

**LIVED EXPERIENCES OF MOTHERS WHEN PROVIDING
KANGAROO MOTHER CARE AT THE HOSPITALS IN VHEMBE
DISTRICT OF LIMPOPO PROVINCE, SOUTH AFRICA**

By

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DECLARATION

I, **Thivhavhudzi Mavis Mulaudzi**, declare that “**Lived experiences of mothers when providing Kangaroo Mother Care at the selected hospitals in Vhembe District of Limpopo province, South Africa**” submitted for magister curationis degree is my original work and all the sources that I have used or quoted have been indicated and acknowledged by means of complete references, and that this work has not been submitted before for any other degree at any other institution of higher education.

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DEDICATION

This study is dedicated to:

- *My supervisor, Dr Ndou N.D*
- *My senior co-supervisor Prof Khoza L.B*
- *My children, Mukondeleli, Tendamudzimu, Konanani and Wavhutali*
- *My late father Petrus Madala*
- *My mother Mutshekwa Annah*
- *My husband, Abel*
- *My brothers Thivhilaeli and Mushe*
- *My sisters Julia and Luambo*

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ABSTRACT

Each year, an estimated 3.6 million infants die worldwide in the first four weeks of life due to complications of premature birth. One-third of Low Birth Weight (LBW) babies die within the first 12 hours after delivery. The main reasons premature babies are at greater risk of illness and death is that they lack the ability to control their body temperature meaning that they get cold or hypothermic very quickly. Kangaroo Mother Care reduces mortality and if widely applied it could reduce deaths in premature newborn babies. The purpose of this study is to explore and describe the lived experiences of mothers when providing Kangaroo Mother Care at the hospitals in Vhembe District of Limpopo province. Qualitative approach with explorative descriptive, contextual and phenomenological designs were employed to explore the experiences of mothers when providing Kangaroo Mother Care. The study population consisted of all mothers who were providing Kangaroo Mother Care. A non-probability convenience sampling method was used to determine the sample of the study. The size of the sample was determined by data saturation. In-depth individual interviews were conducted using a central question. The Tesch's eight steps of open-coding model guided the process to analyse data. Trustworthiness was ensured throughout by employing the principles of credibility, dependability, conformability, and transferability. Ethical considerations were followed to protect the participants. Recommendations were made based on the research findings. The findings of the study revealed that mothers who provide Kangaroo Mother Care experience challenges. They received inconsistent information about the practice of Kangaroo Mother Care from nurses. The relationship between mothers and nurses was good. Recommendations were made based on the findings and relevant structures in order to ensure that mothers challenges are addressed. The study revealed ineffective support provided to mothers by nurses and family members.

Keywords: Challenges, Experiences, Kangaroo mother care, Mother, Premature

ABBREVIATIONS

CEO	Chief Executive Officer
GDB	Global Burden of Diseases
LBW	Low birth weight
MDG	Millennium Development Goal
NU	Neonatal Unit
NICU	Neonatal Intensive Care Unit
STS	Skin to Skin
UK	United Kingdom
WHO	World Health Organization
SA	South Africa
WPD	World Premature Day

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CHAPTER 1

OVERVIEW AND RATIONALE

1.1 Introduction and Background of the Study

Kangaroo Mother Care is an evidence-based approach to reduce morbidity and mortality in premature infants (Seidman, Shalini, Kenny & Cyril et al., 2015). Kangaroo Mother Care entails prolonged Skin-To-Skin (STS) contact between the mother and infant, exclusive breastfeeding whenever possible, early discharge with adequate follow-up and support, and initiation of the practice in the facility and continuation at home (WHO, 2003). In 2013 black mothers across the world had the highest rates of premature births of 16.3%, followed by American Indians (13.1%), Hispanics (11.3%), whites and Asian/Pacific Islanders (10.2%) (Child trends data Bank, 2015).

