A critical inquiry of challenges in safe infant feeding by mothers with HIV

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Dissertation submitted in fulfillment of the requirements for the degree Master of Science in Community Nursing Science at the Potchefstroom campus of the North-West University

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DECLARATION

I, Fanny ObertNyalunga declare that this dissertation is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references as I am aware of the seriousness of plagiarism as a crime punishable by law.

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FANNY OBERT NYALUNGA                    DATE
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I also give thanks to my special friends and colleagues, in particular Ms Tinyiko E Nkhwashu for her guidance and support.
ABSTRACT

A critical inquiry of challenges in safe infant feeding faced by mothers with HIV

Keywords: Safe infant feeding; Exclusive breastfeeding; formula feeding; mixed feeding; challenges; mothers with HIV

The World Health Organization as well as the South African National Department of Health, recommended that mothers known to be HIV infected (whether on lifelong Antiretroviral Therapy or not) should exclusively breastfeed their infants for the first six months of their lives. Despite the recommendation HIV positive mothers are faced with challenges in safe infant feeding.

The purpose of the study was to critically investigate the challenges in safe infant feeding by mothers with HIV in one district in Mpumalanga. A qualitative approach with explorative, descriptive and contextual design was used. The sample size of this study depended on data saturation, which was reached after twelve individual mothers with HIV were interviewed.

Semi-structured individual interviews were conducted using an interview guide. Data collected during this study was analysed by using the open coding method. The researcher and co-coder analysed the data independently, and then met and discussed their findings in order to reach consensus on the themes and sub-themes that emerged from the data.

The following themes, exclusive breastfeeding; exclusive formula feeding and mixed feeding were identified in safe infant feeding by mothers with HIV. From these findings it seems that although the Tshwane declaration of support for breastfeeding in South Africa and the South African National Department of Health recommended exclusive breastfeeding, more support, strategies and research are needed to strengthen and promote exclusive breastfeeding effectively.
From the findings, literature and the conclusion of this study, recommendations in the field of nursing practice, nursing education and nursing research were made.
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<tr>
<td>AFASS</td>
<td>Accessible, Feasible, Affordable, Safe and Sustainable</td>
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<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
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<td>ART</td>
<td>Antiretroviral Therapy</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>MTCT</td>
<td>Mother-to-Child Transmission of HIV</td>
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<td>PMTCT</td>
<td>Prevention of Mother-to-Child Transmission of HIV</td>
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<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV / AIDS</td>
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<td>UNICEF</td>
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CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Despite the avalanche of research on strategies aimed at reducing mother-to-child transmission of human immunodeficiency virus (HIV), there are still relative few studies to document women’s experiences and challenges adhering to these strategies (Ramara et al., 2010:7; Buskens et al., 2007:1102; Traore et al., 2009:830). One of the strategies to limit mother-to-child transmission is to ensure safe infant feeding. This study describes the challenges of mothers with HIV in one district in Mpumalanga, South Africa to safely feed their infants.

1.2 BACKGROUND AND RATIONAL

According to the 2010 UNAIDS Global report, (UNAIDS, 2010: 21) an estimated 33.3 million people were living with HIV in 2009, with an estimated 2.6 million new infections annually across the world. Of the new cases, 370 000 were children under 15 years of age, and the vast majority of these are from mother to child transmission (MTCT) of HIV (Jackson et al., 2009:219). Sub-Saharan Africa and South Africa specifically carry a large portion of this burden (UNAIDS, 2010:19, Sibeko et al., 2009:1983). The South African national department of health reported an annual estimated 38 000 children to acquire HIV infection from their mothers around the time of birth, and an additional 26 000 children were infected with HIV through breastfeeding in 2006 (Department of Health, 2010).

According to Coutsoudis, (2012:14) the new data resulted in the latest WHO/UNICEF/UNAIDS guidelines (2007): Exclusive breastfeeding is recommended for HIV-infected women for the first six months of the baby’s life unless replacement-feeding is acceptable, feasible, affordable, sustainable and safe for them and their infants before that time (AFASS criteria).
Although HIV is present in breast milk and there is a risk of transmission through breastfeeding, the risk can be drastically reduced when breast milk is given exclusively (Coovadia, 2007:1107). However in South Africa, although the majority of mothers initiate breast feeding, only 10.4% exclusively breast-feed until their infant is 3 months of age and the percentage decreases to 1.2% by 6 months of age (Doherty et al., 2006:2421). The limited number of mothers that are able to breast feed their babies exclusively is problematic as exclusive breastfeeding is considered one of the ‘safe’ infant feeding practices (National Department of Health, 2010:32)

The newest guidelines to prevent mother-to-child-transmission (PMTCT) from the World Health Organization (WHO, 2009:15, 2010:1) as well as the South Africa (National Department of Health, 2010:32), recommend that mothers known to be HIV-infected (whether on lifelong Antiretroviral Therapy (ART) or not) should exclusively breastfeed their infants for the first 6 months of life. They should then introduce appropriate complementary foods, and continue breast-feeding for the first 12 months of life to take full advantage of the nutritional and immunoprotective benefits of breast milk while limiting the risk of MTCT as much as possible. According to the newest evidence (Horvath et al., 2009:1), the risk of MTCT is low for infants of mothers on ART as the viral load in the milk is extremely low, while infants of mothers who not yet qualify for ART, are protected by receiving an oral antiretroviral drug, Nevirapine themselves until breastfeeding is stopped (Chasela et al., 2010:2277). The new policy guidelines put an end to the confusion existing before the newest research evidence became widely known.

Before the new evidence regarding prevention of mother to child transmission became clearer in the last few years, HIV positive mothers faced the dilemma of either giving their babies the benefits of breastfeeding but exposing them to the risk of HIV infection, or avoiding all breastfeeding and increasing the risk of death from diarrhoea and malnutrition. The options recommended as ‘safe’ infant feeding practices for HIV positive mothers are exclusive breastfeeding (with either mother on ART or baby on oral Nevirapine) or safely
prepared formula feeding. However, it seems difficult for mothers to implement safe infant feeding (Almroth et al., 2008:1066, Shapiro et al., 2003:221).

Several studies have investigated different factors influencing mothers' ability to adhere to safe infant feeding practices. Organizational, social as well as personal factors have been identified. According to Buskens et al. (2007:1102) PMTCT programs are finding it difficult to implement and monitor safe infant feeding practices, especially where infant feeding strategies are not in agreement with existing norms. Supporting the findings Buskens et al. (2007:1102), Traore et al. (2009:830) also found that the selection of an appropriate option and applying it does not only depend upon the mother but also on the father, grandmothers and other family members. Community values, customs, and policies as well as factors like knowledge, number of antenatal visits and interactions within a couple can also influence the ability of a mother to adhere to her decision of how to feed her infant safely (Greiner et al., 2002:88, Bland et al., 2007:289).

Other studies focused on the role of education and support for HIV positive mothers. According to Fjeld et al. (2008) lack of knowledge on the subject was revealed as one of the barriers to adherence to safe infant feeding practices. In India, the findings of the study of Suryavanshi et al. (2003:1327) also called for urgent action to educate, counsel and support HIV positive women in making decisions about how to nourish their infants safely. Ramara et al. (2010:7) explored and described the socio-economic and cultural experiences of mothers with HIV who practiced the safe infant feeding of their choice with the aim of compiling content for health education programmes that can be utilized by midwives when educating HIV positive mothers on infant feeding.

