) qualitative approach is a broad range of research method used to study phenomena of social action and of which researchers do not have an understanding thereof.

In this study the qualitative exploratory research design was use, to explore and describe the HIV positive mother’s perceptions towards exclusive breastfeeding. The nature context and boundaries of the phenomena were poorly understood and defined (Brink et al 2017:120). The researcher focused on what was described by the HIV positive mothers as their perceptions towards exclusive breastfeeding.

Qualitative research design has the following characteristics:
It often involves merging various data collection strategies, and this is referred to as triangulation. It is flexible, and capable of adjusting to new information during the course of data collection. Tends to be holistic, striving for an understanding of the whole. Requires researchers to become intensely involved. Requires researchers to become the research instrument. Involves ongoing analysis of data to formulate subsequent strategies and to determine when data collection is done (Polit & Beck et al 2017: 463).

Exploratory research is a research type that explores the dimensions of a phenomenon and investigates the full nature of the phenomenon, the manner in which it is manifested, and other factors to which is related (Polit & Beck 2017:728).

### 3.2.1 Qualitative exploratory design

Qualitative exploratory design is a means to understand and gain insight into a situation, community, individual or phenomena under study (De Vos, Strydom, Fouche & Delport 2017:95).

The researcher used qualitative exploratory design in order to gain insight into and understanding of HIV positive mothers’ perceptions towards exclusive breastfeeding. The design assisted the researcher to ask one grand question followed by probing questions based on the participant’s responses.

### 3.3 RESEARCH METHOD

#### 3.3.1 Population and sample

The population is the entire group of persons or objects that is of interest to the researcher, in other words that meet the criteria that the researcher is interested in studying (Grove et al 2015: 46; Brink et al 2017: 131).
In this study, the target population were 15 HIV positive mothers who opted for exclusive breastfeeding. The participants were identified by checking HIV status of each delivered mother in the delivery register. The researcher compiled a list of the post-delivery mothers who were found to be HIV positive and opted for exclusive breastfeeding. The participants were approached one by one in a private side ward to request their voluntary participation in the research study. The venue and time for interviews was stated during appointment request to those who agreed to participate. The participants’ autonomy was respected as they had the right to refuse to participate or withdraw after having signed the informed consent form.

**Research setting**

Research setting refers to the location in which the study is conducted (Grove et al 2015: 276). The researcher conducted the study in postnatal ward at a particular hospital, Limpopo Province, South Africa. This particular hospital is a Tertiary hospital in Capricorn District, situated about 27km east of Polokwane city, and is a referral hospital for high risk pregnancy, sick neonates and complicated deliveries from about 19 clinics in Capricorn district, and about 37 hospitals in Limpopo Province.

**3.3.2 Sample**

According to Brink et al (2017:217) a sample is a part or fraction of the whole, or a subset of a larger set, selected by the researcher to participate in a research study. It consists of a selected group of the elements or a defined population. In this study 15 HIV positive mothers, made a subset of all HIV positive mothers who opted for exclusive breastfeeding in postnatal ward at a particular hospital, Limpopo Province.

**3.3.3 Sampling**

According to Brink et al (2017:132) sampling is defined as the researcher’s process of selecting the sample from a population in order to obtain information regarding
phenomena in a way that represents the population of interest. Sampling refers to the process of selecting a portion of the population to represent the entire population (Polit & Beck 2017:743).

Purposive sampling was used to select the participants who were information-rich and from whom the researcher could obtain in-depth information about the study at hand (Grove et al 2015:270). The researcher used purposive sampling because the HIV positive mothers who opted for exclusive breastfeeding were the only participants that could provide the essential information required to answer the research question.

The researcher sampled 15 HIV positive mothers who opted for exclusive breastfeeding readily available during the time of data collection.

*Inclusion criteria*

The HIV positive mothers who opted for exclusive breastfeeding aged 18 years and above were included in the study as they were the relevant population for the study.

*Exclusion criteria*

All HIV negative mothers who opted for exclusive breastfeeding, all HIV positive mothers opted for other infant feeding methods and all HIV positive mothers opted for exclusive breastfeeding aged below 18 years.

### 3.3.4 Data collection

Data collection is the precise, systematic gathering of information relevant to research purpose or specific objectives, or hypothesis of the study (Grove 2015:502; Brink et al 2017:725).
A grand tour question was used to collect data, where a broad question was asked in an unstructured interview to gain a general overview of a phenomenon, on the basis of which more focused questions were subsequently asked (Polit & Beck 2017: 730).

The researcher asked questions and probed according to the responses of the participants. In-depth interviews were conducted with individual participant to gather data. Data were collected by using a voice recorder to capture the responses and field notes were taken to support the recorded information. The researcher collected data daily for three weeks until data saturation was reached.

3.3.5 Data analysis
Grove et al (2015:502) describe data analysis as a technique used to reduce, organise and give meaning to information. The process of data analysis involves making sense of text and image data (Botma et al 2016: 220).

Data analysis involves organising what the researcher has seen, heard and read so that the researcher can make sense of the data collected. This was done by listening to the voice recorder/tape and by checking on field notes taken during data collection. Data analysis was done concurrently with data collection. The researcher produced information by gathering data into specific segments.

This study used the thematic data analysis. The data were transcribed and categorised into themes for the purpose of presentation using an adapted Colaizzi (1978) seven steps of analysis as cited in Shosha (2010:35).
Step 1: Acquiring a Sense of Each Transcript

In this step, the researcher read and re-read each transcript in order to obtain a general sense about the whole content. The researcher put aside any preconceived ideas or thoughts about the phenomena under the study, to prevent contamination of the findings.

Step 2: Extracting Significant Statements

In this step the researcher extracted the significant statements pertained to the phenomenon under the study from each transcript. The researcher recorded these statements on a separate sheet and coded them based on their transcript, page and lines numbers.

Step 3: Formulating meanings

The researcher formulated meanings from these significant statements. Each underlying meaning was coded in one category as they reflect an exhaustive description. Then the researcher compared the formulated meanings with the original meanings maintaining the consistency of description.

Step 4: Theme clusters

The formulated meanings were sorted into categories, clusters of sub themes and themes. The researcher grouped all formulated meanings into categories that reflect a unique structure of clusters of themes. Each cluster of theme was coded to include to include all formulated meanings related to that group of meanings. Thereafter, groups of clusters of themes that reflect a particular vision issue were incorporated together to form a distinctive construct of theme. Each formulated meaning fell only in one theme cluster that distinguished in meaning from other structures.
Step 5: Exhaustive description

The findings of the study were integrated into an exhaustive description of the phenomenon. All emergent themes were defined into an exhaustive description. After merging all the study themes, the whole structure of the phenomenon “HIV positive mother’s perceptions of exclusive breastfeeding” has been extracted.

Step 6: Statement of identification

In this step, the fundamental structure of the phenomenon was described. The researcher checked the findings for the redundant, misused or overestimation descriptions and then eliminated them from the overall structure.

Step 7: Participant verification

The validation of findings in the study sought from the participants, through member checking, where the participants were given an opportunity to react to their responses when analysed data was referred back to them for review, validation and commentary, as well as corrections on the themes and categories. The researcher also ensured credibility of the study through persistent observation by consistently pursuing interpretations in various ways.

3.4 TRUSTWORTHINESS [The section below is a repetition of what is already given in §1.8. What value does this add? Check with your supervisor]

Brink et al (2017:172) explain trustworthiness as a way of ensuring data quality or rigour in qualitative research. This was assured by documenting accurately and comprehensively, by checking for correctness, thus matching response with code assigned to a participant.

Credibility
Credibility alludes to confidence in the truth of data and the interpretation thereof (Brink et al 2017: 172). The researcher ensured credibility by member checking, persistent observation and literature control. Member checking was employed to validate the obtained data through discussion with the participants, where they were given an opportunity to react to their responses when analysed data was referred back to them for review, validation and commentary, as well as corrections on the themes and categories. The researcher ensured credibility of the study through persistent observation by consistently pursuing interpretations in various ways.

**Confirmability**

Confirmability refers to the potential for congruency of data in terms of accuracy, relevance or meaning. The data reflect the voice of the participants and not the researcher’s biases or perceptions (Brink et al 2017: 173). The researcher looked for a second opinion to ensure accuracy and relevancy of data.

**Dependability**

Dependability refers to the provision of evidence such that it were to be repeated with the same or similar participants in the same or similar context, its findings would be similar. The term thus refers to the stability of data over a time (Brink et al 2017: 172). One question was asked to all participants in a similar way to give a similar meaning to get the same response from the participants if it were to be repeated on the same participants. The researcher used probing in a way that it did not change the meaning of question.

**Transferability**

Transferability refers to the ability to apply the findings in other contexts or to other participants. The researcher is not primarily interested in generating findings, rather in defining observations within the specific context in which they occur (Brink et al 2017:173). The findings of this study cannot be generalised as the study was conducted in one setting meaning postnatal ward in a particular hospital, Limpopo Province South Africa.
3.5 ETHICAL CONSIDERATIONS

The researcher obtained permission from the Limpopo Department of Health Research Committee to conduct a study at in postnatal ward of a particular hospital, Limpopo Province. Permission was also obtained from the Chief Executive Officer and Nurse Manager of a particular hospital in Limpopo Province to conduct the study in their institution, maternity postnatal ward.

Informed consent

Participants were asked for participation in the study. The following information was provided to participants: research topic, purpose, the benefit of the study and that participation in the study is voluntary, if the participant wanted to withdraw from participating even after giving informed consent, may do so without any coercion or penalty.

Privacy and confidentiality

Participants’ right to both privacy and confidentiality were protected. The interviewer and interviewee were in a private room during data collection. No names or person’s identification reflected on the records for data, only codes names used. Participants were informed that the findings of the study would not be published without their consent.

Autonomy

Autonomy means that every person has the right to self-determination. This implies that an individual has the right to decide whether to participate in the study, without the risk of penalty or prejudicial treatment (Brink et al 2017: 35).

Participants were assured of freedom to decline participation in the study or if agreed they may withdraw from the research study without any penalty. The decision to participate is
voluntary (Brink et al 2017: 35). The participants had the right to refuse to participate or give information even after signing informed consent form.

**Beneficence**

The researcher secured the well-being of the participants who have the right to protection from discomfort and harm, be it psychological, spiritual, emotional, economic or legal (Brink et al 2017:35). Questions and probing were asked in a way that did not emotionally hurt the participants. Participants’ culture was also respected by being non-judgemental towards them.

**Justice**

Fairness to all participants practiced and promises fulfilled e.g. the researcher adhered to agreed time for meeting as promised. The participant’s names were not mentioned anywhere in the research project as promised. Anonymity ensured by allocating each participant with a code name and their identity remained anonymous, their responses and records are kept confidential. The information discussed during the study will not be accessed by any other person who is not part of the research project (Brink et al 2017: 37).

### 3.6 SCIENTIFIC INTEGRITY OF RESEARCH

The study has the approval from the University of South Africa. The researcher also compiled and submitted ethics application to the Research and Ethics Committee of the Ministry of Health. Permission was granted by all health institutions that were selected for the study. The researcher conformed to methodological requirements of a qualitative study. All data and information collected from the participants and authorities of health institutions were captured and stored in a password protected computer file to ensure confidentiality. Data collection and entry were done by the researcher. This arrangement minimised issues of bias and manipulation of data by the investigator.
3.7 CONCLUSION

The chapter discussed research design, which is qualitative exploratory design, research method that is population, sample and sampling techniques, data collection methods and data analysis. Trustworthiness which includes credibility, confirmability, dependability and transferability were also discussed. Lastly, ethical considerations undertaken during the study meaning informed consent, privacy and confidentiality, autonomy, beneficence and justice were also shared.
CHAPTER 4

ANALYSIS, PRESENTATION AND DESCRIPTION OF THE RESEARCH FINDINGS

4.1 INTRODUCTION

In this chapter, the researcher presents and analyses data, and comes up with research findings. The purpose of the study was to explore the HIV positive mothers’ perceptions towards exclusive breastfeeding in postnatal ward at a particular hospital in the Limpopo Province, South Africa.

Qualitative research is non-numerical, and usually is in the form of written words or videotapes, audiotapes and photographs. It involves examination of text rather than the numbers that are considered in quantitative studies. Frequently, massive amounts of data, in the form of text, are gathered (Brink et al 2017: 193).

Grove et al (2015:502) describe data analysis as a technique used to reduce, organise and give meaning to information.

According to Botma et al (2016: 220) the process of data analysis involves making sense of text and image data. It involves preparing data for analysis, conducting different analyses, moving deeper and deeper into understanding the data, and making an interpretation of the larger meaning of the data. In qualitative research data, collection and analysis often occur simultaneously, rather than after data are collected (Polit & Beck 2017: 530).