Each year, an estimated 3.6 million infants die worldwide in the first four weeks of life (neonatal period) due to complications of premature birth (Lawn, Kerber, Enweronu-Laryea and Cousens, 2010). To deal with this problem, Kangaroo Mother Care method has proven to be an effective alternative to ensure the survival of premature and Low Birth-Weight (LBW) infants and to promote a better quality of life (Valera, Munoz, Plata Charpark & Tessier, 2014).

Kangaroo Mother Care includes early and continuous breastfeeding by mothers of premature babies. The clinical efficacy and health benefits of Kangaroo Mother Care have been demonstrated in multiple settings. In low birth weight newborns (< 2000 g) who are clinically stable, Kangaroo Mother Care reduces mortality and if widely applied it could reduce deaths in premature newborns. One-third of Low Birth Weight (LBW) babies die within the first 12 hours after delivery and the main reason premature babies are at greater risk of illness and death is that they lack the ability to control their body temperature meaning that they get cold or hypothermic very quickly (Grace, Amy & Stephen, 2016).

More than 60% of premature babies are born in South Asia and sub-Saharan Africa, where 52% of the global live births occur (Blencowe, Cousens, Oestergaard, Chou et al., 2012). Very high rates of premature births are observed in North Americas as well as Africa, but the burden in terms of absolute numbers disproportionately affects developing countries, especially those in Africa and South Africa (Beck, Wojdyla, & Say et al., 2010).

The 10 countries with the highest number of premature babies' include Brazil, the United States, India and Nigeria, in demonstrating that premature birth is truly a global problem. On average, 12% of babies are born too early compared with 9% in higher income countries. Poor families are at higher risk (Kinney & Davidge, 2012).

Premature birth is also the major determinant of neonatal morbidity and mortality in Zimbabwe. Although 8 to 10% of deliveries are premature, prematurity contributes 33% of neonatal deaths (Chimbini, Tshimanga, Chikwasha & Mungofa, 2013). A few studies on challenges experienced by mothers when providing Kangaroo Mother Care to premature babies were conducted in African countries including South Africa, Nigeria and Zimbabwe, but most studies in this field have been conducted in developed countries such as United States of America (USA). In almost all countries with reliable data, premature birth rate is increasing. To reduce premature birth rates, mothers need better access to family planning and increased empowerment as well as improved care before, between and during pregnancy (World Health Organization, (WHO) 2012).

In South Africa (SA), more than 8 out of 100 babies are born prematurely and it ranks 24 out of 184 countries for the number of newborn deaths due to complications from premature birth. In SA, 41% of children who die under the age of 5 years most of them are premature, and this is a rising proportion (Mongale, 2012). Having committed to beyond Millennium Development Goal (MDG) for child survival and pledging support to a promise renewed, SA is using World Premature Day (WPD) to take actions to address premature birth, hopes of taking a step forward in achieving these goals for child survival (WHO, 2012).

A study conducted by Obeidat, Bond and Callister (2009) found that when the newborn premature baby is admitted to the Neonatal Intensive Care Unit (NICU), mothers were anxious, depressed, shocked, scared, worried, powerless and out of control due to emotional instability. Mothers who deliver premature babies experience emotional challenges, fear, despair and sadness. A premature baby brings a challenge to the majority of mothers, who are boarded into a reality for which they are unprepared. They may both feel disappointed and guilty about the failure to achieve a full-term pregnancy as well as fearing that the baby would die. Pregnant mothers prepare themselves for a fully developed infant and grieve over the lost dream of a full term baby. Grieving may hinder the attachment between mother and child (Granrud, Ludvigsen & Andershed, 2014).

Premature birth experience is traumatic for mothers and may lead to various emotional responses including stress-related symptoms such as depression and/or acute stress disorder (Jubinville, Newburn-cook, Hgadoren & Lacaze-Masmonteil, 2012). Following a premature delivery mothers can find themselves in crisis, consisting of guilt and failure that they were unable to endure the pregnancy up to full-term. Furthermore, these feelings can be so extreme that mothers find it difficult to cope and they can feel guilty for not being able to take care of their babies and the delay in being able to see or touch the baby can affect bonding (Cockcroft, 2012).