Knowledge about experiences and challenges regarding adherence to safe infant feeding practices could help to improve HIV/AIDS preventive programmes even more as health education can address the specific issues (Buskens et al., 2007:1102). Knowledge about local circumstances and HIV positive mothers' challenges regarding
adherence to safe infant feeding practices are crucial feedback for programme development (Sibeko et al., 2009:1984) and the contextualisation of policy guidelines.

1.3 PROBLEM STATEMENT

Safe infant feeding imply feeding practices that would lead to a healthy, HIV-free child who has no underlying morbidity resulting from incorrect feeding practices (National Department of Health, 2010:6). HIV positive mothers' challenges regarding adherence to safe infant feeding practices has not been considered in the development of HIV/AIDS preventive programs (Buskens et al., 2007:1102) and this knowledge will therefore be valuable to contextualize guidelines for the specific context.

1.4 RESEARCH QUESTION

What are the challenges of mothers with HIV in one district in Mpumalanga to safely feed their infants?

1.5 PURPOSE OF THE STUDY

The purpose of the study was to critically investigate the challenges in safe infant feeding by mothers with HIV, in one district in Mpumalanga.

1.6 PARADIGMATIC PERSPECTIVE

The paradigmatic perspective of the researcher is hereby declared.

1.6.1 Meta-theoretical assumptions

Meta-theoretical assumptions cannot be verified and are concerned with a researcher's views on man and society (Botes, 1995:9). In this research my meta-theoretical assumptions are based on the description of the challenges by mothers with HIV. The researcher believes that mothers with HIV have vast collective challenges in safe infant feeding that can be best described by them. The researcher
believed that mothers with HIV could provide valuable description that may be used in the contextualization of guidelines regarding safe infant practices for HIV positive mothers. The following meta-theoretical assumptions were defined within the researcher's view as applied in the study: man, environment, health and nursing.

1.6.1.1 Man

Human beings are whole and complete individuals with a particular personality, occupation, responsibility, background and nationality. For the purpose of this study the focus is on the mother with HIV and the nurse. The mothers with HIV strive towards safe infant feeding. The nurse strive towards his or her occupation and responsibility to give information to mothers with HIV about safe infant feeding and encourages them to practice it for the benefit of the infant.

1.6.1.2 Environment

Environment consists of all the external factors influencing the life and activities of people. The mother with HIV is in constant interaction with all the external factors influencing her life and activities, including her family, nurses and the characteristics which contribute as challenges in safe infant feeding.

1.6.1.3 Health

Health is defined as the general condition of the body or mind, especially in terms of the presence or absence of illnesses, injuries, or impairments. To be healthy, mothers with HIV are encouraged to practice safe infant feeding that would lead to a healthy, well-grown, able, live HIV free child who has no underlying morbidity resulting from incorrect feeding practices.
1.6.1.4 Nursing

In this study nursing, is the profession or task of looking after people who are ill or injured. The nursing activities are those that support the HIV positive mother to practice safe infant feeding (National Department of Health, 2008:6). Nursing support and strengthen efforts to promote exclusive breastfeeding and exclusive formula feeding that is acceptable, feasible, affordable, sustainable and safe for mothers with HIV and their infants.

1.6.2 Theoretical assumptions

The theoretical assumptions include the central theoretical statement as well as concept clarification.

1.6.2.1 Central theoretical statement

Understanding the challenges faced by mothers with HIV to safely feed their infants could contribute towards a critical contextualization in safe infant feeding by mothers with HIV.

1.6.2.2 Concept clarification

The following concepts, Safe infant feeding; Exclusive breastfeeding; Exclusive formula feeding; Mixed feeding; Challenges; Mothers with HIV; Code on the infant clinic card; parity, are defined as follows:

- **Safe infant feeding**

  Feeding practices that would lead to a healthy, well-grown, able, live, HIV free child who has no underlying morbidity resulting from incorrect feeding practices (National Department of Health, 2010:6).
• **Exclusive breastfeeding**

Feeding practice in which an infant receives only breast milk and no other liquids or solids, including water, but may receive drops or syrups consisting of vitamins, mineral supplements, or medicines that are deemed necessary and essential for the child. When expressed milk is given, the preferred term is exclusive breast milk feeding (National Department of Health, 2010:4).

• **Exclusive formula feeding**

Feeding practice in which infants receive no breast milk, but receive only a formula that provides adequate nutrients until the age at which they can be fed solid foods (National Department of Health, 2010:4).

• **Mixed feeding**

Feeding a child with breast milk and other milks (including commercial formula or home-prepared milk), foods, or liquids (National Department of Health, 2010:5).

• **Challenge**

A situation that tests mothers with HIV's abilities in a stimulating way (National Department of Health, 2008:6).

• **Mothers with HIV**

Mothers who have taken an HIV test with a positive result and know their result (National Department of Health, 2010:5).

• **Code on the infant clinic card**

Letter from the alphabet used as codes on the infant clinic card. The code (a letter together with the first letter of the mother own
mother’s name) gives an indication of a woman’s HIV status if used with the code key that is only available to health professionals working directly with these women (Coutsoudis, 2012:14).

- **Parity**

Parity refers to the number of times that a woman has given birth to a child, live or still born, excluding abortions (Fraser et al., 2010:239).

### 1.6.3 Methodological assumptions

The methodological approach of the study is qualitative in nature (Babbie & Mouton, 2004:273); therefore the study is characterized by the following key features:

- The research is conducted in the natural setting of research participants. It is the desire of the qualitative researcher to be as non-intrusive as possible. The researcher interviewed without any intervention or interference and therefore the specific debate sessions were not interrupted.

- Qualitative research focuses on process rather than outcome. The researcher followed the qualitative research process and motivated steps taken to ensure high quality research (Burns & Grove, 2005:535).

- The participant’s perspective is emphasized. The researcher conducted the semi-structured individual interviews where he identified with the participants in trying to explore challenges of mothers with HIV to safely feed their infants. The researcher asked probing questions to gain more understanding of the phenomenon.

- The primary focus is in-depth descriptions and understanding of the challenges faced by mothers with HIV. In this research individuals were used to gather information of the phenomenon in
detail and the actions and behavior of the participants during the interviews were described in the field notes.

- The main concern was to explore and describe the challenges in this specific context rather than generalizing to some theoretical population. The context in which the research was done was described in details to allow the reader to gather his or her own understanding.

1.6.4 Theoretical framework

Accessible, Feasible, Affordable, Safe and Sustainable (AFASS) is a criteria to assist with infant feeding choice in HIV positive women (National Department of Health, 2008:36). AFASS criteria describe the theory, which explains why a critical inquiry of challenges in safe infant feeding by mothers with HIV. Table 1.1 explains operationalising the AFASS criteria.

**Table 1.1 Operationalising the AFASS Criteria**

| Accessible: The mother perceives no barrier to choosing and executing the option for cultural or social reasons, or for fear of stigma and discrimination. |
| Feasible: The mother (or family) has adequate time, knowledge, skills and other resources to prepare and feed the infant, and the support to cope with family, community and social pressures. |
| Affordable: The mother and family, with available community and / or health system support, can pay for the purchase / production, preparation and use of the feeding option, including all ingredients, fuel and clean water and equipment, without compromising the and nutrition spending of the family. |
Sustainable: Availability of a continuous and uninterrupted supply and dependable system of distribution for all ingredients and commodities needed to safely implement the feeding option, for as long as the infant needs it.