The purpose of data analysis is to organize, provide structure to, and elicit meaning from data (Polit & Beck 2017: 530).
4.2 DATA MANAGEMENT

Data management in qualitative research is reductionist in nature. It involves converting masses of data into smaller, manageable segments (Polit & Beck 2017: 535).

A grand tour question was asked to collect data, and in-depth interviews conducted, where the researcher asked one broad question and probed according to the response of each participant. Data collected by using a voice recorder to capture responses and field notes were also collected to support the recorded information. Data collection commenced on the 18th April 2017, where 15 participants were interviewed daily and data saturation was reached on the 25th April 2017.

The interviews were conducted in a private room to maintain privacy and confidentiality of the participants. Code names, instead of real names, were used to ensure anonymity.

Data management was done according to Bazeley (2013:63) seven steps to managing Qualitative Databases. Steps for data management are as follows:

[NB please use past tense to show that the steps below were carried out in the past]

Step 1. ACCURACY: The researcher checked data if it was of enough quality and accuracy before commencing with a major analysis. Data was collected from 15 HIV positive mothers opted for exclusive breastfeeding aged 18 years and above until no new information was coming up. All the interviews started from the central question of the study.

Step 2. MAINTAIN COPIES: The researcher prepared backups of the data management system. These were updated as data preparation and analysis proceeded. Two voice recorders were used to capture data from participants, transcribed data is stored in two different information storage to ensure that data is not lost. The field notes were also written and kept as a backup for the management of data.
Step 3. ARRANGEMENT: Field notes are arranged in the voice recorder based on the date and the time when the data was collected, and kept for future reference.

Step 4. ORGANIZATION: The researcher organized narrative information into word document for data analysis. Colaizzi (1978) adapted seven steps of analyzing data as cited in Shosha (2010:35) were used to identify the themes and the sub-themes of this study. The researcher grouped related types of information together in order to be able to identify themes and categories. The researcher organized information which were relevant to research problem from participant’s response.

Step 5. LABELING: The voice recorded interviews were stored by the researcher in a securely locked place only accessible to the researcher for future reference. The participants were labeled Participant A to Participant R as a way of identifying them as the researcher record their responses in the interviews.

Step 6. CATALOGUING: List of all documents are kept alphabetical in the researcher's personal password protected computer file. All the field notes are kept sequentially from the first interview to the last interview and are kept in the securely locked place.

Step 7. MISSING DATA AND SAFE STORAGE: All rough work of transcription, field notes, typed transcription, and the voice recorded information are kept in a securely locked place accessible only to the researcher for future reference.

4.3 DATA ANALYSIS

Data analysis was done concurrently with data collection, which means…. The researcher produced information by gathering data into specific segments. The collected data was
transcribed and categorised into themes for the purpose of presentation using an adapted Colaizzi (1978) seven steps of analysis as cited in Shosha (2010:35).

**Step 1: Acquiring a Sense of Each Transcript**

In this step the researcher read and re-read each transcript in order to obtain a general sense about the whole content. The researcher put aside any preconceived ideas or thoughts about the phenomena under the study, to prevent contamination of the findings.

**Step 2: Extracting Significant Statements**

In this step the researcher extracted the significant statements pertaining to the HIV positive mothers’ perceptions towards exclusive breastfeeding from each transcript. The researcher recorded these statements in a separate sheet and coded based on their transcript, page and lines numbers. One hundred and seven significant statements were extracted from 15 transcripts.

**Step 3: Formulating meanings**

The researcher formulated meanings from these significant statements. Each underlying meaning was coded in one category as they reflect an exhaustive description. Then the researcher compared the formulated meanings with the original meanings maintaining the consistency of description. One hundred and seven formulated meanings were derived from one hundred and seven significant statements.

**Step 4: Theme clusters**

The formulated meanings were sorted into categories, clusters, themes, and sub-themes. The researcher grouped all formulated meanings into categories that reflect a unique structure of clusters of themes. Each cluster of theme was coded to include all formulated meanings related to that group of meanings. Thereafter, groups of clusters of themes that
reflect a particular vision issue were incorporated together to form a distinctive construct of theme. Each formulated meaning fell only in one theme cluster that distinguished in meaning from other structures. Twenty-one of theme clusters emerged, which were later, grouped into seven of emergent themes.

**Step 5: Exhaustive description**

The findings of the study were integrated into an exhaustive description of the phenomenon. All emergent themes were defined into an exhaustive description. After merging all the study themes, the whole structure of the phenomenon “HIV positive mother’s perceptions of exclusive breastfeeding” has been extracted.

**Step 6: Statement of identification**

In this step, the fundamental structure of the phenomenon was described. The researcher checked the findings for the redundant, misused or overestimation descriptions and then eliminated them from the overall structure.

**Step 7: Participant verification**

The validation of findings in the study sought from the participants, through member checking, where the participants were given an opportunity to react to their responses when analysed data were referred back to them for review, validation and commentary, as well as corrections on the themes and categories. Participant’s views was obtained through phone calls. The researcher also ensured credibility of the study through persistent observation by consistently pursuing interpretations in various ways.

**4.4 DISCUSSION OF RESEARCH FINDINGS**

The research findings will be discussed in this section. The researcher used the adapted Colaizzi seven steps of data analysis as cited in Shosha (2010:35). Data was collected in
postnatal ward at a particular hospital in Capricorn district, Limpopo Province, South Africa. Unstructured interview was conducted to collect data, where information was captured by using a voice recorder and taking field notes. Data was collected until data saturation was reached. Data analysis was done concurrently with data collection, then twenty one theme clusters and the following six themes emerged:

Table 4.1 Perceptions of HIV positive mothers with regard to the exclusive breastfeeding.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Description of the existing benefits of breast milk and exclusive breastfeeding</td>
<td>1.1 Description that breastmilk as a means to prevent diseases leading to good health</td>
</tr>
<tr>
<td></td>
<td>1.2 An outline that breastmilk lead to the growth of the infant</td>
</tr>
<tr>
<td></td>
<td>1.3 Existence of various nutrients in breastmilk which prevents infection mentioned</td>
</tr>
<tr>
<td></td>
<td>1.4 Promotion of bonding and mother’s awareness to child care responsibilities</td>
</tr>
<tr>
<td>2.An outline of the importance of exclusive breastfeeding</td>
<td>2.1 Breastfeeding viewed as a learning process correcting unhealthy feeding methods and others related practices</td>
</tr>
<tr>
<td></td>
<td>2.2 Breastfeeding mothers’ readiness result from willingness to protect infants against infections</td>
</tr>
<tr>
<td>3.Existing knowledge of PMTCT and exclusive breastfeeding</td>
<td>3.1 Existing knowledge related to mode of HIV transmission through breastfeeding</td>
</tr>
<tr>
<td>3.2 Known challenges associated with exclusive breastfeeding mentioned</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
</tr>
<tr>
<td>3.3 Lack of knowledge related to medications instructions including ARTs</td>
<td></td>
</tr>
<tr>
<td>3.4 Lack versus existence of knowledge related to feeding instructions for children of HIV positive mothers</td>
<td></td>
</tr>
<tr>
<td>3.5 Lack of updated information related to exclusive breastfeeding by midwives</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Challenges faced by HIV positive breastfeeding mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Lack of trust on carers of infants in maintaining appropriate feeding practices</td>
</tr>
<tr>
<td>4.2 Prolonged exclusive breastfeeding problematic as viewed by mothers and family members</td>
</tr>
<tr>
<td>4.3 Existing myths related to breastfeeding practices as viewed by mothers and family members</td>
</tr>
<tr>
<td>4.4 Existence of religious and cultural practices which affects breastfeeding practices</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Strategies used to overcome breastfeeding challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Defiant practices by mothers to ignore religious and cultural expectations outlined</td>
</tr>
<tr>
<td>5.2 Acceptance versus lack of acceptance of feeding practices by family members provision of explanation</td>
</tr>
</tbody>
</table>
6. Support experienced by mothers related to feeding practices decisions taken

| 6.1 Existing support experienced from partners |
| 6.2 Existing support experienced from family members |

7. An outline of adherence to treatment and feeding practices

| 7.1 Adherence to feeding strategies advices observed from mothers |
| 7.2 Developed strategies to defend feeding practices outlined |
| 7.3 Existence of mechanisms to disclose HIV positive status and feeding practice developed |

4.4.1 Demographic characteristics of the participants.
The non-probability purposive sampling technique was used to select the participants who through the judgement made by the researcher were information-rich and those were whom the researcher could obtain in-depth information about the study at hand (Grove et al 2015: 270) that is HIV positive mothers with infants who supposed to be breastfed.

Table 4.2: Demographic profile of participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiparous</td>
<td>13</td>
</tr>
<tr>
<td>Primigravidae</td>
<td>2</td>
</tr>
<tr>
<td>18 to 20 years</td>
<td>None</td>
</tr>
<tr>
<td>21 to 30 years</td>
<td>5</td>
</tr>
</tbody>
</table>
The sample consisted of 15 HIV positive postnatal mothers who opted for exclusive breastfeeding, 13 multiparous and 2 primigravidae. This means that the multiparous participants have experience with regard to the practice of exclusive breastfeeding aiming at PMTCT as compared to primigravidae who never practiced breastfeeding before because most of the multiporous participants in this study were HIV positive with previous pregnancies and practiced exclusive breastfeeding. Moges, Kassa and Boneya (2017:7) in support of these findings said that mothers on chronic HIV care have better knowledge of PMTCT and adhered to the recommended prevention mechanism. The primigravidae need health education and assistance in the practice of exclusive breastfeeding as well as support from midwives while still in the hospital and from family members and support groups after discharge. Infant Feeding Policy for Maternity and Neonatal Services (2015:8) states that Antenatal education on the importance of exclusive breastfeeding must be given throughout antenatal period and pregnant women should be encouraged to attend mother support groups in their local area to help them gain confidence from meeting experienced breastfeeding mothers and counsellors. All mothers should be offered assistance with the first feed and support to acquire the skills of positioning and attachment for effective feeding, the midwife or trained person should be available to assist them when necessary (Infant Feeding Policy for Maternity and Neonatal Services 2015:10). The participants’ age for those who were interviewed was from 22 to 40 years, which means the study participants’ were within the childbearing age. According to Adewoye, Musa, Atoyebi and Babatunde (2013:188) childbearing age ranges between 15-49 years, this confirms that participants’ age in this study, falls within reproductive age group. Four were employed, and the rest unemployed. This shows that four employed participants relied on the carers of babies for baby feeding and administration of
antiretroviral treatment while they are at work, on the other hand, these mothers are required to express the breast milk for feeding while they are away from home. National Infant Feeding Policy for Maternity and Neonatal Services (2015:10) states that mothers who cannot be able to initiate breastfeeding for some reasons should be informed to express breast milk and given information on how to safely handle and store breast milk. This covers the working mothers as well, since they cannot be with their babies for the whole day. The baby carers should be involved when providing the pregnant women with information on exclusive breastfeeding and its importance (National Infant Feeding Policy for Maternity and Neonatal Services (2015:8). The rest of unemployed participants have a good chance to practice exclusive breastfeeding because they are always with their babies. According to National Infant Feeding Policy for Maternity and Neonatal Services (2015:19, 27) almost all mothers should practice exclusive breastfeeding and are to breastfeed on demand.

Interviews were conducted for approximately 30 to 45 minutes for each participants including time for clarifying those who were in need of clarity.

**Theme 1: Description of the existing benefits of breast milk and exclusive breastfeeding.**

**Table 4.3: Theme 1 and Sub-themes**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
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<td>1.Description of the existing benefits of breast milk and exclusive breastfeeding</td>
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</tr>
<tr>
<td></td>
<td>1.3 Existence of various nutrients in breastmilk which prevents infection mentioned</td>
</tr>
</tbody>
</table>
The results revealed that there are potential benefits of breast milk and exclusive breastfeeding, which emerged as the main reason why HIV positive mothers opted for exclusive breastfeeding. Four sub-themes have emerged from the theme whereby the participants were allowed during the interview sessions to narrate the breast milk benefits. There are four sub-themes, which emerged under this theme, and direct participants excerpts and literature supports the discussion. Participant A recognised the benefits of breastmilk disclosed that and said:

“If I give the baby breast milk only, without giving other things such as water, the baby will not be sick, and won’t give me problems.”

Participant B said: “Breast milk is very much important to the baby as there are many illnesses, breast milk examine different illnesses in the baby’s body”.

Participant D said: “The first thing the baby will not be attacked by diseases such as TB and HIV infection”.