Shrivastava, Shrivastava and Ramasamy (2013) state that mothers who practice Kangaroo Mother Care method exhibit less maternal stress and fewer symptoms of depression, and have a better sense of the parenting role and more confidence in meeting their babies' needs. Furthermore, Kangaroo Mother Care improves growth in low birth weight and premature infants and has a significant role to play in protecting them from hypothermia and sepsis, as well as promoting exclusive breastfeeding. It helps to reduce neonatal mortality and inculcates confidence and a better sense of parenting in mothers with regard to their babies' needs. Bonding and caring for a premature baby improves the emotional and social well-being of mothers. Most premature babies are born ill with difficulties in adapting to life because of immature body systems, which result in a stressful situation for mothers (Velinkoshi-Indogo, 20).

The study conducted by Axelin, Lehton, Pelander, and Salantra, (2010) revealed that mothers actively participate in their premature infants care, however, the participation is unique according to the mother and her experiences before and during NICU admission. Therefore, midwives need to consider these differences in mothers when involving them in premature babies' care. Mothers had apprehension about their infant's fragile health, losing the support of the neonatal team, and performing medical procedures (Murdoch & Franck, 2012).

The implementation of Kangaroo Mother Care helps mothers relax, become familiar with their babies, reduce their sense of guilt, and increase confidence in their motherhood skills and their ability to take care of their infant, these may also improve mother-child communication and interaction and yield positive consequences for the families of premature babies in their future life together (Ishikazi, Nagahama & Kaneko, 2013). When mothers were involved in giving care, they shifted from a passive to an active role, moving from mere parenting to engage parenting and from exclusion to participation in their baby's care. In addition, when parents' integration into the unit was facilitated, they felt safer, gained control over the situation, were involved in rapport-developing, were more confident, and felt more connected to their baby (Obeidat, Bond & Callister, 2009).

Kangaroo Mother Care has also been described as a cost-effective and high-impact intervention for improving newborn's survival. Beneficial physiological and behavioral effects of Kangaroo Mother Care for the baby include better thermoregulation, improved cardiorespiratory stability, lower risk of infection and faster growth (Campbell-Yeo, Disher, Benoit, & Johnston, 2015). Behavioral effects relate to better sleep cycles, less crying and an analgesic effect during painful procedures. Beneficial effects for mothers include better breastfeeding (increased milk production, exclusivity, early initiation) and psychosocial effects reduced anxiety, more maternal satisfaction, improved maternal-infant attachment and bonding (Bergh, Manu, Van-Rooyen et al., 2013).

Nurses need to be aware of their authority and positively assert non-judgmental, trustful and open relationship with mothers. Nurses who engage with mothers are good listeners and share their observations with the mother and also talk about the baby

with the mother, asking open ended questions which allow the mother to feel like they are 'good' mothers, who are involved in their baby's care, therefore, neonatal nurses must act as role models (Valizadeh, Zamanzadeh, Akbarbegloo & Sayadi, 2012).

1.2 The Research Problem

The researcher is a registered midwife in one of the hospitals in Vhembe District of Limpopo Province. She observed that mothers experience challenges when providing Kangaroo Mother Care to the premature babies. Mothers were complaining of long stay in hospitals, lack of skills on how to provide Kangaroo Mother Care to their premature babies. The researcher has therefore decided to explore and describe the lived experiences of mothers when providing Kangaroo Mother Care at the selected hospitals in Vhembe district of Limpopo province.

1.3 Purpose of the Study

The purpose of this study is to explore and describe the lived experiences of mothers when providing Kangaroo Mother care at the selected hospitals in Vhembe district of Limpopo province, South Africa.

1.4 Research Objectives

The objectives of the study were to:

- Explore and describe the lived experiences of mothers when providing Kangaroo Mother Care.
- Determine the support received by the mother family members, nurse and midwives

1.5. Research Questions

- What are mothers' lived experiences of providing Kangaroo Mother Care?
- What type of support do mothers receive when providing Kangaroo mother Care?