Safe: Formula milk would be correctly and hygienically prepared by clean hands, using clean, safe water and clean utensils. Nutritionally adequate quantities of formula milk would regularly be available. Clean water and fuel would be regularly available. Formula milk would be fed using clean hands and utensils and preferably with cups rather than bottles.

1.7 RESEARCH METHODS

In the next section the research design, sampling, data collection data analysis and trustworthiness are proposed.

1.7.1 Research approach and design

A qualitative approach with explorative, descriptive and contextual design was used to describe challenges in safe infant feeding by mothers with HIV. Descriptive design was designed to gain more information about characteristics within a particular field of study (Burns & Grove, 2005:232).

1.7.2 Population and sample

The population for this study consists of mothers with HIV in the specific district in Mpumalanga. The sampling criteria are as follows:

- Mothers must be HIV-positive (as indicated by a code on the infant’s clinic card).
- Mothers should attend the baby clinic in the specified district with her baby.
- The baby should be in the age group 6 weeks to 6 months.

The mothers were recruited through a mediator (clinic clerk) who was asked to give an envelope to all mothers with babies in the relevant age range. The mothers identified as HIV positive according to the code on their baby's card received an envelope with health educational material and a request were contacted by the researcher in one week time to enquire if they were interested to participate, while the other mothers received a similar envelope with only the health educational material.

Purposive sampling was used as sampling technique as these participants were able to provide the richest information on the issue at hand (Polit & Hungler, 1997:239). The sample size was planned to be as large as feasible and depended on the data-saturation. Mothers were recruited and interviewed until no new findings present during the interviews (Strydom & Delport, 2005:328). Eventually 12 mothers were interviewed.

1.7.3 Data collection

After the mothers that expressed their interest to participate were contacted by the researcher, an appointment was made at a time and venue of the participants' preference to ensure the setting would be non-threatening to the participants.

Data was collected with semi-structured individual interviews guided by open-ended questions. After some introductory remarks to put the participant at ease, an interview guide was used to guide the questions. Clarification and expanded responses were used as communication techniques (De Vos et al., 2006:328).

The semi-structured individual interviews were voice recorded and transcribed as soon as possible. The following types of field notes
were recorded after each interview: observational notes (information about the situation without interpretation), personal notes (information regarding the interviewer’s own reactions with reflection on his own thoughts and feelings) and methodological notes (notes on the data-collection) (Stewart & Shamdasani, 1990:89).

1.7.4 Data analysis

The open coding method was used to analyze the data collected from the individual interviews. The three types of codes used are:

- Descriptive codes: It is the simplest method of classification of data, and was used in the initial phase of the data analysis. Data classified in chapter 3 (see Table 3.1).

- Interpretative codes: As the researcher gains insight into the processes under discussion, he sorted out statements and used the participants’ terms to attach meaning to these statements. Meaning attached to statements in chapter 3 (see Table 3.1).

- Explanatory notes: These codes are part of the researcher’s attempt to unravel the meaning inherited in the discussions. These codes can be more general for an example patterns, themes, and causal links (Burns & Grove, 2005:549).

The researcher and co-coder coded the transcriptions and identified the repetitive themes (Babbie & Mouton, 2004:296). Before results were finalized the researcher and co-coder discussed the findings in order to reach consensus in case of differences. Before reporting the research findings, the literature was searched for studies investigating similar or related topics to determine whether the findings were contrasting, alike or if the current study had any unique findings. The findings from the different studies were then discussed in relation with each other. More details of data analysis are described in chapter two.
1.8 TRUSTWORTHINESS

To ensure the trustworthiness of this study, the following constructs of Lincoln and Guba as discussed by De Vos et al., (2006:345) were used.

1.8.1 Credibility

Credibility seeks to find truth about the findings, and was ensured by the following procedures in this study:

- **Referential adequacy**: Voice recording as well as field notes were used to provide good record during data collection.

- **Peer briefing**: The researcher discussed the findings with colleagues who are knowledgeable in qualitative methods in order to review perception, insight and analyses.

1.8.2 Transferability

As the study is contextual in nature, the findings are not generalisable. However the theoretic framework and context of this study was described in detail to enable the reader to decide if the findings are transferable (De Vos, 2006:345).

1.8.3 Dependability

Dependability refers to consistency of the research findings (Babbie & Mouton, 2004:278). In this study the researcher planned to account for differing conditions by providing a rich description of the findings in which the research is conducted (De Vos, 2006:345). Stepwise replication was used in which the researcher and the independent coder discussed the data analysis to reach consensuses on the findings.
1.8.4 Confirmability

Confirmability refers to the degree to which the findings are the product of the focus of the inquiry, and not the biases of the researcher (Babbie & Mouton, 2004:278). In this study an audit trail was kept to determine if the conclusions, interpretations, and recommendations can be traced to the sources and if they are supported by the inquiry. The transcriptions of the interviews were also checked against the original recordings.

1.9 ETHICAL CONSIDERATIONS

The conduct of any research study requires honesty and integrity in order to recognize and protect the rights of the human subjects. Burns and Grove (2005:181) list these rights as the right to self-determination, the right to privacy, the right to anonymity and confidentiality, the right to fair treatment and the right to protection from discomfort and harm.

Permission to conduct the research was obtained. After obtaining approval from the Ethics Committee of the North-West University (Appendix B), the researcher applied to the health care authorities of Mpumalanga province for the permission to conduct the research study in the province (Appendix C & D). Informed consent was obtained from the participants after briefing about the study. The participants received clear and full information regarding the study, including the aim and expectations from them, and that they are free to choose to participate or to stop in the process without any harm (Appendix A). Participants were also informed about measures to ensure confidentiality and anonymity. The language of the participants was considered to gain co-operation and understanding.

Due to the risk of personal discomfort mothers with HIV may experience when suspecting that their status will be disclosed, special precautions were taken to protect the status of mothers with HIV during recruitment. All transcriptions as well as coding documents will
be locked up at the School of Nursing Science and will be kept for five years.

1.10 FRAMEWORK OF THE RESEARCH

Chapter 1: Orientation to the study

Chapter 2: Research Methods

Chapter 3: Research findings and literature comparison

Chapter 4: Conclusions, limitations and recommendations

1.11 CLOSING REMARKS

In this chapter the introduction and the background of the research study is firstly discussed. The problem statement, the research question, the purpose of the study and the research methods were then outlined. Lastly, the framework of the research was provided.
CHAPTER 2

RESEARCH METHODS

2.1 INTRODUCTION

The previous chapter dealt with the introduction, background and rational, problem statement, research question, purpose of the study as well as a brief orientation to the research methods. The research approach and design including population and sample, data collection, data analysis and ethical considerations are addressed in more detail in this chapter. An investigation among mothers with HIV was conducted to describe the challenges to provide safe infant feeding. The primary aim is in depth description of the challenges from the viewpoint of the mothers with HIV.

2.2 RESEARCH APPROACH AND DESIGN

A qualitative approach with explorative, descriptive and contextual design was used to understand the challenges in safe infant feeding by mothers with HIV (Burns & Grove, 2005:232; Brink, 2006:113). The challenges will add to the knowledge about safe infant feeding by mothers with HIV. The results regarding the challenges can be used in the contextualization of guidelines regarding safe infant feeding practices for mothers with HIV.