Cuinhane, Coene, Roelens and Vanroelen (2017:4) support the idea by saying that mothers who breastfeed experience less ailments such as diarrhoea in their children and the babies are protected from HIV transmission from mother to child. Hazemba, Ncama and Sithole (2016:10) hold the same view as outlined in their study that exclusive breastfeeding by HIV positive mothers has a possibility for reduction of infant and under-five deaths, which are growing in numbers in this era of HIV and AIDS.

Sub-theme 1.1: Description that breastmilk is a means to prevent diseases leading to good health.

The findings revealed that participants’ understanding that breastmilk could prevent the baby from different illnesses made them to choose exclusive breastfeeding for a period six months as advised by health professionals. The participants believed that their babies
are protected from HIV infection and other diseases. Participant A confirmed this by saying:

“My baby grew well without illnesses or allergies. He had no vomiting, diarrhoea or other illnesses. I can conclude by saying that exclusive breastfeeding is good because this is what I have giving the child breastmilk only, the baby grow well without problems such as HIV infection, allergy nor body weakness”.

Participant B who held the same opinion said:

“Breastfeeding protect the baby from illnesses such as cough, constipation, diarrhoea, vomiting and failure to thrive”.

Shongwe and Mkhonta (2015:9597) explain that the breastfeeding mothers perceived breast milk as feed that prevents their babies from illnesses such as flu, diarrhoea or allergic reaction.

Participants, in addition, considered breast milk to be a safe for the newborn baby because is free from germs, is always covered and it remains in a normal body temperature.

This was outlined by Participant O who said: … “It is good to give the baby breast milk as it is safe, free from germs, breast milk remains clean as the breast is covered. Its temperature is normal not too hot or cold to the baby. Other feeds need to be warmed before feeding, but the breast milk is ever warm. It is good to exclusive breastfeed, as the baby is protected from different diseases. I can say let us stick to exclusive breastfeeding as it is safe and good for the baby”.

Another participant G with the same opinion said: “Exclusive breastfeeding is good because it prevent the baby from HIV infection. The baby who is on exclusive breastfeeding is free from illness”.

Siziba et al (2015: 174) report that mothers considered breast milk to be always available, convenient to give because it is clean, warm, best and natural food for the infant, which will prevent them to contract childhood illnesses. On the contrary and in support, Coovadia (2007:1116) indicated that the risk of HIV transmission when mothers stick to
exclusive breastfeeding it is dominated by improved infant survival whilst exclusive formula feed poses zero risk for HIV transmission but has a disadvantage to expose infants to common infections, malnutrition and sickness. Therefore, it is suggested that exclusive breastfeeding is the best option for HIV positive mothers in developing countries. Furthermore, Tariq, Elford, Tookey, Anderson, de Ruiter, Connel and Pillen (2017:331) stated that exclusive replacement feeding such as formula eliminates the risk of vertical HIV transmission through breast milk, but in low-income settings, it presents significant challenges, which is associated with increased infant mortality secondary to diarrhoeal illness and malnutrition. This supports that exclusive breastfeeding is still the best feeding option for HIV positive mothers in low-income settings.

Sub-theme 1.2: An outline that breastmilk lead to the growth of the infant.

The findings pointed out that most of the participants relied on breast milk only for growth and development of their babies during the first six months of the infant’s age. Participant G supports this notion by saying:

“The baby on exclusive breastfeeding grows well and become healthy”.

Another participant B with the same opinion said: …

“Breast milk is the only treatment for the baby as it provides good health”.

In addition, the notion is supported by participant F who said… “My first born baby was on exclusive breastfeeding for six months and was healthy. I have never suffered by taking the baby to doctors, because he was healthy due to exclusive breastfeeding”.

According to Cuinhane et al (2017:11) mothers considered breast milk as a natural food, which enables the babies to grow quickly and develop strong bones. Cuinhane et al (2017:11) further stated that breastfeeding mothers believed that breast milk makes the baby to be strong and healthy. Mataya et al (2013:18) argue that most of the mothers who breastfeed believed that breast milk boosts the baby’s immune system.
Suwankhong and Liamputtong (2017:71) also explained that mothers considered breast milk to be the best option for feeding their infants as it provides better growth development.

**Sub-theme 1.3: Existence of various nutrients in breastmilk which prevents infection mentioned.**

The results pointed out that breast milk provide nutrients required by the baby’s body for nourishment and prevention of malnutrition. Marshall and Raynor (2014:708) support the study finding because they outlined that the body need proteins for growth and repairing of horn out tissues. Vitamins are necessary to boost the baby’s immunity. All vitamins are required for good nutrition and good health. Participants confirmed these by narrating that breast milk provides nutrients to infants, which was substantiated by the participant N who said:

> “Breast milk has vitamins. Exclusive breastfeeding can help by providing the baby with proteins”.

Another participant P with the same opinion said: …. “Breast milk is good because the baby won’t be thirsty, as the first milk quench thirst, and then followed by nutritious breast milk which keeps them healthy based on the nutrients they receive from breastmilk”.

Participant O also said… “One other thing breast milk is full of nutrients that are better than those in other feeds”.

Participant R said:…. “Breastfeeding is good because breast milk nourishes the baby and he grows well”.

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According to Suwankhong and Liamputtong (2017:71) mothers considered breast milk as the best nutrition for the baby because it contains better nutrients as compared to formula feed. Hazemba et al (2015:111) stated that mothers believed that first breast milk, which is called colostrum, contains vitamins. Mothers perceived breastfeeding as an important option for feeding the baby because breast milk contains adequate nutrients for the infant (Siziba et al 2015: 174). The first breast milk, meaning colostrum provide the baby with passive immunity in a form of lactobacillus bifidus, lactoferrin, lysozyme and secretory IgA (Marshall & Raynor 2014:601).

Sub-theme 1.4: Promotion of bonding and mother’s awareness to child care responsibilities.

The findings indicated that previous experience of mothers on exclusive breastfeeding made them aware that they must put their trust on these infant feeding methods as the best for their babies. Participant A confirmed and said:

“I practiced exclusive breastfeeding for six months with my other child while I have already tested HIV positive, and continued with breastfeeding for two years after I introduced solids food. I introduced solid feeds after six months of the baby’s age. My baby grew well without problems from birth until now. His birth weight was 2500g, and increased normally as expected”.

Adding to the above notion Participant M said: “I practiced breastfeeding previously with my other babies before I could be HIV positive. I practiced breastfeeding for two years to each child. When I was breastfeeding my third born baby, I tested HIV positive and the baby as well. I continued with exclusive breastfeeding because I was on antiretroviral treatment. With this one, at the clinic they told me to take antiretroviral treatment and continue with exclusive breastfeeding, the baby will be protected from HIV infection”.
Kafulafula et al (2014:11) say the mothers who breastfeed, felt that exclusive breastfeeding was an important component of an infant's wellbeing. It encourages optimal growth, protects babies from childhood diarrhoea and recurrent episodes of other illnesses and if the infants can suffer from diarrhoea, they would recover faster than those who are not exclusively breastfed.

Hallowell, Froh and Spatz (2016:7) concur with the findings and stated that early and prolonged breastfeeding prevents obesity at individual health. Breastfeeding in infancy is associated with good cardiac health and small reductions in the risk for ischemic cardiovascular disease in adulthood.

**Theme 2: An outline of the importance of exclusive breastfeeding.**

**Table 4.4 Theme 2 and Sub-themes**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes</th>
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</thead>
</table>
| 2. An outline of the importance of exclusive breastfeeding | 2.1 Breastfeeding viewed as a learning process correcting unhealthy feeding methods and others related practices  
2.2 Breastfeeding mothers' readiness resulting from willingness to protect infants against infections |

Two sub-themes have emerged from this theme as indicated in Table 4.4 above. The health care providers, especially those who offer the Antenatal care to pregnant women have a role to provide these women information on the importance of exclusive breastfeeding to the baby and the mother, especially in the first six months (Health Service Executive, Infant Feeding Policy for Maternity and Neonatal Services (2015:8). The results pointed out that participants narrated their knowledge about the importance of exclusive breastfeeding, which was verified by participant B who said:
“Breast milk is very much important to the baby as there are many illnesses; breast milk examines different illnesses in the baby’s body”.

Participant O supported this notion and said: “The baby on exclusive breastfeeding will not be ill. The breast milk is clean, no bacteria or virus could be able to enter the breast”. Participant Q said: “The baby on exclusive breastfeeding looks good, does not suffer from illnesses and grows well”.

Hazemba, Ncama and Ahmed (2015:61) explain that mothers chose exclusive breastfeeding because it was optimal for their HIV-exposed infants and themselves. Additionally they indicated that mothers chose exclusive breastfeeding in order to protect their babies from HIV infection and perceive that breastfed baby is healthier than formula fed baby (Hazemba et al 2015:62). Pedersen, Amanda, Wilkinson, Andreasen, Kinung’hi, Urassa, Michael, Todd, Changalucha and McDermid (2016:871) stated that breastfeeding is linked with reduced incidents, severity and mortality from infectious diseases, particularly diarrhoea and pneumonia that affect infants.

**Sub-theme 2.1: Breastfeeding viewed as a learning process correcting unhealthy feeding methods and others related practices.**

Findings pointed out that most of the participants had been HIV positive with their previous pregnancies and they have learned a lot with their infants that were born before the current one. They further indicated that they have attended health education sessions several times on feeding practices, as such they have knowledge on the dangers of mix feeding. Participant G confirmed that by saying that:

“What I know is that if I can mix breastfeeding and formula feeds, the baby’s intestines and gut are still soft they will not tolerate formula feed and there will be damage to gut
and intestines as such the baby will be HIV infected. Breastfeeding exclusively prevent the baby from many diseases, this is what I have learnt from my other children when they were born”.

Participant O pointed out by saying that: “I practiced exclusive breastfeeding with my second born baby after I tested HIV positive. Then the baby became very ill at the age of 7 months because I started giving him soft porridge and other things immediately when I arrived at home. The baby became very ill almost dead. They brought him back to life in this hospital by their treatment; I stayed here for 8 months because of giving mix feeds in early age of the new-born baby. They told me that the baby’s stomach was damaged due to early solid feeding. With this one, there is nothing that could prevent me from practicing exclusive breastfeeding for six months”.

According Gupta, Dadhinch and Suri (2017:209) giving other fluids or milk other than breast milk put infants at risk of increased infections. Babies lack the desire to suckle after being fed with something else, these results in the decrease of milk production by the mother.

Some mothers acknowledged that early feeding and performance of cultural practices contradict the PMTCT recommendations, as such they adhered to six months exclusive breastfeeding without any interference with those cultural practices (Mphego et al 2014: 287).

Sub-theme 2.2: Breastfeeding mothers’ readiness resulting from willingness to protect infants against infections.

The findings pointed out that the HIV positive mothers are always ready and willing to protect their infants from infection because they know that it is good. The benefits of exclusive breastfeeding as practised by some of the participants make these mothers to
continue with this infant feeding method with the current babies due to their experience with the previous ones. Participants with that experience said:

“I am still prepared to practise exclusive breastfeeding to this baby because it is the best feeding method which protects the baby from HIV infection as long as there are no solid feeds before six months of age”

Another participant said: … “I am still going to adhere to exclusive breastfeeding. I breastfed my first-born baby, he was healthy, no illness and other problems. After six months we started giving him purity, mabale soft porridge and other food”.

A participant holding the same view said: … “There is nothing that can hinder me from practising exclusive breastfeeding. I am going to follow nurses’ instruction that says: the baby should not be given traditional medicines before six months of the baby’s age. I will only give medicine from the clinic that prevents HIV transmission through breastfeeding”.

Mphego et al (2014:283) said that participants were motivated to practice exclusive breastfeeding because they had a desire to protect their infants from HIV infection. They were, therefore, prepared to participate in the Prevention of Mother-to-Child Transmission programme as they were enrolled to this programme with their previous babies and they know the benefits thereof.

Suwankhong and Liamputtong (2017:71) mothers believed that breast milk boost immune system of the infant as such prevent the risk of illnesses.

Zhu et al (2016: 5) in China found that the primigravidae mothers that displayed increased breastfeeding knowledge, attitude, subjective norm and breastfeeding control, opted
more to practice breastfeeding that resulted in obvious higher rates of exclusive breastfeeding at day 3 and 6 weeks postpartum.

**Theme 3: Existing knowledge of PMTCT and exclusive breastfeeding amongst HIV positive mothers.**

It is evident from the study results that the HIV positive mothers’ possession of knowledge related to PMTCT and exclusive breastfeeding, has emerged from three sub-theme of this theme.