The study was context specific because it focused on the challenges faced by mothers with HIV to safely feed their infants in a specific local area, and did not look on the challenges faced by other group of mothers. It could also be considered contextual because it focused on the challenges of a specific group of mothers, namely the mothers participating in the PMTCT programme.
2.3 POPULATION AND SAMPLE

2.3.1 Population

The population of the study consists of mothers with HIV participating in the PMTCT programme in a specific sub-district in Mpumalanga province. The province consists of three health districts, a population of 3.6 million as per 2007 census (Department of Health, 2010:47). The selected district is part of the Ehlanzeni district with a HIV prevalence of 33.8% among antenatal women and situated in a semi-rural area (See figure 2.1), (Department of Health, 2010:49). The HIV vertical transmission rate in the province is 5.7% versus the target of less than 5% (Mpumalanga Department of Health, 2012).

Figure 2.1 HIV prevalence distribution among antenatal women by district, 2010
2.3.2 Sample.

Purposive sampling was used as sampling technique as these participants were able to provide as rich information on the issue at hand (Polit & Hungler, 1997:239). The sampling criteria used were as follows:

- Mothers with HIV and participating in PMTCT programme (as indicated by a code on the infants clinic card);
- Mothers were attending the baby clinic with their babies in one of the clinics in the specified sub-district;
- The babies were in the age group of between 6 weeks and 6 months.

The mothers were recruited through a mediator (clinic clerk) who was asked to give an envelope to all mothers with babies in the relevant age range. She was requested to give the mothers that are HIV-positive (those with a code on their baby's card) an envelope with health educational material and a request to contact by the researcher if interested to participate. All other mothers received a similar envelope with only the health educational material. All the mothers who received the request were contacted by the researcher within a week. The sample size was as large as feasible and depended on data-saturation. After twelve mothers were interviewed no new findings were found during the semi-structured individual interviews (Strydom & Delport, 2005:328).
2.4 DATA COLLECTION

This section discusses the data collection process and the role of the researcher.

2.4.1 Data collection process

After each mother who was interested had been contacted by the researcher, an appointment was made at a time and venue to ensure that the setting was non-threatening to the participants. Arrangement was made with the clinic operational manager. Semi-structured Individual interviews took place during the day at the clinic in a consultation room with adequate lighting, suitable temperature and ample ventilation. The room was quiet with no outsider interruptions. Chairs were arranged to facilitate eye contact and continuous rapport during the interview. Data was collected by means of semi-structured individual interviews guided by open-ended questions. After some introductory remarks to put the participant at ease, an interview guide (Appendix E) was used to guide the interviews.

All the interviews were guided by the same set of questions and the same interviewer (see Appendix E). The researcher initiated the discussion by asking an opening question which was nondirective to elicit spontaneous responses from the participants. The researcher allowed opportunity for each individual participant's views to emerge and develop a sense of trust. When the participants expressed challenges and experiences that were not clear they were asked to elaborate further and made sure that they focus on the matter raised and not to start on irrelevant matters. Clarification and expanded responses were used as communication techniques (De Vos et al., 2006:328).

During the interviews the researcher used listening skills, minimal encouragers and probing questions to ensure that rich information was obtained, while he observed the non-verbal actions and reactions of the participants (Krueger & Casey, 2000:44).
Immediately after the interviews, the following types of field notes were recorded: observational notes (information about the situation without interpretation), personal notes (information regarding the interviewer's own reactions with reflection on his own thoughts and feelings) and methodological notes (notes on the data-collection) (Stewart & Shamdasani, 1990:89) see Appendix F.

2.4.2 The role of the researcher.

In qualitative research, the role of the researcher must be explicitly stated to avoid conflict between the researcher role and the clinician role (Burns & Grove, 2005:435). The researcher avoided giving health education while conducting interviews. The researcher does not claim to be objective but to be actively part of the research itself (Babbie & Mouton, 2004:19). In this study, the researcher explained the research proceedings and obtained a written consent from all participants before each interview began. The researcher emphasized the purpose of the research, reassured the participants that confidentiality was maintained by using numbers in the transcripts when referring to participants and therefore their names could not be linked to these numbers. The researcher also ensured that the interview room was kept as disturbance-free as possible and that there were no cellular phones or distracting movements that would have disturbed the interviews (Mouton & Marais, 2008:243).

With regard to ethical issues, the researcher requested permission to conduct research from the Ethics committee of the North-West University (Appendix B) and the Provincial Research and Ethics committee of Mpumalanga Province Department of Health (Appendix C). The health manager of the district was approached by sending her a requisition letter with the approval letter from the Province requesting permission to conduct research in the district. When the approval letter (appendix D) was received, the researcher identified possible participants and arranged individual interview appointments.

The researcher was responsible for the arrangements for the data collection. The researcher conducted the semi-structured individual
interviews himself to be more engaged with the research. Immediately after the interview, the researcher compiled field notes of the interviews to capture what he observed, heard, experienced and thought of in the course of the data collection. The researcher was further engaged with the research when he analysed the data.

2.5 DATA ANALYSIS

Open coding was used to analyse the data collected from the individual interviews. The researcher requested a colleague to be a co-coder. The co-coder was selected because of the experience from her study. The data was independently analysed by the researcher and a co-coder. All useful material from the transcriptions was coded and put into a code list (Isacsson, 2008:9). The following three types of codes were used as described by Burns and Grove (2005:549).

Type 1: Descriptive codes

The researcher classified elements of the data by using terms that described how the data was organised. The researcher organised the data into safe infant feeding; exclusive breastfeeding; exclusive formula feeding; and mixed feeding. The term used by the participant were close to the descriptive codes used, safe, exclusive, mixed, breastfeeding, and formula feeding, as codes.

Type 2: Interpretative codes

The researcher gained insight into the process under discussion and sorted out statements using the participant’s terms to attach meaning to the statements as organised by the researcher.
Type 3: Explanatory codes

The researcher attempted to unravel the meanings inherited in the discussion. All the transcriptions were coded and repetitive themes were identified. The researcher and co-coder analysed the data independently. The researcher and co-coder then met and discussed their findings in order to reach consensus in case of differences (Burns & Grove, 2005:549).

Before reporting the research findings, the literature was searched for studies investigating similar or related topics to determine whether the findings were contrasting, alike or if the current study had any unique findings. The findings from the different studies were then discussed in relation with each other.

2.6 TRUSTWORTHINESS

The trustworthiness of this study was ensured by the following constructs of Lincoln and Guba (De Vos et al., 2006:345) namely, credibility, transferability, dependability and confirmability.

2.6.1 Credibility

Credibility seeks to find truth about the findings. Participants were given enough time during the interview to verbalise their challenges in safe infant feeding. Credibility was also ensured by the following procedures in this study:

- **Referential adequacy:** Voice recording as well as field notes were used to provide good record during data collection.

- **Peer briefing:** The researcher discuss the findings with colleagues who are knowledgeable in qualitative methods in order to review perception, insight and analyses.
2.6.2 Transferability

As the study is contextual in nature, the findings are not generalisable. However the theoretical framework and context of this study was described in detail to enable the reader to decide if the findings are transferable (De Vos, 2006:345).

2.6.3 Dependability

Dependability refers to the consistency of the research findings (Babbie & Mouton, 2004:278). In this study, the researcher accounted for differing conditions by providing a rich description of the findings of the research (De Vos, 2006:345). Stepwise replication was used in which the researcher and the independent coder discussed the data analysis to reach consensuses on the findings.

2.6.4 Confirmability

Confirmability refers to the degree to which the findings are the product of the focus of the inquiry, and not the biases of the researcher (Babbie & Mouton, 2004:278). In this study the researcher stated his assumptions and kept an audit trail to ensure the conclusions, interpretations, and recommendations can be traced to the sources and that they are supported by the inquiry. The transcriptions of the interviews will also be checked against the original recordings.

2.7 ETHICAL CONSIDERATIONS

Permission was obtained from the Ethics committee of the North-West University and the Provincial Research and Ethics committee, and Ehlanzeni District Health Manager of Mpumalanga Province Department of Health for this study.

The conduct of any research study requires honesty and integrity in order to recognize and protect the rights of the human subjects. Burns and Grove (2005:181) list these rights as the right to self-
determination, the right to privacy, the right to anonymity and confidentiality, the right to fair treatment and the right to protection from discomfort and harm. In this study great care was exercised in ensuring that the participants' human rights were protected.

2.7.1 The right to self-determination

The participants were informed about this study and allowed to voluntarily participate or not (Informed consent form – Appendix A). They were ensured that they had the right to withdraw from the study at any time without stating any reason, and without being discriminated against.

2.7.2 The right to privacy

An appointment was made at a time and venue ensured that the setting was non-threatening to the participants. Individual interviews took place during the day at the clinic in a consultation room with adequate lighting, suitable temperature and ample ventilation. The room was quiet with no outsider interruptions to ensure privacy. The researcher also ensured that the interview area was kept as disturbance-free as possible and that there were no cellular phones or distracting movements that would have disturbed the interviews (Mouton & Marais, 2008:243).

2.7.3 The right to anonymity and confidentiality

The participants were given the assurance that their identity cannot be linked even by the researcher with the individual responses. The information will not be shared with others without their authorisation. The researcher emphasized the purpose of the research, reassured the participants that confidentiality was maintained by using numbers in the transcripts when referring to participants and that their names would not be linked to these numbers.
2.7.4 The right to fair treatment

The participants were fairly selected and individually treated during the course of this study. All mothers who received the request were contacted by the researcher within a week, and interviewed the same. The right to fair treatment holds that each participant should be treated fairly and should receive what she is due or owed (Burns & Grove, 2005:189).

2.7.5 The right to protection from discomfort and harm

The mothers were recruited through a mediator (clinic clerk) who was asked to give an envelope to all mothers with babies in the relevant age range. She was requested to give the mothers that are HIV-positive (those with a code on their baby’s card) an envelope with health educational material and a request to be contacted by the researcher if interested to participate, while the other mothers received a similar envelope with only the health educational material. They all received the same envelopes to ensure protection from discomfort and harm. The researcher did not foresee any discomfort although the sensitivity of the topic was acknowledged. The researcher made provision for referral to counselling if they should have experienced discomfort, and they were informed accordingly.

2.8 CLOSING REMARKS

A detailed description of the research approach and design including population and sample, data collection, data analysis and ethical considerations was provided in this chapter. In an attempt to answer the research question a qualitative research approach was used and semi-structured individual interviews with mothers with HIV practicing safe infant feeding were conducted in one district in Mpumalanga. The next chapter will deal with research findings and literature comparison.
CHAPTER 3

RESEARCH FINDINGS AND LITERATURE COMPARISON

3.1 INTRODUCTION

The previous chapter addressed in more details the research approach and design including population and sample, data collection, data analysis and ethical considerations. This chapter outlines the research findings, analysing and literature comparison after collection of the data (Burns & Grove, 2005:95).

3.2 RESEARCH FINDINGS AND LITERATURE COMPARISON

The research findings were divided into four major elements, demographic findings, exclusive breastfeeding, exclusive formula feeding, and mixed feeding. Table 3.1 represents the four major elements as well as the sub-elements of the challenges in safe infant feeding faced by mothers with HIV.

3.2.1 Demographic data

The first major element of the challenges in safe infant feeding faced by mothers with HIV is presented in Column A (see Table 3.1), as well as in Table 3.2. This first major element could be divided into eight sub-elements, as shown in Table 3.2.

Of the twelve participants, five were married and seven were single. Their ages were between nineteen and thirty-six years old. Their parity was between one and four, and some experienced the challenges in safe infant feeding before. Six of them were not working while the other six were working. Both groups experienced different challenges regardless of them working or not. Their infant's age was between six weeks and fourteen weeks. Of the twelve infants, five were six weeks old, four were ten weeks old, and three were fourteen weeks old.
Seven participants chosen to exclusively formula feed their infants, while the other five were exclusively breastfeeding their infants. Six of the participants disclose their status to their husbands or fathers of the babies, while the other six their status was not known by their husband or the fathers. Some of the demographic data are factors described as the challenges with exclusive breastfeeding, exclusive formula feeding, and mixed feeding.
Table 3.1 Exploring the challenges in safe infant feeding by mothers with HIV

<table>
<thead>
<tr>
<th>COLUMN A</th>
<th>COLUMN B</th>
<th>COLUMN C</th>
<th>COLUMN D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic findings</td>
<td>Exclusive breastfeeding</td>
<td>Exclusive formula feeding</td>
<td>Mixed feeding</td>
</tr>
<tr>
<td>- Marital status</td>
<td>- Not able to go to work</td>
<td>- Disclosing her status</td>
<td>- Disclosing her status</td>
</tr>
<tr>
<td>- Age</td>
<td>- Disclosing her status</td>
<td>- Pressure by family members and friends</td>
<td>- baby not satisfied by breastfeeding alone</td>
</tr>
<tr>
<td>- Parity</td>
<td>- Taking baby everywhere</td>
<td>- expensive</td>
<td>- Pressure by family members and friends</td>
</tr>
<tr>
<td>- Working</td>
<td>- Baby not satisfied by Breastfeeding alone</td>
<td>- others feeding the baby</td>
<td></td>
</tr>
<tr>
<td>- Infant's age</td>
<td>- Others (family members and friends) feeding the baby</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Feeding method</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Lives with husband</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Husband knows her status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married or single</td>
<td>Age</td>
<td>Parity</td>
<td>Working</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----</td>
<td>--------</td>
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</tr>
<tr>
<td>Single</td>
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</tr>
<tr>
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<td>1</td>
<td>Yes</td>
</tr>
<tr>
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</tr>
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</tr>
<tr>
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<td>3</td>
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</tr>
<tr>
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<td>4</td>
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</tr>
<tr>
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<td>4</td>
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</tr>
<tr>
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</tr>
<tr>
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<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Single</td>
<td>23</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>Married</td>
<td>29</td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>Single</td>
<td>27</td>
<td>2</td>
<td>Yes</td>
</tr>
</tbody>
</table>
3.2.2 Challenges with exclusive breastfeeding.

This second major element of challenges in safe infant feeding faced by mothers with HIV is indicated in Column B (see Table 3.1), as well as in Table 3.3 below. This second element could be divided into five sub-elements as shown in Table 3.3.