**Table 4.5 Theme 3 and Sub-themes**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes</th>
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</table>
| 3. Existing knowledge of PMTCT and exclusive breastfeeding amongst HIV positive mothers | 3.1 Existing knowledge related to mode of HIV through breastfeeding  
3.2 Known challenges associated with exclusive breastfeeding mentioned  
3.3 Lack of knowledge related to medications instructions including ARTs  
3.4 Lack versus existence of knowledge related to feeding instructions for children of HIV positive mothers  
3.5 Lack of updated information related to exclusive breastfeeding by midwives |

The study findings further revealed that empowerment of HIV positive pregnant women during Antenatal care on PMTCT and exclusive breastfeeding in counselling and health education sessions, brought about knowledge and self-reliant on part of exclusive breastfeeding. Participant B confirmed that and said:
"It is important to exclusively breastfeed the baby as is still young, but one need to know that if formula could be given, the baby will be constipated and there is no treatment for that at the clinic as the baby is still young".

Participant G said: “What I know is that if I can mix breastfeeding and formula feeds, the baby’s intestines and gut are still soft, there will be damage to gut and intestines as such the baby will be HIV infected. Breastfeeding exclusively prevent the baby from many diseases”.

Participant K supported the notion by saying that: “My sister in Law is also HIV positive but she gives breast milk and formula feeding to her child. I think is better if she could either give formula exclusively or exclusive breastfeeding to prevent the baby from illnesses as mixed feeds can affect the baby’s CD4 cell count to be low”.

Cuinhane et al (2017:2) explain that mothers had knowledge on how exclusive breastfeeding reduces the risk of postnatal HIV transmission.

According to Mphego et al (2014: 287) HIV positive mothers who had knowledge about mother-to-child, transmission of HIV adhered to exclusive breastfeeding method despite the pressures they received from family members to mixed feeds or give traditional medicines. These mothers were also pressurized to perform various cultural practices on their babies in order to clean the baby’s stomach.

The mothers who had knowledge on sufficient nutrition provided by exclusive breastfeeding, practised exclusive breastfeeding while still in the hospital and at home after discharge. The beliefs the mothers had on the importance of breastfeeding to their babies and to themselves seemed to be essential to the decision of breastfeeding. The
mothers with sufficient knowledge on breastfeeding were the once who assumed a positive attitude towards practising exclusive breastfeeding (Zhu et al 2016: 5).

Sub-theme 3.1: Existing knowledge related to mode of transmission of HIV through breastfeeding.

Knowing the mode of transmission of HIV by participants is important as the breastfeeding mother would be always alert to such risk during baby feeding period and the practice of exclusive breastfeeding. The results pointed out that the HIV positive mothers have knowledge related to the mode of HIV through breastfeeding, which was outlined by the Participant A who said:

“I have realised that at times the baby may bite the breast and it may bleed, as such the baby may be HIV infected”.

Another participant G with knowledge said: „„ “What I know is that if I can mix breastfeeding and formula feeds, the baby’s intestines and gut are still soft, there will be damage to gut and intestines as such the baby will be HIV infected”.

Participant M said: „„ “I practice exclusive breastfeeding to prevent my baby from HIV infection. Exclusive breastfeeding protect the baby from HIV infection”.

Mataya et al (2013:16) indicate that many participants were aware of the aim of programs to prevent the transmission of HIV from the mother to the baby through breastfeeding.

According to Mataya et al (2013:18) most of the mothers considered breast milk as the only reliable food for the baby because boosts the baby’s immune system and is readily available.
Zhu et al (2016:5) state that the mother’s decision for practising exclusive breastfeeding influenced by its benefits to the baby. Meanwhile the knowledge on the sufficient nutrition provided by exclusive breastfeeding influenced them to practice breastfeeding.

Sub-theme 3.2: Known challenges associated with exclusive breastfeeding mentioned.

Involvement of baby carers in counselling and health provision sessions empowers them with knowledge and full understanding of exclusive breastfeeding practices but it is not always the case where carers are available in these sessions which is problematic. The baby carers remain with babies almost 8 to 12 hours while the mothers are at work or school. The involvement of the baby carers ensures that babies on exclusive breastfeeding and antiretroviral treatment will be cared when their mothers are away but the study results indicate that HIV positive mothers knows the existing challenges. Participant D said:

“I don’t think I will manage to practice exclusive breastfeeding because I am attending school. The clinic nurses told me to express the breast milk and the person who takes care of the baby will feed him. I am not sure that person who will take care of the baby while I am at school will give the expressed breast milk to the baby or not. I am afraid my Aunt will not give my baby expressed breast milk”.

Participant D went on to say: “I want to go back to school or look for a job. What worries me is that, I am not sure as whether my Aunt will give my child antiretroviral treatment at the correct time. What will happen if the baby missed this treatment? I am worried about adhering to practice exclusive breastfeeding even if I can express the breast milk to feed my child while I am at school”.

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Participant K also said: ... “I attend HIV counselling sessions together with my mother and at clinic they advised me to eat well, refrain from taking alcohol and practice unsafe sex as all these may affect my CD4 cell count to be low “.

Health Service Executive Infant Feeding Policy for Maternity and Neonatal Service (2015:8) states that all pregnant women must be given information and opportunities for a one-to-one discussion before 32 weeks gestation, including their partners and other support persons involved in caring of babies.

According to Marinda, Chibwe, Tambo, Lulanga and Wandabwa (2017:11) there is a need to strongly invigorate Infant and Young Child Feeding information sharing throughout the continuum of health care from the facility level to community up to family thus including those who remain with the baby while the mother is not around.

**Sub-theme 3.3: Lack of knowledge related to medications instructions including ARTs.**

Lack of knowledge on how the antiretroviral treatment works affects the taking of the medication by the participants. There will be poor uptake of the treatment, and in turn there will be poor adherence to the practice of exclusive breastfeeding or taking the treatment for other reasons. If participants know how the drug works, they will adhere to both treatment and exclusive breastfeeding. This was indicated by participant B who said:

“I want to know how to give antiretroviral treatment to my baby for the prevention of HIV infection, as they have not yet explained how I should give it to my child. How does it work to protect the baby from HIV infection? I want to know, if I give it to the baby, how long should I wait before I could breastfeed my baby?"

Participant R without knowledge related ARTs said: “I am on antiretroviral treatment but I don’t remember how does it works”.

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Haffejee et al (2016:175) indicated that most of HIV positive mothers often become pregnant aiming to receive antiretroviral treatment because they believe that antiretroviral treatment will cure them of HIV, not knowing that antiretroviral treatment are meant for the prevention of HIV transmission from mother to child.

Sub-theme 3.4: Lack versus existence of knowledge related to feeding instructions for children of HIV positive mothers.

Lack of knowledge on exclusive breastfeeding may result in failure to practice exclusive breastfeeding for six months as recommended. These may lead to the practice of mix feeding that exposes the baby to risk of HIV infection. The participant E said:

“At the clinic they told me about exclusive breastfeeding for six months but not explain further why it is important, things such as the importance of exclusive breastfeeding are critical that they tell us so that we must not thing they are just telling us for the sake of telling us”.

Participant M said: “Breastfeeding is food for the baby until he reaches age of commencing soft porridge. I don’t remember the exact months of commencing soft porridge and other food”.

Contrary to the above statements, participant O said: “The baby who is on exclusive breastfeeding will not be ill. The breast milk is clean, no bacteria or virus can be able to enter the breast”.

Participant Q said: “The baby who is no exclusive breastfeeding looks good, does not suffer from illnesses and grows well”.

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In support of the findings Bekere, Garoma and Beyene (2014:40) explain that most of the participants, about 35%, did not know the meaning of exclusive breastfeeding. Shomo and Al-Shubrumi (2014:52) explain that although breastfeeding has several well-known benefits, participants’ general knowledge was limited. The majority of these participants mentioned only one benefit and no one mentioned more than four benefits of breastfeeding.

Sub- theme 3.5: Lack of updated information related to exclusive breastfeeding by midwives.

Lack of up to date information on part of health care providers/midwives sent conflicting messages to the participants, especially to those who are well informed about the practice of exclusive breastfeeding for six months. One of the participants observed that the health care provider/midwife has recommended 4 months exclusive breastfeeding in the Antenatal card instead of six months, Participant F said:

“I see here, in my Antenatal card, they recommended exclusive breastfeeding for 4 months. What they recommended here differ from what I practised with my first born baby”.

Participant E said: At the clinic they told me that the baby must not be given soft porridge and muti, it means traditional medicine, but they did not explain the consequences of giving the baby soft porridge before six months of the baby’s age elapses”

Gupta et al (2017:210) mention that many maternal-child health workers, invariably lack the necessary knowledge and skills to help and support women initiate breastfeeding as well as support maintenance of exclusive breastfeeding. ‘

Powell et al (2014:263) indicate that some of health care providers, nurses and doctors provide mixed reports on kind of breastfeeding support during mother-infant dyad hospital stay after delivery. This was shown where one nurse told the participant to exclusively
breastfeed and the other one ended up asking the woman the type of formula she was going to feed the baby. These conflicting messages caused confusion among the mothers, not knowing which feeding option to follow.

**Theme 4: Challenges faced by HIV positive breastfeeding mothers**

There are some challenges faced by HIV positive mothers related to the practice of exclusive breastfeeding. There are four emerged sub themes from this theme.

**Table 4.6 Theme 4 and Sub-themes**

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes</th>
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<tbody>
<tr>
<td>3.Challenges faced by HIV positive breastfeeding mothers</td>
<td>3.1 Lack of trust on carers of infants in maintaining appropriate feeding practices</td>
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<tr>
<td></td>
<td>3.2 Prolonged exclusive breastfeeding problematic as viewed by mothers and family members</td>
</tr>
<tr>
<td></td>
<td>3.3 Existing myths related to breastfeeding practices as viewed by mothers and family members</td>
</tr>
<tr>
<td></td>
<td>3.4 Existence of religious and cultural practices which affects breastfeeding practices</td>
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</table>

**Sub-theme 4.1: Lack of trust on carers of infants in maintaining appropriate feeding practices.**

One of the participants showed lack of trust on carers of the infants with regard to maintaining of exclusive breastfeeding as well as giving the baby antiretroviral treatment while she will be at school. The participant D said:
“I don’t think I will manage to practice exclusive breastfeeding because I am attending school. The clinic nurses told me to express the breast milk and the person who takes care of the baby will feed him. I am not sure that person who will take care of the baby while I am at school will give the expressed breast milk to the baby or not. I am afraid my Aunt will not give my baby expressed breast milk especially because she does not know that I am HIV positive”.

Participant D continued to say: “I want to go back to school or look for a job. What worries me is that, I am not sure as whether my Aunt will give my child antiretroviral treatment at the correct time. What will happen if the baby missed this treatment? I am worried about adhering to practice exclusive breastfeeding even if I can express the breast milk to feed my child while I am at school. A home we give the baby soft porridge immediately when the baby is born together with breast milk”.

This raised a concern to include the baby carers in health education sessions to empower them with information on the practice of exclusive breastfeeding. The Health Service Executive Infant Feeding Policy for Maternity and Neonatal Service (2015:8) concurs with this, and states that anyone who is directly involved in taking care of the baby is entitled to attend health education session in order to be well informed in relation to the practice of exclusive breastfeeding and measures to prevent the baby from HIV infection and other diseases.

**Sub-theme 4.2: Prolonged exclusive breastfeeding problematic as viewed by mothers and family members.**

Six months’ exclusive breastfeeding is considered by the participants and their family members to be a long period, as they believe the baby goes hungry when feed on the breast only. They regard the baby’s cry as a sign of hunger.
Participant E said: “Breastfeeding is a good thing, but giving the baby only breast milk, the baby won’t be hungry? Exclusive breastfeeding for six months is too long period without giving soft porridge? I think the baby need some soft porridge. I don’t produce enough breast milk”.

Hazemba, Ncama and Sithole (2016:10) explain that some mothers perceived that babies cry from hunger because breast milk is not enough, mothers interpreted baby cry as a sign of hunger. Gupta et al (2017:210) explain that mothers perceive that they do not have enough breast milk.

Participant M said: “The baby, who is not given food and water as well, will not grow well. At home they say if the baby is fed on the breast only, he will be hungry. Breast milk is not enough for the baby. At home we do not give anything in early days of the baby’s life, but after the umbilical cord stump is off, is the time when we start giving the baby soft porridge. I can give” low water”, it is previously boiled water given to the baby when is Luke warm”.