Table 3.3 Challenges with exclusive breastfeeding

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not able to go to work.</td>
</tr>
<tr>
<td>Disclosing her status.</td>
</tr>
<tr>
<td>Taking baby everywhere.</td>
</tr>
<tr>
<td>Baby not satisfied by breastfeeding alone.</td>
</tr>
<tr>
<td>Others (family members, and friends) feeding the baby.</td>
</tr>
</tbody>
</table>

All the mothers who opted for exclusive breastfeeding were familiar with the concept. In general they spoke in favour of exclusive breastfeeding. They agreed that an infant could survive on breast milk alone for the first six months (Fjeld et al., 2008:5). Never the less exclusive breastfeeding was practiced only by a few. When asked about the challenges associated with exclusive breastfeeding, the mothers mentioned the challenges presented in Table 3.3. These challenges are confirmed by the following direct quotations from the transcripts:

“I resume work after six months because I cannot leave my with baby with people whom I don’t trust that they might feed my baby with something else either than breast milk”

“I not familiar with breast expression”

“Is not easy to tell everyone about your status”
"Is difficult to explain for family member and friends why I'm not feeding my baby anything else than exclusive breast milk"

"Family members and friends argue with me and give my baby supplementary feed without my concern, because they say I'm starving the baby"

"My mother and other family members they keep on telling me that I'm starving my baby"

"The baby is crying of hunger most of the times because is not getting satisfied on breast milk only"

"Family members and friends offer my baby whatever they eat while holding my baby"

The options recommended as ‘safe’ infant feeding practices for HIV positive mothers are exclusive breastfeeding (with either mother on ART or baby on oral Nevirapine) or safely prepared formula feeding. However, it has proven difficult for mothers to implement safe infant feeding (Almroth et al., 2008:1066, Shapiro et al. 2003:221). The findings of this study revealed that mothers who opted for exclusive breastfeeding have more challenges, which are critically to safe infant feeding by mothers with HIV.

One of the aspects in the AFASS Criteria is Acceptable. It means that the mother perceives no barrier to choosing and executing the option for cultural or social reasons, or for fear of stigma and discrimination (National Department of Health, 2008:36). Challenges such as not able to go to work; disclosing her status; and taking baby everywhere become a barrier to executing exclusive breastfeeding by mothers with HIV. Sustainability is not maintained if the baby is not satisfied by breastfeeding alone, and others (family members and friends) feeding the baby. Major challenges of infant feeding practice were found to be disclosure of HIV status with their spouse, insufficient breast milk and occupational status (Muluye et al., 2012:6).
3.2.3 Challenges with exclusive formula feeding

This third major element of challenges in safe infant feeding faced by mothers with HIV is indicated in Column C (see Table 3.1), as well as in Table 3.4 below. This third element could be divided into three sub-elements as shown in Table 3.4.

**Table 3.4 Challenges with exclusive formula feeding**

- Disclosing her status
- Pressure by family members and friends
- Expensive

Disclosing her status was perceived as barrier to choose and execute exclusive formula feeding for cultural or social reasons, or for fear of stigma and discrimination (National Department of Health, 2008:36). Challenges such as pressure by family members and friends, and expensiveness are critically to exclusive formula feeding as a safe infant feeding by mothers with HIV.

All the mothers who opted for exclusive formula feeding reported confidence in being able to practice an alternative safe infant feeding, although they expressed great concern for the social consequences of exclusive formula feeding. These concerns are confirmed by the following direct quotations from the transcripts:

“*Is not easy to tell everyone about your status*”

“*Is difficult to explain to my husband why I’m not breastfeeding my baby*”
“I will have problems if I tell people that I have HIV. I think that people would not want to have anything more to do with me if they knew that I have HIV”

“People call me by names saying that I have pride and I’m lazy”

“I can’t afford formula milk any more since the supplier from the clinic has been stopped”

“The father is no more working we can’t afford formula milk anymore”

“The grant is not enough to buy formula milk”

The social consequences of exclusive breastfeeding are confirmed by Fjeld et al., (2008:8). Generally, the grandmothers would not accept their daughter or daughter-in-law not breastfeeding and would demand an explanation from her. All the mothers who opted for exclusive formula feeding reported confidence in being able to practice an alternative safe infant feeding, although they were less optimistic and expressed great concern for the social consequences of not breastfeeding (De Paoli et al., 2004:613).

3.2.4 Challenges with mixed feeding

This fourth major element of challenges in safe infant feeding by mothers with HIV is indicated in Column C (see Table 3.1), as well as in Table 3.5 below. This fourth element could be divided into four sub-elements as shown in Table 3.5.

Table 3.5 Challenges with mixed feeding

- Disclosing her status
- baby not satisfied by breastfeeding alone
- Pressure by family members and friends
- Others feeding the baby.
The options recommended as 'safe' infant feeding practices for HIV positive mothers are exclusive breastfeeding (with either mother on ART or baby on oral Nevirapine) or safely prepared formula feeding. However, it seems difficult for mothers to implement safe infant feeding (Almroth et al., 2008:1066, Shapiro et al., 2003:221). The mothers, who opted for exclusive breastfeeding seems to have more challenges, thus end up not adhering to safe exclusive breastfeeding. These challenges are confirmed by the following direct quotations from the transcripts:

"Is not easy to tell everyone about your status"

"Is difficult to explain to my husband why I'm not breastfeeding my baby"

"I will have problems if I tell people that I have HIV. I think that people would not want to have anything more to do with me if they knew that I have HIV"

"The baby is crying of hunger most of the times because is not getting satisfied on breast milk only"

"My mother and other family members they keep on telling me that I'm starving my baby"

"Family members and friends argue with me and give my baby supplementary feed without my concern, because they say I'm starving the baby"

"Family members and friends offer my baby whatever they eat while holding my baby"

The most common reason for mixed feeding was pressure by family members and friends. Kakute et al. (2005:326) reported that the most common reason was family and community pressure.
3.4 CLOSING REMARKS

The findings of this study were discussed and confirmed by the findings of other studies. The available literature, which includes research articles and other journals, relevant research reports and books were reviewed on the challenges that emerged from the individual interviews to provide a scientific basis for the research and highlight new insight gained from it.
CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

The research findings were discussed in the previous chapter. The conclusions drawn from the previous chapter, limitations of the study and recommendations that will be used in the contextualization of guidelines regarding safe infant feeding practices for HIV-positive mothers are discussed in this section.

The following sub-elements emerged as the challenges in safe infant feeding by mothers with HIV: Not able to go to work until the baby is six months, disclosing status, taking baby everywhere, Baby not satisfied by breastfeeding alone, others (family members and friends) feeding the baby, pressure by family members and friends and expensive formula milk. These sub elements were common with other studies.

4.2 CONCLUSIONS

The challenges in safe infant feeding by mothers with HIV that emerged from the data analysis were classified into exclusive breastfeeding and exclusive formula feeding challenges. The main challenge was fear to explain for husbands, family members, friends and neighbours why they are exclusively feeding their infants without them knowing their HIV status. This makes it difficult to adhere to safe infant feeding methods.

The mothers who opted for exclusive breastfeeding have more challenges. Challenges such as not able to go to work; disclosing her status; taking baby everywhere; baby not satisfied by breastfeeding alone; and others (family members and friends) feeding the baby become a barrier to executing exclusive breastfeeding by mothers with HIV. Regarding the AFASS criteria, sustainability is not maintained if
the baby is not satisfied by breastfeeding alone, and others (family members and friends) feeding the baby.

The mothers who opted for exclusive formula feeding faced fewer challenges. The challenge they reported was disclosing her status; pressure by family members and friends; and that formula feeding is expensive. In both methods the biggest challenge was explaining for husbands, family members, friends and neighbours why they are exclusively feeding their infants without knowing their HIV status. Major challenges of infant feeding practice were found to be disclosure of HIV status with their spouse, insufficient breast milk and occupational status

4.3 LIMITATIONS

The study was conducted in a smaller semi-rural area in one district in Mpumalanga province where PMTCT programme was not completely accepted. Only twelve participants were interviewed. The reader should always consider the context within, which the study was performed when deciding whether it can be applied to other settings.