Mnyani, Tait, Armstrong, Blaauw, Chersich, Buchmann, Peters and McIntyre (2017:9) mention that HIV positive women expressed their views by saying that cultural factors and the influence of elders prevented them from practicing exclusive breastfeeding for six months. This is also supported by Goosen et al (2014:22) explain that mothers believed giving water and non-prescribed medicine to their babies to clean urine, relief constipation, and work off acid and stop hiccups shows to be responsible for the baby’s health.
Sub-theme 4.3: Existing myths related to breastfeeding practices as viewed by mothers and family members.

There are some myths that affect the practice of exclusive breastfeeding. This contributes to failure to maintain exclusive breastfeeding for six months. Participant O said:

“In our culture, we practice what they call “GO THEKGA NGWANA” meaning they protect the baby from some evil spirits where after they did some other rituals, we give oral stuff to the baby to drink”. “In our cultural practice, a new-born baby is given warm water and breastfeeding, nothing else”.

Participant I said: “At home my sister use what they call “TSITSA TSA HLOGO” is the traditional treatment of sunken fontanel, where we give the baby oral muti after performing other rituals as part of the treatment”.

In addition this notion participant M said: “At home say the baby who is not given food and water will not grow, as such they say I must give the baby soft porridge and previously boiled water known as low water”.

According to Chinofunga and Vungu (2013:549) the mothers’ traditional beliefs were that the first breast milk is not good for the baby, and colostrum was considered as dirty, so was not given to the baby. The mothers’ believe that there should be no breastfeeding after sexual intercourse and exclusive breastfeeding was not accepted in their culture. The participants also believed that breast milk alone does not satisfy the baby and exclusive breastfeeding does not reduce the chances of HIV infection. All these myths affect the practice of exclusive breastfeeding.
Goosen et al (2014:22) stated that giving water and non-prescribed medicines were considered responsible for the baby’s health, as mothers believed it solves various symptoms and/or ailments. Mothers believe and perceived that giving water cleans urine, relieves constipation, works off acid caused by milk and stops hiccups. The mothers and grandmothers related the baby cry as a sign of hunger, and believed that giving breast milk alone to the baby is not enough (Goosen et al 2014:23).

Sub-theme 4.4: Existence of religious and cultural practices, which affects breastfeeding, practices.

The practice of religion and culture on a newborn baby most of the time interferes with the practice of exclusive breastfeeding for six months. In some religion and culture, they perform some rituals before the baby could be allowed to get out of the house for the first time. Participant Q said:

"At the age of three months according to our church, they spray the baby and me with water and then allow us to get out of the house. The church practice, they prick the baby’s fingers with needle and give the baby church tea to drink as well and allow to start with other feeds”.

In addition to this notion participant D said: “In our culture when the baby is born we give soft porridge immediately together with breastfeeding. Our religious practice, we give church tea to the baby to drink as part of other rituals performed before the baby could be allowed to get out of the house for the first time”.

According to Chinofunga (2013:549) water is prescribed as medication in some other participant’s church.
There are some cultural ways of treating the baby for dehydration and sunken fontanel or pulsating anterior fontanel. These practices interfere with exclusive breastfeeding practice.

Participant G said: “Cultural practice has got no problems. I treated my baby with traditional medicines, but the baby is well. The baby was treated for “HLOGWANA” they cut on the anterior fontanel with a razor blade then smear some black stuff and give some oral traditional medicine to drink. I saw my baby was well, even today had no problems”.

Madiba and Langa (2014:271) explain that women performed cultural and traditional practices on babies to protect them from evil spirits, where most women prepare oral traditional mixture and give it to the baby to drink and this interfere with the practice of exclusive breastfeeding.

**Theme 5: Strategies used to overcome breastfeeding challenges**

**Table 4.7 Theme 5 and Sub-themes**

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<thead>
<tr>
<th>Theme</th>
<th>Subthemes</th>
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<tbody>
<tr>
<td>5. Strategies used to overcome breastfeeding challenges</td>
<td>5.1 Defiant practices by mothers to ignore religious and cultural expectations outlined</td>
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<tr>
<td></td>
<td>5.2 Acceptance versus lack of acceptance of feeding practices by family members provision of explanation</td>
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The participants developed strategies to overcome the challenges they come across in the practice of exclusive breastfeeding, aiming to protect their babies from contracting HIV infection through such cultural and religious practices.

**Sub-theme 5.1: Defiant practices by mothers to ignore religious and cultural expectations outlined.**

Possession of knowledge and understanding on how HIV could be transmitted from mother to child encourages the mothers to stand against the religious and cultural
practices. The participant had courage to go against such practices aiming to protect their babies from the risk of HIV infection.

Participant L said: “Pertaining to traditional practice, I told my family members that my baby should not be treated with traditional medicines including giving water in between breastfeeding in order to prevent him from HIV infection. Everybody at home understood, so I am going to practice exclusive breastfeeding for six months without giving any other feeds including water”.

Mphego et al (2014:286) mention that the knowledge and understanding of mother to child transmission of HIV made it easy for some participants to resist family pressures to mix feed and adhere to their feeding options.

Sub-theme 5.2: Acceptance versus lack of acceptance of feeding practices by family members’ provision of explanation.

The mothers, who honour their religious practices, intend to postpone the religious activities until the six months of exclusive breastfeeding is over, in order to protect the baby from the risk of HIV infection.

Participant Q said: “I will wait until six months is over, is then that I will give the baby church tea to drink and allow them brick his fingers”.

This differs with the findings by Madiba and Langa (2014:274) who found that the mother who planned to delay cultural practices until six months, was over powered by the family members who performed cultural rituals to her baby during her absence.

Participant I said: At home they use traditional beliefs but I won’t practice such things to my child. My sister use “TSITSA TSA HLOGO” which they refer to the pulsating and
sunken fontanel, where they give the oral traditional muti after performing some other rituals. I won’t practice such things to my child as I am HIV positive. I am afraid that the baby’s immune system could be low if I can give him traditional muti or feeding him with soft porridge before six months elapses”.

This differs with findings by Hazemba et al (2015:113) where participants had a sense of fear and insecurity, adhered to cultural practices that were in conflict with the practice of exclusive breastfeeding for six months. They feared that their babies would contract a childhood disease and death, if they go against the cultural practice.

**Theme 6: Support experienced by mothers related to feeding practices decisions taken.**

**Table 4.8 Theme 6 and Sub-themes**

<table>
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<th>Theme</th>
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<tbody>
<tr>
<td>6. Support experienced by mothers related to feeding practices decisions taken</td>
<td>6.1 Existing support experienced from partners</td>
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<tr>
<td></td>
<td>6.2 Existing support experienced from family members</td>
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Support offered by family members on the practice of exclusive breastfeeding influences the HIV positive mothers to adhere for six months exclusive breastfeeding. There are two sub-themes that emerged from the main theme.

**Sub-theme 6.1: Existing support experienced from partners.**

Male partners and husbands especially who know the HIV status of their female partners offer a great support on exclusive breastfeeding, and the mothers get greatly encouraged to adhere to six months exclusive breastfeeding.
Participants L said: “I explained my condition to my husband. My husband has got no problem about exclusive breastfeeding for six months without giving any other things to the baby because I told him my HIV status”.

Participant P said: “My husband will give me support on exclusive breastfeeding. We both accepted that we are HIV positive”.

Participant A added to this notion by saying that:.. “I am staying with my husband who is supportive to exclusive breastfeeding without giving the baby other feeds, Before my husband could know that I am HIV positive, was so careless about many things at home, but after he discovered that I am HIV positive, during my second pregnancy, he began to take care of our family more than before. He is supportive as he does not want our baby to be HIV positive”.

Shongwe and Mkhonta (2015: 9601) concur with this, and explain that some of the participants expressed great pleasure in getting support on exclusive breastfeeding from their male partners, especially those mothers who disclosed their HIV status to their partners.

Sub-theme 6.2: Existing support experienced from family members.

The successful practice of exclusive breastfeeding in HIV positive mothers is influenced by people who interact with them on a daily basis. These include sisters, brothers, mothers and the rest of family members, especially people who practiced exclusive breastfeeding before. The exclusive breastfeeding mothers are highly appreciating the support and are able to exclusive breastfeed their babies without fear.

Participant R said: “I will get support on practising exclusive breastfeeding at home, as all my sisters practised it. They will encourage me to eat enough food and to breastfeed the baby”.

Participant K said: “At home I will get a full support because they know my HIV status and they do not judge me according to my condition.” I attend HIV counselling sessions together with my mother and I even did research about this condition”.

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Participant F added to this notion by saying that: “I don’t think I will have problems in managing to exclusive breastfeed for six months. I got enough support at home from everybody, my brothers, and my sisters; they support me on practising exclusive breastfeeding to my previous baby”.

In addition Participant I said: “In terms of support, my sister is there to take care of me, give me advices, without causing me stress”.

These findings are supported by Shongwe and Mkhonta (2015:9601) who found that in single mothers, got support from their biological mothers who encouraged them to practice exclusive breastfeeding. The study revealed that sharing personal experiences during community gathering and antenatal clinic visits motivated the mothers to practise exclusive breastfeeding.

Powell et al (2014:262) in the study conducted at Athens in United States of America, stated that mothers who succeeded in exclusive breastfeeding they got support and encouragement from the other mothers and friends who also breastfed their own children successfully for more than six months. These mothers shared their fears, and struggles on exclusive breastfeeding and they find common ways of making exclusive breastfeeding successful. Other mothers reported that knowing people who have breastfed before or still breastfeeding assisted them to talk with them about exclusive breastfeeding even before they become pregnant, this helped them to succeed in exclusive breastfeeding their own infants.

**Theme 7: An outline of adherence to treatment and feeding practices.**

In all spheres of people’s life, there is a need to develop a way out in terms of the challenges or difficulties the person may come across. HIV positive mothers require strategies to cope with the practice of exclusive breastfeeding to prevent their babies from the risk of HIV infection. Three sub-themes have emerged under this theme.

**Table 4.9 Theme 7 and Sub themes**

<table>
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<th>Theme</th>
<th>Subthemes</th>
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### 7. An outline of adherence to treatment and feeding practices

<table>
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<tr>
<th>Sub-theme</th>
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#### Sub-theme 7.1: Adherence to feeding strategies advice observed from mothers.

The goal of administering antiretroviral treatment to HIV infected mothers is to reduce the viral load in the woman’s blood stream and sustain viral suppression, in turn decreases the risk of mother to child transmission of HIV (Guidelines for Maternity care in South Africa 2016:109). Knowing and understanding this aims, assures the participants to cope with exclusive breastfeeding, as they know that their babies are protected from the risk of HIV infection. Participants O said:

> “Antiretroviral treatment weakens the HIV, and then the baby become protected from HIV infection. It is safe to breastfeed the baby. He won’t be HIV infected”.

Participant Q said: “Antiretroviral treatment protects the baby from HIV infection and Neverapine as well”.

Hazemba et al (2015:62) concur with this, and indicate that antiretroviral treatment assures the HIV positive mothers to practice exclusive breastfeeding without any fear of infecting their babies because of being on the treatment.


#### Sub-theme 7.2: Developed strategies to defend feeding practices outlined.
The HIV positive mothers who realised the importance and experienced the benefits of exclusive breastfeeding on the babies end up developing ways of defending this infant feeding method to other people who may try to discourage them from practicing it. Participants narrated how they will defend their choice of practicing exclusive breastfeeding to anyone who may try to be an obstacle of their choice. Participant Q said:

“If somebody queries or ask why I give the baby breast milk only, I will answer by saying this is the order from the clinic and I will obey it until the baby reaches six months old”.

Participant R said: “If someone ask me why do I exclusive breastfeed the baby, I would say is how I nurture my baby”.

This is corroborated Mataya et al (2013:17) who state that women ignored what others were saying about them in order to cope with the practice of exclusive breastfeeding. These women pledged to be religiously adherent to exclusive breastfeeding because that was the only way they could ensure that their babies remain HIV negative.

**Sub theme 7.3: Existence of mechanisms to disclose HIV positive status and feeding practice developed.**

**Usually the** Women who accepted that they are HIV positive, are always keen to share their HIV status with anyone who may query their way of living including infant feeding options such as exclusive breastfeeding. One participant narrated how she is ready to defend the practice of exclusive breastfeeding by revealing her HIV status.

Participant K said: “If somebody can ask me why do I exclusive breastfeeding; I will tell the person about my HIV status without fear so that he/she could understand my situation”.

This differs with the findings of the study conducted in Malawi by Mataya et al (2013:17) where the participants when faced with words of discouragement from people, they turned such insults into words of encouragement to even doing better in terms of adhering to exclusive breastfeeding.
4.5 CONCLUSION

In this chapter the researcher managed to explore HIV positive mothers’ perceptions of exclusive breastfeeding in the postnatal ward in a particular hospital. Data were transcribed and categorised into themes using an adapted Colaizzi (1978) seven steps of analysis as cited in Shosha (2010:35). The themes identified were as follows: Description of the existing benefits of breast milk and exclusive breastfeeding, An outline of the importance of exclusive breastfeeding, Existing knowledge of PMTCT and exclusive breastfeeding amongst HIV positive mothers, Challenges faced by HIV positive breastfeeding mothers, Strategies used to overcome breastfeeding challenges, Support experienced by mothers related to feeding practices decisions taken and An outline of adherence to treatment and feeding practices. Chapter 5 will deal with conclusions and recommendations including the limitations of the study.
CHAPTER 5

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter presents the summary of the findings that emanated from the study, the limitations, conclusion and description of the recommendations. The recommendations are based on findings of the study.

The purpose of the study was to explore the HIV positive mothers’ perceptions towards exclusive breastfeeding in the postnatal ward of a particular hospital Limpopo Province, South Africa.

The objectives that guided the study were to:

explore how HIV positive mothers in postnatal ward at a particular hospital perceive exclusive breastfeeding.

describe the perceptions the mothers have towards exclusive breastfeeding.

5.2 RESEARCH DESIGN AND METHOD

The qualitative exploratory research design was used to explore and describe the HIV positive mothers’ perceptions towards exclusive breastfeeding. According to Munhall (2012) as cited in Grove et al (2015:20) qualitative research is a systemic, subjective approach used to describe life experiences and situations and giving it meaning. Qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem (Creswell 2017:4).

Qualitative researchers believe that the truth is complex and dynamic and can be found only by studying people as they interact with and their sociohistorical settings (Creswell 2014; Munhall 2012) as cited in Grove et al (2015:20). The study was conducted in postnatal ward at a particular hospital in Limpopo Province.
Exploratory descriptive qualitative research was relevant for this study. A well-designed exploratory descriptive qualitative study answers the research problem (Grove et al. 2015:21).

A grand tour question was asked to collect data, in-depth interview conducted, where the researcher asked one broad question and probe according to the respond of each participant. Data collected by using a voice recorder to capture responses and field notes were also taken to support the recorded information. Fifteen participants were interviewed daily until data saturation was reached.

Interviews were conducted in a private room to maintain privacy and confidentiality of the participants. Anonymity was ensured by using code names instead of real names.

Data analysis was done concurrently with data collection. The researcher produced information by gathering data into specific segments. The collected data was transcribed and categorised into themes for the purpose of presentation using an adapted Colaizzi (1978) seven steps of analysis as cited in Shosha (2010:35).

5.3 SUMMARY AND INTERPRETATION OF RESEARCH FINDINGS

Twenty-one cluster of themes and seven themes emerged from this study. The emerged themes are as follows:

Description of the existing benefits of breast milk and exclusive breastfeeding.

An outline of the importance of exclusive breastfeeding.

Existing knowledge of PMTCT and exclusive breastfeeding amongst HIV positive mothers.

Challenges faced by HIV positive breastfeeding mothers.

Strategies used to overcome breastfeeding challenges.

Support experienced by mothers related to feeding practices decisions taken.

An outline of adherence to treatment and feeding practices.
Theme 1: Description of the existing benefits of breast milk and exclusive breastfeeding.

The study results revealed that there are existing benefits of breast milk and exclusive breastfeeding. The Infant Feeding Policy for Maternity and Neonatal Services (2015:27) state that exclusive breastfeeding is beneficial for the mother and infants.

This study revealed that HIV positive mothers perceived that breast milk prevent the baby from illnesses such as cough, constipation, diarrhoea, vomiting and failure to thrive. This is concurred by Infant Feeding Policy for Maternity and Neonatal Services (2015:27) which indicates that breastfeeding reduce the risk of acute infections such as diarrhoea, pneumonia, ear infection, haemophilus influenza, meningitis and urinary infection.

The participants in this study believed that breast milk protects the baby from diseases such as tuberculosis including HIV infection. Breast milk provides good health to the baby. Infant Feeding Policy for Maternity and Neonatal Services (2015:27) concurs with this, and explains that breast milk protect the baby against chronic conditions in the future such as type 1 diabetes, ulcerative colitis and Crohn’s disease. Contrary and in support Sankoh et al (2015:3) stated that even in context where HIV poses a threat, where breastfeeding increases the risk of HIV transmission, it is uncertain that replacement feeding is safer than breast milk. Formula milk lacks many nutrients found in breast milk, it must be mixed with often unclean water, as such exposes the infant to risks of contracting diseases such as cholera and diarrhoea thus increasing infant morbidity and mortality rates than in breastfeed infants. Therefore, exclusive breastfeeding appears a safer feeding option during the first six months of infant’s life
The participants indicated that breast milk is good for the growth and development of the baby. The baby who is on exclusive breastfeeding grows well because breast milk nourishes the baby. Siziba et al (2015:174) concurs by saying breast milk makes the baby to grow strong and well.

Various nutrients that are required for growth and development of infants as well as the prevention of infection were mentioned by the participants in this study. They indicated that breast milk provides the baby with vitamins and proteins that boost the infant’s immune system as such the baby is prevented from infections. Pedersen et al (2016:875) state that mature breastmilk immune composition is associated with breastfeeding practices. Breastmilk from mothers who breastfed exclusively contained higher overall immunoglobulin A (IgA) than the milk from mothers who were partially breastfed their infants. Breast milk contains immunoglobulins that confer immunity against infections (Lawrence and Lawrence 2010) as cited in Jonas and Woodside (2016:174).

Mothers with previous experience of exclusive breastfeeding, rely on this feeding method considering it to be the best feeding option for their babies because breast milk provides the baby with vitamins and proteins. Most of the participants practiced exclusive breastfeeding with their previous babies and the babies grew well without illnesses. The first breast milk quenches thirst then followed by nutritious breast milk that promotes the baby’s growth. This is supported by Kafulafula et al (2014:6). Participants reported that exclusive breastfeeding promotes the wellbeing of infants. Hazemba et al (2015:6) indicate that mothers opted for exclusive breastfeeding because breast milk is safe as compared to formula when they are on antiretroviral treatment.

**Theme 2: An outline of the importance of exclusive breastfeeding.**

The participants in this study shared their experiences on the practice of exclusive breastfeeding with their previous babies and they learnt how important it is to exclusive breastfeed. Pederson et al (2016:871) indicate that exclusive breastfeeding reduce the incidents, severity and mortality from diarrhoea and pneumonia with ≥ 800,000 deaths.
The participants showed their awareness of dangers of mixed feeding by saying that early solids feeding will cause illness to the baby. This is shown when the participants say mixing breastfeeding with formula may lead to intestines and gut damage as such the baby will be exposed to the risk of HIV infection. Gupta et al (2017:209) state that giving any foods or fluids before the age of six months will expose the baby to increased risk of infections like diarrhoea that will result with weight loss and malnutrition.

The study revealed that the participants showed their readiness to practice exclusive strictly for six months because they have realised that this feeding method prevent the babies from HIV infection. Mnyani et al (2017:6) concurs, where the greater proportion of postnatal mothers intended to practice exclusive breastfeeding in order to protect their babies from HIV infection.

**Theme 3: Existing knowledge of PMTCT and exclusive breastfeeding amongst HIV positive mothers.**

The participants showed to have knowledge on the prevention of mother to child transmission of HIV. The participants indicated that if mix feeding could be practiced before the age of six months, the baby will be exposed to a risk of HIV infection because the gut and the intestines are still soft as such damage may occur. This is concurred by Flax, Hamela, Mofolo, Hosseinipour, and Hoffman and Maman (2016:2619) the participants were aware that early introduction of complementary foods could cause harm to the child’s gut as such the baby could get HIV infection.

The participants showed they have knowledge on the mode of HIV through breastfeeding. They mentioned that in case where the baby may bite the breast and bleeding occurs, there is a high risk of HIV infection. The other mode of transmission they mention was a situation where mix feeding has occurred before six months of the baby’s age is not over, because there will be damage of gut and intestines the baby could be HIV infected. This supported by Flax et al (2016:2619) where the participants mentioned that early
introduction of complementary feeds could harm the baby’s gut, which will results with HIV infection to the baby.

Some of the participants had challenges with regard to the practice of exclusive breastfeeding where one participant indicated that she doubt as to whether her Aunt will be able to give her baby the expressed breast milk and antiretroviral treatment while she is at school. This gave rise to the need to involve the baby carers in health education sessions in to empower them on the practice of exclusive breastfeeding and the importance of giving the antiretroviral treatment to the babies when their mothers are away. In support of these findings, Marinda et al (2017:6) mentioned that there is a great need to empower community members thus includes the baby carers to enable them to give support in exclusive breastfeeding practice.

The results of this study revealed that other participants had limited knowledge on how antiretroviral drug works. One of the participants interviewed wanted to know the duration that should be taken after administration of the treatment before she could breastfeed her baby. This showed that she had less information on the antiretroviral treatment. Hazemba et al (2016:6) state that although the emphases was made to mothers that exclusive breastfeeding reduce the risk of MTCT while adhering on antiretroviral treatment, some mothers doubted this because of they had inadequate information and lack of understanding of exclusive breastfeeding practice in the context of PMTCT of HIV.

Some of the participants showed lack of knowledge on exclusive breastfeeding, while others had the knowledge related to the practice of exclusive breastfeeding. This was identified when one of the participants saying that she does not know the duration of exclusive breastfeeding because nurses at the clinic did not inform her about it. While the other participant wanted to know the consequences of mix feeding. Bekere et al (2014:40) explain that 35% of participants did not know the meaning of exclusive breastfeeding.
The participants that had knowledge on the practice of exclusive breastfeeding said that exclusive breastfeeding is good because the baby grows well without suffering from illnesses. One participant indicated that she practiced this infant feeding method before, with her previous baby while she was found to be HIV positive, at the age of eighteen months her baby tested negative, as such, she is still going to exclusive breastfeed the current child for six months. In support of these findings, Bekere et al (2017:40) 86.4% of mothers had knowledge on the benefits of exclusive breastfeeding and 65.3% on its role of protecting the baby against diseases. A high percentage of 80.5% participants had knowledge that breast milk alone is enough for the baby up to six months. This knowledge empowered the mothers to resist the external interferences and pressures that were threats to the practice of exclusive breastfeeding (Bekere et al 2016:42).

The findings of the study showed that some of health care providers had limited knowledge on the practice of exclusive breastfeeding. This was revealed when one of the participant indicated in her Antenatal card where the midwife recommended exclusive breastfeeding for 4 months. The participant was concerned about this information because she practiced exclusive breastfeeding for six months with her previous baby. This is concurred by Valley, Kupul, Neo, Fiya, Kaldor, Mola, and Worth (2013:7) mentioned that key health care workers are not aware of up to date information relating to infant feeding, especially within the context of HIV. This lack of up to date information and knowledge led to inaccurate information being given to women concerning the importance of exclusive breastfeeding for six months and continuation of breastfeeding after introduction of other foods and fluids.

**Theme 4: Challenges faced by HIV positive breastfeeding mothers.**

The challenges that some of the participants had pertaining to exclusive breastfeeding were that some will be going back to work while others were going back to school. All these posed a problem in terms of adherence to exclusive breastfeeding because these mothers needed someone to remain taking care of their infants.

One of the participants lacked trust on the carers of her baby while she was at school. This raised the need to involve the baby carers in health education sessions to empower
them with information about the importance of practicing exclusive breastfeeding for six months without giving the baby any other feeds including water. Health Service Executive Infant Feeding Policy for Maternity and Neonatal Service (2015:8) concurs that anyone who is directly involved in taking care of the baby is entitled to attend health education session in order to be well informed in relation to the practice of exclusive breastfeeding and measures to prevent the baby from HIV infection and other diseases.

The study findings suggested that the participants considered six months exclusive breastfeeding being a long period for the baby to go without solids feeds. The participants indicated that the baby on exclusive breastfeeding would go hungry; as such, he needs some soft porridge. They considered the baby cry a-sign of hunger. This is supported by Flax et al (2016:2618) mothers believed that the baby goes hungry when fed on the breast only, as such the baby needs some food and fluids as well. Cuinhane et al (2017:9) the participants perceived that both breast milk and formula were not nutritious enough to feed the baby up to six months of age and this lead to mothers fail to adhere to exclusive breastfeeding for six months of the baby’s age. Shongwe and Mkhonta (2015:9600) mentioned that mothers found it not easy to practice exclusive breastfeeding because of the pressure they received from the in-laws or husbands who suggest that the baby should get other feeds because breast milk is not enough as such they believe the baby become hungry if is on breast milk alone.