4.4 RECOMMENDATIONS

The purpose of the study was to critically investigate the challenges in safe infant feeding by mothers with HIV in one district in Mpumalanga. The major challenges found to be critical were disclosure of HIV status and social pressure. Based on the findings of this study, the following recommendations are made for nursing practice, nursing education and nursing research.

4.4.1 Nursing practice

- The community should be given information about PMTCT programmes and the importance of safe infant feeding, in the form of awareness campaigns, door-to-door campaigns and use of the media.
• The PMTCT programmes outcomes should be publicized and show the evidence by means of statistics to the community (husbands, family members, friends and neighbours).

• Mother with HIV should be encouraged to bring their partners for couple counseling because mother have difficulty explaining for their husbands why they are exclusively feeding their baby without them knowing their HIV status.

• Policy makers should involve health care providers and also make effort to revise the PMTCT policy and guidelines to ensure that it is effectively implemented.

4.4.2 Nursing education

• Safe infant feeding practices and strategies should be included in the curricula of all nursing courses.

• Counseling in HIV should be included in the curricula of all nursing courses.

• Other categories of nurses should be trained to promote safe infant feeding.

4.4.3 Nursing research

Further studies should be conducted to determine:

• Effective strategies to disclose HIV status.

• Effective interventions to enhance family members and friends support.

4.5 CLOSING REMARKS

The purpose of the study was to explore and describe the challenges in safe infant feeding faced by mothers with HIV in one district in Mpumalanga to safely feed their infants. The challenges of mothers with HIV to safely feed their infants were explored and described in details.
The purposive sampling method used in the study allowed the researcher to gather information from information-rich participants. The researcher made a good choice of utilizing the individual interviews as a method of data collection.
REFERENCES


WHO see World Health Organization


APPENDIX A

INFORMED CONSENT

Dear participant,

I am an M Cur student of the Potchefstroom-campus of the North-West University. You are invited to participate in a research study regarding challenges in safe infant feeding by mothers with HIV.

The Nature and purpose of the study

The objective of the study is to explore and describe the challenges in safe infant feeding by mothers with HIV. This information will be used to inform relevant guidelines as well as enable health workers to provide better support for mothers with HIV. You are asked to participate in the interviews where these challenges will be explored.

During the interview you will be asked to give your opinion about challenges in safe infant feeding by mothers with HIV. The interview will be conducted at a time and venue most suited for you. It can be done at the clinic while waiting or after your consultation in a private room or at your home if you prefer. It will last about 30 minutes. Your permission is also asked to record the interview to be transcribed and analysed afterwards. The recording will be locked away in a safe place and the final reports will not be traceable back to individual participants.

Approval to do research

The protocol of this study was submitted to the Ethics committee of the Faculty of Health Science of the Potchefstroom Campus of the North-West University and approval has been granted. The provincial authorities and the person in charge of the clinic are also aware of this research being done in this clinic.
Risk or discomfort involved.

An experienced interviewer will conduct the interview and it is not foreseen that you will experience any discomfort although the sensitivity of the topic is acknowledged. If you experience any psychological discomfort professional counselling will be available after the interview.

Possible benefits of this research

Your contribution will add to the knowledge of and insight into the challenges in safe infant feeding by mothers with HIV. This will contribute to the improvement of guidelines and support for mothers with HIV. The guidelines may be to the benefit of patients, health workers as well as the community as a whole.

Right to withdraw

Your participation in this research is entirely voluntary and you can refuse to participate or stop at any time without stating any reason. There will not be discriminated against you if you prefer not to participate.

Confidentiality

Any information that you supply will be kept strictly confidential. The results will be published or presented in such a fashion that all participants will remain unidentifiable.

Information

If you have any question about the research you are welcome to contact the researcher, Mr. F.O Nyalunga at telephone 082 784 8209. You are also welcome to indicate on the attached document if you would like to receive a report of the study after it has been completed.
CONSENT TO PARTICIPATE IN THE STUDY

I have read the above information before signing this consent form. The content and meaning of the information is clear to me. I have been given opportunity to ask questions. I understand that if I do not participate it will not be to my disadvantage. I hereby volunteer to take part in this study.

--------------------------------------
Participant's signature

--------------------------------------
Person obtaining informed consent

--------------------------------------
Witness

--------------------------------------
Date

VERBAL PARTICIPANT INFORMED CONSENT
(For patients who cannot read or write)

I, the undersigned, ...................................... have read and have explained to the participant, named ................................., the patient information letter, which has indicated the nature and purpose of the research in which I have asked the patient to participate. The explanation I have given included both the possible risk and benefits of the research. The participant indicated that she understands that she will be free to withdraw from the research at any time for any reason.

I hereby certify that the patient has agreed to participate in the research.

--------------------------------------
Participant’s name

--------------------------------------
Person obtaining informed consent

--------------------------------------
Witness

--------------------------------------
Date
Participant’s particulars for feedback regarding the research

I would like to receive a report of the research: “A critical inquiry of challenges in safe infant feeding by mothers with HIV”, after it has been completed.

Name: ……………………………………………………………

Address: ……………………………………………………………
…………………………………………………………
…………………………………………………………
…………………………………………………………
APPENDIX B

ETHICS APPROVAL OF PROJECT

This is to certify that the next project was approved by the NWU Ethics Committee:

Project title:
A critical inquiry of challenges in safe infant feeding by mothers with HIV

Student/Projectleader: Dr. CS Minnie
Student: FO Nyalunga (218822435)

Ethics number: NWU-00022-11-A1
Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation

Expiry date: 2018/05/11

The Ethics Committee would like to remain at your service as scientist and researcher, and wishes you well with your project.
Please do not hesitate to contact the Ethics Committee for any further enquiries or requests for assistance.

The formal ethics approval certificate will follow shortly.

Yours sincerely

[Signature]
APPENDIX C

MPUMALANGA PROVINCIAL GOVERNMENT

Building No.3
No. 7 Government Boulevard
Riverside Park Extension 9
Nelspruit
1200
Republic of South Africa

Department of Health

Enquiries: Molefe Machaba (013) 765 3009/3172

21 July 2011

Mr F.O. Nyalunga
P.O. Box 2580
White River
1240

Dear Mr F.O. Nyalunga

APPLICATION FOR RESEARCH & ETHICS APPROVAL: A CRITICAL INQUIRY OF CHALLENGES IN SAFE INFANT FEEDING BY MOTHERS WITH HIV IN ONE DISTRICT IN MPUMALANGA

The Provincial Research and Ethics Committee has approved your research proposal in the latest format that you sent. No issues of ethical consideration were identified.

Kindly ensure that you provide us with the report once your research has been completed.

Kind regards,

Molefe Machaba
Research and Epidemiology

Date: 21-07-2011

Siyamakele

Department of Health

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TO: MR F. O NYALUNGA

FROM: MS T.Z MADONSELA
DISTRICT DIRECTOR: EHLANZENI

DATE: 23 AUGUST 2011

SUBJECT: APPLICATION FOR PERMISSION TO DO RESEARCH STUDY.

1. The above matter bears reference.
2. Kindly note that the permission to do the research study is granted.
3. I wish you all the best in your research.
4. Hope you find the above in order.