The study findings revealed some myths that affect the practice of exclusive breastfeeding. This contributes to failure in adherence to the practice of exclusive breastfeeding for six months. Their babies solids feeds and some fluids before six months of the baby’s age elapses. This means the practice of exclusive breastfeeding was not adhered to by these mothers and for some of them this practice is influenced by their family members like their in-laws. In support of these findings, Cuinhane et al (2017:5) say that some participants believed that their babies cry because of hunger as breastfeeding alone was not enough, as such they gave them soft porridge at three months of age. Hazemba et al (2015:114) mothers perceived that crying of the baby was
the sign of hunger as such they started feeding their babies with soft porridge before six months of the baby’s age elapses.

The results of this study revealed that in some religious and cultural practices, there are rituals that interfere with adherence to exclusive breastfeeding practice. In other churches, when the baby is born, the give oral tea church after they performed other rituals according to their beliefs before they could allow the baby to be out of the house for the first time. In other cultures, they also give some oral traditional medicine to treat what is called “HLOGWANA” meaning sunken fontanel or pulsating anterior fontanel, after they had performed some other traditional rituals. Hazemba et al (2015:114) support these findings by stating that mothers used traditional herbs to treat diarrhoea (chibele), chest infections (midulo/milio), dehydration (chapamutu) and oral thrush (chamukamwa) in Zambia. This practice interferes with the practice of exclusive breastfeeding.

**Theme 5: Strategies used to overcome breastfeeding challenges.**

The study revealed that the participants had developed their own strategies to overcome the breastfeeding challenges they come across during the practice of exclusive breastfeeding for six months of the baby’s age in order to protect their babies from the risk of contracting HIV infection.

The study revealed that other mothers were prepared to go against religious and cultural practices. Some of them stated that they are Christians and do not follow cultural practices. Mphego et al (2014:286) concur that mothers resisted family pressures to practice mix feeding and participants indicated that they will not allow cultural rituals to be done to their babies, while others to their feeding options because they had knowledge and understanding of mother to child transmission of HIV. Shongwe and Mkhonta (2015:9601) mentioned that mothers who succeeded to achieve exclusive breastfeeding were those who resisted pressure from family members to introduce other fluids.
The mothers, who honour their religious practices, intend to postpone them until the six months of exclusive breastfeeding is over, in order to protect the baby from the risk of HIV infection.

Some participants indicated that although there are some religious practices they need to follow, they would wait until the period of six months exclusive breastfeeding is over before they could do such practices. This differs with what Madiba and Langa (2014:274) found where the participant who planned to delay cultural practices until six months were over powered by family members who performed cultural rituals to her baby during her…

**Theme 6: Support experienced by mothers related to feeding practices decisions taken.**

Support offered by family members on the practice of exclusive breastfeeding influences the HIV positive mothers to adhere for six months exclusive breastfeeding.

This study revealed how the participants acknowledged the support they receive from their husbands and life collaborators towards the practice of exclusive breastfeeding. One participant indicated that after the husband knew that the wife was HIV positive, he started displaying a positive behaviour towards his family. She indicated that before disclosure, the father was not taking care of his family well, but then, he was so committed to his family in terms of providing food, well fair and material things. Shongwe and Mkhonta (2015:9601) explain that some participants expressed their great pleasure to get support on exclusive breastfeeding from their male partners, especially those mothers who disclosed their HIV status to their partners.

The study revealed that some of the participants managed to practice exclusive breastfeeding due to the support they receive from their family members. One of the participants pointed out that she did not experience any problem of practicing exclusive breastfeeding at home because family members knew her HIV status; therefore, they support the practice of exclusive breastfeeding. She further mentioned that she has a good support from her mother at home and they do not judge her according to her condition. This is supported by Sabzi, Anoosheh, Mohammadi and Parsay (2016:51) who
say that mothers reported the presence of their experienced family members or friends increases their confidence and self-efficacy in the practice of exclusive breastfeeding.

**Theme7: An outline of adherence to treatment and feeding practices.**

The study revealed that some of the participants have developed their own ways of defending their chosen infant feeding method of exclusive breastfeeding.

The study revealed that participants were more confident that as long as they take antiretroviral treatment, their babies are protected from contracting HIV infection through breast milk. They believed that antiretroviral treatment weakens the HIV and it also boost the immune system of the mother, as such, the baby is protected from being HIV infected. Acheampong, Naab and Kwashie (2017:6) concurred that antiretroviral treatment assures the HIV positive mothers to practice exclusive breastfeeding without any fear of infecting their babies because of being on the treatment because most of HIV positive mothers who previously practiced exclusive breastfeeding and taking antiretroviral treatment their babies found to HIV negative.

The study revealed that the participants have developed their own ways of dealing with any situation that could threaten their decision of practicing exclusive breastfeeding for six months, after they have realised the importance and the benefits of exclusive breastfeeding.

Other participants were ready to answer anyone who would query their way of baby feeding, saying that they obeyed the instructions from the clinic. Acheampong et al (2017:6) concur with this, and state that mothers developed coping strategies in order to adhere to exclusive breastfeeding without fear of what other people were saying about them. These participants channelled their problems to God through prayer, believing that God eventually will solve their problem.

This study revealed that one of the participants was ready to defend the practice of exclusive breastfeeding by disclosing her HIV status to anyone who could ask her why is
she feeding the baby on the breast only. Greene, Ion, Kwaramba, Lazarus and Loutfy (2017:8) concurred with this and stated that some women opted to be open about their HIV status and working toward educating those around them about motherhood and HIV. Contrary to the findings, Acheampong et al (2017:3) mentioned that the participants had hope since their babies looked healthy physically. They indicated that there was nothing to worry about.

5.4 CONTRIBUTION OF THE STUDY

The study revealed that some of the HIV positive mothers do not adhere fully to the practice of exclusive breastfeeding due to cultural and religious practices that interfere with exclusive breast-feeding for six months of the baby’s life. Some mothers believed that breast milk alone is not enough as such, the baby goes hungry and he needs some soft porridge. While others believed that when the umbilical stump get off, the baby is now ready to be given soft porridge and “low water” meaning that they give the baby previously boiled Luke warm water. Others prick the baby’s fingers with needles and give oral church tea to the baby before they could allow the mother and baby to get out of the house for the first time post-delivery.

It was also found that some of health care providers had limited up to date knowledge on the practice of exclusive breastfeeding. One of the participants indicated in her Antenatal card where it was recommended that she should practice exclusive breastfeeding for 4 months. The participant said that what was recommended in the Antenatal card differs with what she practiced with her first-born baby, as she exclusively breastfed her child for six months.

The study also revealed how other participants developed the coping strategies to deal with anything that may threatens>threaten their chosen method of feeding, meaning exclusive breastfeeding. Some participants were confident that as long as they are on antiretroviral treatment, their babies were protected from HIV infection because the treatment weakens the HIV. Others were ready to answer whoever queries their feeding method by saying that they obey the order from the clinic,
and is the way of nurturing their babies. [Let us avoid repetition. You have said this many times] One participant was ready to disclose her HIV status to anyone who could query her feeding option.

5.5 LIMITATIONS OF THE STUDY

The study was conducted in a maternity postnatal ward of one particular tertiary hospital in Limpopo Province that is a referral hospital for complicated obstetric cases including the sick neonates. The limitation is, therefore, that the database was narrow (based on a single setting), and that prevents generalisation to comparable situations. However there were limited generalisations of findings from this study because purposive sample of participants were drawn from a single setting that.

It remains unknown about the perceptions of HIV positive mothers towards exclusive breastfeeding in other areas of Limpopo and other Provinces in South Africa.

5.6 RECOMMENDATIONS

Based on the findings in this study, the following recommendations were raise.

5.6.1 Description of the existing benefits of breast milk and exclusive breastfeeding.

Health care providers to continue providing sufficient information on the benefits of breast milk in reducing the risk of HIV transmission when the mothers are on antiretroviral treatment and adhere to the practice of exclusive breastfeeding for six months in HIV positive mothers.

This could be done through community awareness campaigns and through displaying these benefits on the posters and pamphlets.

5.6.2 An outline of the importance of exclusive breastfeeding.

Health care providers should intensify the health education on the promotion of exclusive breastfeeding to all mothers of childbearing age including their family members for their support.
Support groups should be formed and utilise community resources such as clinics to meet for discussions where mothers can share their fears, struggles and successes on exclusive breastfeeding for six months.

5.6.3 Existing knowledge of PMTCT and exclusive breastfeeding amongst HIV Positive mothers

The healthcare providers should be workshopped on new developments on PMTCT to prevent giving out dated messages on HIV positive and exclusive breastfeeding to the clients.

Infant and Young Child Feeding policy implementation be a Key Performance Area for all health care providers working in maternity. This will encourage each staff member to keep her/himself up-to-date with new information on infant feeding methods. This will enable the health care workers to provide the mothers and community with up-to-date information on exclusive breastfeeding in HIV positive mothers.

Continuous Professional Development strategy should be adhered to by all health care providers offering maternity care to keep themselves abreast with the new development on exclusive breastfeeding for six months in HIV positive mothers.

The health care providers should involve the baby carers in health education sessions to empower them with information about the importance of practicing exclusive breastfeeding for six months without giving the baby any other feeds including water.

5.6.4 Challenges faced by HIV positive breastfeeding mothers.

Religious and cultural practices should be included in the Infant Feeding guidelines, this will assist the health care providers to offer appropriate counselling on these practices that interfere with the practice of exclusive breastfeeding for six months.

5.6.5 Support by experienced mothers related to feeding practices decisions.
Healthcare providers should include family members in health information sessions, to enable them give required support to mothers on the practice of exclusive breastfeeding for six months.

**5.6.6 Strategies used to overcome breastfeeding challenges.**

Health care providers should give support and emphasise the importance of adhering to antiretroviral treatment, which reduces the risk of mother-to-child transmission of HIV, this will assist the HIV positive mothers, to develop a coping strategies to adhere to the practice exclusive breastfeeding although they encounter discouragement and insults from other people.

**5.6.7 An outline of adherence to treatment and feeding practices.**

The health care providers should emphasise the importance of adhering to antiretroviral treatment HIV positive breastfeeding mothers aiming at maintaining the viral load very low to reduce the risk of HIV infection to the baby.

**5.6.8 Further study is required**

Further studies need to be conducted on a larger scale, which will include hospitals in other districts of Limpopo Province to find how HIV positive mothers perceive exclusive breastfeeding in those areas.

**5.7 CONCLUSION**

The findings revealed how important it is for health care providers to emphasise the importance of adhering to the practice of exclusive breastfeeding for six months by HIV positive mothers. The health care providers should give enough support and information to HIV positive mothers on the practice of exclusive breastfeeding to enable them to develop coping strategies to deal with any obstacles to exclusive breastfeeding as their infant feeding option.

Further study is required which will include hospitals in other districts of Limpopo Province to find out how HIV positive mothers perceive exclusive breastfeeding for six
months which is now extended to a period of one year when the mother is on antiretroviral treatment (Tuthill 2015:18).

The findings, limitations, conclusions and recommendations were discussed in this chapter.

The study revealed that the participants perceived exclusive breastfeeding to be beneficial to their infants as it protects them from different illnesses including HIV infection. Most of the mothers had knowledge on the benefits of breast milk, which include provision of growth to the infant and good health among the others. Despite having this knowledge of exclusive breastfeeding by HIV positive mothers, some participants had limited knowledge on the practice of exclusive breastfeeding including how antiretroviral treatment works to prevent the baby from HIV infection. The study also revealed how religious and cultural practices interfere with the practice of exclusive breastfeeding. Lack of up-to-date knowledge on the practice of exclusive breastfeeding was also found even amongst the health care providers, where one practitioner recommended 4 months exclusive breastfeeding in the Antenatal card of one of the participants. The study revealed how support from family members plays an important role in the practice of exclusive breastfeeding. The participants acknowledged the support they received from husbands, partners and other family members. The participants in this study showed how they developed the coping strategies to defend the practice of exclusive breastfeeding for six months.

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ANNEXURE

AN INSTRUMENT

Describe your perceptions with regard to the exclusive breastfeeding.
ANNEXURE

TITLE: THE HIV POSITIVE MOTHERS' PERCEPTIONS OF EXCLUSIVE BREASTFEEDING IN POSTNATAL WARD AT MANKWENG HOSPITAL LIMPOPO PROVINCE, SOUTH AFRICA

INVESTIGATOR: MAFOKWANE MOTHOBOLA MARIA

CONTACT NUMBER: 0780562653

I cordially requesting your participation in the research study as its titie is indicated above. Please read the following information about the study and if you would like to participate, kindly sign at the end of the form.