Kind Regards

MADONSELA T.Z
DISTRICT DIRECTOR
APPENDIX E

INTERVIEW GUIDE

1. Are you married or single?
2. How old are you?
3. What number is your child (parity)?
4. How old is your child?
5. Are you working or not?
6. Are you living with your husband or others (e.g. parents, in-laws)
7. Does your husband know your HIV status?
8. Who others, who know your HIV status?
9. Which feeding method are you practicing?
10. Could you please tell me about the challenges with this method?
APPENDIX F

EXAMPLE OF FIELD NOTES

Observational notes

The interview was conducted in a consultation room with adequate lighting, suitable temperature, ample ventilation and quiet with no outsider interruptions. All the mothers were with their babies. Each mother displayed the feeding method practically through feeding the baby during the interview. All the mothers appeared to be relaxed and compassionate with the researcher.

Personal notes

All the mothers were freely communicating, expressing their views and developed a sense of trust with the researcher. They were elaborating further and made sure that they focus on the matter raised and not to start on irrelevant matters. They also showed intimacy love and concern about their babies, as they feed, handle and communicate to them.

Methodological notes

All the interviews were guided by the same set of questions and the same interviewer (See Appendix E). The researcher initiated the discussion by asking an opening question which was nondirective to elicit spontaneous responses from the participants. The researcher allowed opportunity for each individual participant's views to emerge and develop a sense of trust. During the interviews the researcher used listening skills, minimal encouragers and probing questions to ensure that rich information was obtained, while he observed the non-verbal actions and reactions of the participants (Krueger & Casey, 2000:44).
APPENDIX G

EXAMPLE OF A TRANSCRIBED INDIVIDUAL INTERVIEW

I = Interviewer

P= Participant

I: Good day mother.
P: Goodday sir.

I: How are you today?
P: I am fine, and how are you sir?

I: I’m also fine. Do you still remember the purpose of our meeting today?
P: Yes, I still remember that we are going to discuss about the challenges in safe infant feeding.

I: Thank you that you still remember and I believe that you understood everything written on the consent form?
P: Yes I understood everything and I’m ready, I can’t wait to see the outcomes of the research.

I: Since you are ready, can we start now?
P: Yes, I will tell you everything that I experience.

I: Are you married?
P: No, I’m not married. I’m staying at home with my parents.

I: How old are you?
P: I’m twenty six years old.
I: What number is your child (parity)?
P: Is my second born.

I: Since is your second born, have you ever had a miscarriage or death of a baby before?
P: No, I never had any miscarriage or death of a baby before.

I: Then, how old is your first born?
P: My first born is one year eight months old now?

I: Did you know your HIV status by the time you gave birth to your first born baby?
P: Yes, I knew before I gave birth to my first born. I tested during my first pregnancy.

I: How old now is this child?
P: My child completed six weeks old on Saturday (03 days ago).

I: Are you working?
P: No, I'm no more working since post delivery, but I'm looking for a job as I can't just stay at home doing nothing.

I: You said you are no more working. Were you working before?
P: Yes, I was working as a domestic worker. I went for delivery, when I came back I found that somebody has been hired to occupy my post.

I: You said you are staying at home with parents. With whom others are you living with?
P: I'm living with both my parents and the whole family.

I: Who are the whole family?
P: I mean my sister, brothers and my brother's wife (sister in-law).
I: Does the father (your husband) know your HIV status?
P: Yes, my boy friend knows and he also knows his status.

I: Who others, who know your HIV status?
P: Only my sister in-law.

I: Your sister in-law only?
P: Yes, She is the only person whom I share with all my secrets and problems.

I: Which feeding method are you practicing?
P: I’m breastfeeding my baby, because I can’t afford formula feeding is too expensive and I’m not working.

I: When you say breastfeeding, do you understand exclusive breast feeding?
P: Yes, exclusive breastfeeding mean that you give the baby breast milk only and nothing else, even water.

I: Are you giving your baby breast milk only and nothing else?
P: Yes, except for the medication such as grape water and Philips but not water.

I: Both of your babies are breastfed?
P: No, my first born was on exclusive formula feeding.

I: Your first born was on exclusive formula feeding and now you are breastfeeding your baby...
P: Yes, I was working by then that is why I afforded to exclusively formula feed my baby. Now I’m not working I can’t afford formula feeding, is too expensive.

I: If I understand you well, now you are breastfeeding because you can’t afford formula feeding...
P: Yes, I can’t afford formula feeding and I have also look at the benefits of breastfeeding.
I: Benefits of breastfeeding...?
P: Yes, sister at the antenatal clinic educated us that breast milk is best for the health of the baby, and is always ready and available than the formula milk.

I: Could you please tell me about the challenges with this method?
P: The challenge I'm having is that my baby cries indicating that is not getting enough from my breast.

I: Is not getting enough?
P: Yes, my baby sucks a lot. I even feel that is now draining me the way is demanding to breastfeed. I have already lost weight as this stresses me. I have already decided that I will change to formula feeding when he completes two months.

I: You will change?
P: Yes, even my mother said I must give him something else to supplement the breast milk because is not enough for him. When he is breastfeeding, he will cry indicating that is not getting enough.

I: But you said you can't afford formula feeding because is too expensive?
P: Yes is tooexpensive, my mother and his father will finance for the formula feed. I will also use the grant to buy him formula milk.

I: You said you understood exclusive breastfeeding?
P: Yes, I will not give him both I will stop the breastfeeding completely and give him formula feed.

I: Exclusive breastfeeding should be for six months...?
P: Yes it should be for six months, but I can't go up to six months my baby will die of hunger. I will also be drained by the time he is six months old.
I: You will change because he is not getting enough?
P: Yes, there is no point because even my mother and other family members they keep on telling me that I’m starving my baby.

I: That is what they only tell you.
P: No, they say a lot of things.

I: What is lot of things?
P: They will keep on asking me why I should not supplement the breast milk because is not enough for the baby. They also keep on wanting to feed my baby with some extra solid feeds. They also want to know why I ‘m not giving him supplementary feeds.

I: What do you tell them?
P: I just tell them that I just want him to complete two months first before I commence with other feeds.

I: what is their response?
P: They understand because they know that exclusive breastfeeding should be six months if you are HIV positive or you are on PMTCT programme.

I: You said only your sister in-law knows your status. Are the other family members know that know that you are HIV positive or you are on PMTCT programme?
P: Yes, only my sister in-law who knows my status. Is not easy to tell everyone about your status?

I: Is not easy to tell everyone about your status?
P: Yes once people know your status, they will call you with some names thinking that you are cursed and also reject you as they see you like a taboo in the family or society.
I: Was it the same with your first born?
P: No my first born was on exclusive formula feeding. I didn't have such many problems. Even my baby didn't have any problems. She is growing well as she is now one year eight month old. She looks healthy and big as if she is attending crèche.

I: So you will be change to formula feeding because...?
P: No, is not because I didn't have problems with my first baby. As I have already said that my bay will die of hunger and if I continue with breastfeeding my mother and other family members will give him the supplementary feeds. I will end up mixing, so is better to stop exclusive breastfeeding and start with exclusive formula feeding to avoid mixed feeding my baby.

I: Avoiding mixed feeding?
P: Yes if you decide on one exclusive feeding, you must keep on it without mixing both methods at the same time.

I: I believe you are doing this for the best to your child?
P: Yes, I know that I won't regret because I have experience with formula feeding.

I: Thank you for our discussion and I can summarize what we have just discussed now, you said you didn't experience challenges in exclusive formula feeding with your first baby. The challenges you are facing with exclusive breastfeeding includes baby not getting enough from the breast, mother and family members saying you are starving the baby, not easy to tell everyone about your status and, the fear of mixed feeding your baby.
P: Yes, almost are the only challenges I facing with exclusive breastfeeding.

I: Thank you.
P: Thank you sir, bye.