A face to face interview will be conducted by the researcher in a private room to maintain privacy. Confidentiality will be maintained by using code instead of real names. Duration of the interview will be 30 to 45 minutes. An audio recorder will be used and field notes will be taken. No monetary incentives will be offered. Sensitive participants may be emotionally disturbed. The researcher will send the participants who may be emotionally disturbed during interview for counselling by psychologist. Participants will be allowed to ask questions if they so wish. Participants and community will benefit from the research as misconceptions about exclusive breastfeeding will be clarified, participants will also be able to deal positively with their fears with regard to this infant feeding method. Contact the researcher using the above cellular phone numbers for any questions or clarity.

Voluntary Participation:

I---------------------------------------------------------------agree to participate in this research study. I understand that participation in this study is voluntary and there will be no coercion if I decide not to participate in the study.

I understand that extracts from my interview may be quoted in the dissertation and may be published.

I agree to participate in this interview:

Participant's signature................................. Date..............................
Researcher's signature........................................ Date........................................
RESEARCH ETHICS COMMITTEE: DEPARTMENT OF HEALTH STUDIES
REC-012714-039 (NHERC)

7 December 2016

Dear Ms MM Mafokwane

Decision: Ethics Approval

HSHDC/563/2016
Ms MM Mafokwane
Student: 5088-738-6
Supervisor: Dr T Makua
Qualification: D Litt et Phil
Joint Supervisor: -

Name: Ms MM Mafokwane

Proposal: HIV positive mothers' perceptions of exclusive breastfeeding in postnatal ward at a particular hospital, Limpopo Province, South Africa.

Qualification: MPCHS94

Thank you for the application for research ethics approval from the Research Ethics Committee: Department of Health Studies, for the above mentioned research. Final approval is granted for the duration of the research period as indicated in your application.

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the Research Ethics Committee: Department of Health Studies on 7 December 2016.

The proposed research may now commence with the proviso that:

1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.

2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Research Ethics Review Committee, Department of Health Studies. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.
3) The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.

4) [Stipulate any reporting requirements if applicable].

Note:
The reference numbers [top middle and right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the Research Ethics Committee:
Department of Health Studies.

Kind regards,

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MANKWENG HOSPITAL
SIR/MADAM

REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY IN MATERNITY POSTNATAL WARD.

The above matter refers:

I am Mothobola Maria Mafokwane, conducting an academic research study with the University of South Africa to fulfil the requirements of the Master's Degree in Health Studies

The title of the research study is: HIV positive mothers' perceptions of exclusive breastfeeding in postnatal ward at Mankweng hospital Limpopo Province, South Africa.

The aim of the study is to explore the HIV positive mothers' perceptions of exclusive breastfeeding in postnatal ward at Mankweng hospital.

The objectives of the study are to explore how HIV positive mothers in postnatal ward at Mankweng hospital perceive exclusive breastfeeding. To describe the perceptions the mothers have towards exclusive breastfeeding. To develop counselling and health education programmes based on the study findings.

A grand tour question will be used to collect data, where a broad question will be asked in an unstructured interview. The researcher will ask question and probe according to the respond of the participants. In-depth interviews will be conducted with individual
participant to gather data. Data will be collected by using a voice recorder to capture responses and also field notes will be taken to support the recorded information. The researcher will collect data daily for three weeks until data saturation is reached.

The sample will include 15 HIV positive mothers opted for exclusive breastfeeding from 18 years and above. The participants will be identified by checking HIV status of each delivered mother in the delivery register. The researcher will compile a list of post-delivery mothers who are found to be HIV positive and opted for exclusive breastfeeding. Participation in the study is voluntary. Informed consent will be obtained from the participants. A comprehensive written information form regarding the research will be provided to the participants. The participant's names will not be mentioned anywhere in the research project. Anonymity will be ensured by allocating each participant with a code name and, their responses and records will be kept confidential. The information discussed during the study will not be accessed by any other person who is not part of the research project. I will provide my contact numbers to the participants in the event of further questions, comments or complains. Interview will be conducted in a private room to maintain privacy. Sensitive participants, who may be emotionally disturbed, will be referred for counselling by the psychologist. Debriefing sessions will be offered for participants to express their feelings (if needed).

The delivery register will be used only for the identification of HIV positive mothers who opted for exclusive breastfeeding. The researcher will never take the delivery register out of maternity ward. The list of names compiled from delivery register, will only be used for identifying the potential participants, thereafter, it will be destroyed. Participant's right to privacy and confidentiality will be protected. No names or person's identification will be reflected on the records for data, only codes will be used. The data will be transcribed and categorised into themes for the purpose of presentation using an adapted Collaizzi (1978) seven steps of analysis as cited in Shosha (2010:35).
I request to collect data from HIV positive mothers who opted for exclusive breastfeeding aged 18 years and above and also to access the delivery register for the identification of the above mentioned population under the study.

The management is assured that ethical issues shall be adhered to during the execution of the research.

Approval to conduct this study will be highly appreciated.

Yours Sincerely,
Mothobola Maria Mafokwane
Student number: 50887386
REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT MANAKWENG HOSPITAL

1. The above matter has reference.

2. This is to confirm that Mafokwane MM has been granted permission to conduct research on "HIV positive mother’s perceptions of exclusive breastfeeding."

3. She will be conducting research as from 03 April 2017 to 30 April 2017.

4. Attached please find their application letter, approval from Provincial Office, Research Ethics Committee: Department of Health Studies and Research proposal.

Thanking you in advance

Chief Executive Officer

28/03/2017
Enquiries: Dr Makua T
Telephone number: 0124296754
Researcher: Mothobola Maria Mafokwane
Cell phone number: 0780562653
To: THE SECRETARY
LIMPOPO PROVINCIAL DEPARTMENT OF HEALTH
18 COLLEGE STREET
POLOKWANE
0700
Sir/Madam
RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY IN MATERNITY POSTNATAL WARD.
The above matter refers:
I am Mothobola Maria Mafokwane, conducting an academic research study with the University of South Africa to fulfil the requirements of the Master's Degree in Health Studies.
The title of the research study is: HIV positive mothers' perceptions of exclusive breastfeeding in postnatal ward at Mankweng hospital Limpopo Province, South Africa.
The aim of the study is to explore the HIV positive mothers' perceptions of exclusive breastfeeding in postnatal ward at Mankweng hospital.
The objectives of the study are to explore how HIV positive mothers in postnatal ward at Mankweng hospital perceive exclusive breastfeeding. To describe the perceptions the
mothers have towards exclusive breastfeeding. To develop counselling and health education programmes based on the study findings.

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The sample will include 15 HIV positive mothers opted for exclusive breastfeeding from 18 years and above. The participants will be identified by checking HIV status of each delivered mother in the delivery register. The researcher will compile a list of post-delivery mothers who are found to be HIV positive and opted for exclusive breastfeeding. Participation in the study is voluntary. Informed consent will be obtained from the participants. A comprehensive written information form regarding the research will be provided to the participants. The participant’s names will not be mentioned anywhere in the research project. Anonymity will be ensured by allocating each participant with a code name and, their responses and records will be kept confidential. The information discussed during the study will not be accessed by any other person who is not part of the research project. I will provide my contact numbers to the participants in the event of further questions, comments or complains. Interview will be conducted in a private room to maintain privacy. Sensitive participants, who may be emotionally disturbed, will be referred for counselling by the psychologist. Debriefing sessions will be offered for participants to express their feelings (if needed).

The delivery register will be used only for the identification of HIV positive mothers who opted for exclusive breastfeeding. The researcher will never take the delivery register out of maternity ward. The list of names compiled from delivery register, will only be used for identifying the potential participants, thereafter, it will be destroyed. Participant’s right to privacy and confidentiality will be protected. No names or person’s identification will be reflected on the records for data, only codes will be used. The data
will be transcribed and categorised into themes for the purpose of presentation using an

I request to collect data from HIV positive mothers who opted for exclusive
breastfeeding aged 18 years and above and also to access the delivery register for the
identification of the above mentioned population under the study.

The management is assured that ethical issues shall be adhered to during the execution
of the research.

Approval to conduct this study will be highly appreciated

Yours Sincerely,
Mothobola Maria Mafokwane
Student number: 50887386
Enquiries: Latif Shamila (015 293 6650)

Mafokwane MM  
UNISA

Greetings,

RE: HIV positive mother’s perceptions of exclusive breastfeeding in the postnatal ward at Mankweng Hospital, Limpopo Province, South Africa

The above matter refers.

1. Permission to conduct the above mentioned study is hereby granted.

2. 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.
   - 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 3 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.

[Signature]
Head of Department

16/03/2017
Date
ANNEXURE I

Interview transcript

Interviewer: Good day, thank you for agreeing to take part in this research study, as I have explained in the information leaflet, the purpose of the study is to explore the HIV positive mothers' perceptions of exclusive breastfeeding.

Participant: Good day.

Interviewer: As I have already explained when I requested your participation in this study, do you agree that I can ask you some questions?

Participant: Yes, I agree

Interviewer: I thank you

Interviewer: Describe how you perceive exclusive breastfeeding while being HIV positive.

Participant: It is important to give the baby breast milk exclusively, as the baby grows well without problems. If I give the baby breast milk only, without giving other things such as water, the baby will not be sick, and won't give me problems.

Interviewer: Have you ever practiced exclusive breastfeeding before without giving any other feeds?

Participant: Yes. I practiced exclusive breastfeeding before.

Interviewer:

Explain, for how long did you practiced exclusive breastfeeding?

Participant: I practiced exclusive breastfeeding while being HIV positive for two years.

Interviewer: When did you introduced solids feeds?

Participant: I introduced solid feeds after six months of the baby’s age.

Interviewer: What have you experienced when you were practicing exclusive breastfeeding?
Participant: I have realised that at times the baby may bite the breast and it may bleed, as such the baby may be HIV infected.

Interviewer: Did your baby ever bitten your breast?

Participant: He never bit my breast.

Interviewer: Is there anything that could prevent you from practicing exclusive breastfeeding for six months?

Participant: I had no obstacles or hinder to practice exclusive breastfeeding.

Interviewer: Was there anyone at home who queried you for breastfeeding only?

Participant: No one at home complained about my baby feeding practice, meaning exclusive breastfeeding because breastfeeding is the only way of feeding the baby.

Interviewer: Explain how did your baby grow?

Participant: My baby grew well without problems from birth until now. His birth weight was 2500g, and increased normally. He attended child health clinic and they found that his body weight increased as expected because he was on antiretroviral treatment as well. I was also on antiretroviral treatment. At the age of eighteen months, the baby gone for HIV test and results were negative.

Interviewer: Explain, except HIV infection, was there any other illnesses your baby suffered from them?

Participant: No, my baby grew well without illnesses or allergies. He had no vomiting, diarrhoea or other illnesses.

Interviewer: All right. What can you say in conclusion?

Participant: I can conclude by saying that exclusive breastfeeding is good, the baby grow well without problems such as HIV infection, allergy nor body weakness.

Interviewer: In other words, are you still going to practice exclusive breastfeeding?

Participant: I am still going to practice exclusive breastfeeding until I am satisfied that the baby is grown up after six months.
Interviewer: If someone can ask you to explain how do you view exclusive breastfeeding, what can you say?

Participant: It is important to exclusive breastfeed the baby because breast milk protect the baby from diseases such as HIV, and other illnesses or body weakness.

Interviewer: Explain about the information you got from the health care providers at the clinic with regard to exclusive breastfeeding?

Participant: Health education on exclusive breastfeeding for six months is important; when time goes on I will be able to teach my grandchildren about the importance of exclusive breastfeeding for six months.

Interviewer: How did you view the health education?

Participant: I understood the education nurses gave us during Antenatal care.

Interviewer: How do people at home view exclusive breastfeeding?

Participant: I am staying with my husband and my children only.

Interviewer: How does your husband view exclusive breastfeeding?

Participant: My husband was pleased about exclusive breastfeeding because he wants our baby to grow well without HIV infection. He is so supportive to exclusive breastfeeding without giving the baby other feeds until six months elapses. Before we could know our HIV status, my husband was so careless about many things at home, but after he discovered that I am HIV positive, during my previous pregnancy, he began to take care of our family more than before. He is so supportive to the practice of exclusive breastfeeding, as he does not want our baby to be HIV positive.

Interviewer: We are concluding now, what can you say at the end?
Participant: I am still prepared to practice exclusive breastfeeding to this baby because it is the best feeding method which protects the baby from HIV infection as long as there are no solid feeds before six months of the baby’s age.

Interviewer: I thank you.

Participant: I also thank you, I have learnt something from this interview sister. There was no one before who sat down and interviewed me about these things. I feel better now.

Interviewer: Thank you for your participation. Thank you so much.