1.6 Significance of the study

The findings of the study may assist nurses and midwives to understand the lived experiences of mothers when providing Kangaroo Mother Care. The recommendations may contribute towards improving the relationship between midwives and mothers of premature babies. In addition, the research findings may add to the existing body of knowledge on lived experiences of mothers when providing Kangaroo Mother Care. Psychological benefits resulting from mothers directly involved in providing care to their premature babies may increase confidence and competence, as well as reducing maternal and premature baby stress. The findings of the study will be disseminated to the hospital and further communicated to midwives and mothers in order to improve the standard of providing Kangaroo Mother Care.

1.7 Definition of Concepts

A concept is an abstraction inferred from the observation of behaviours, situations or characteristics. A conceptual definition presents the abstract or theoretical meaning of a concepts being studied (Polit & Beck 2016). The following are theoretical and operational definitions of the key concepts used in this study:

The following are theoretical and operational

1.7.1 Lived Experience

Lived experience refers to the skills and knowledge attained from life event which constitutes the process of meaning construction whereby people think about themselves and their position in relation to others and the world around them (Hawker & Soane, 2008). In this study lived experience refers to physiological, physical and social concerns, thoughts and ideas encountered by mothers who are providing care to their premature babies.

1.7.2 Mother

A woman in relation to a child or children to whom she has given birth, who loves unconditionally and places the needs of her children above her own, on a personal level and not only with words but also actions (Oxford Advanced Learner's Dictionary, 2010). In this study, the word mother refers to someone who gave birth to a premature baby and providing Kangaroo Mother Care.

1.7.3 Premature Baby

A premature baby is any viable baby born alive before a gestation period of 37 completed weeks of pregnancy regardless of his or her weight (Cronje, Cilliers, & Pretorius, 2011). In this study a premature baby refers to any baby who is in Kangaroo Care Unit and born before 37 completed weeks.

1.7.4 Kangaroo Mother Care

Kangaroo Mother Mother Care is the standardised protocol based care system for premature and low birth weight and is based on the skin to skin contact between the premature baby and the mother (Nyqvist, Anderson & Ewald et al., 2010). In this study Kangaroo Mother Care refers to skin contact between mother's chest and premature baby's front wearing only a diaper, hold in an upright position.

1.7.5 Support

Providing encouragement, reassurance, being helpful, understanding (Complete Word finder, 1993). In this study, support will mean any form of assistance provided to mothers of premature babies.

1.7.6 Low Birth Weight

Low birth weight is defined by World Health Organization as weight at birth of less than 2500 grams (WHO, 2015). In this study low birth weight is defined as any baby born at term/ after 37 completed weeks with weight of less than 2500 Grams.

1.8 Research Design and Methodology

The research methodology provides an overview of research approaches, research designs, sampling techniques, data gathering and data analysis. In this overview, attention was given to the description of measures to ensure trustworthiness of the study findings and ethical issues.

1.8.1 Qualitative research approach

The researcher used the qualitative approach as it was appropriate in exploring and describing the lived experiences of mothers when providing Kangaroo Mother Care to the premature babies. This approach is described in detail in chapter 3.

1.8.2 Research design

Grove, Burns, and Gray (2013) define the study design as a guide or blue print, which the researchers plan and implement in a way that enable them to reach the desired goal or purpose. In this study qualitative approach with explorative, descriptive, contextual and phenomenological design were used and described in detail in chapter 3.

1.8.3 Study Setting

Study setting is a specific place or places where the data was collected, in real life situation or environment (Brink, Van der Walt & Van Rensburg, 2012). The study was conducted in the Neonatal Intensive Care Units of the three selected hospitals in Vhembe district of Limpopo Province.

1.8.4 Population of the Study

Research population is the entire group of persons or objects with common characteristics that is of interest to the researcher having common characteristics that are selected by the researcher to meet the purpose of the study (Brink, van der Walt and van Rensburg, 2012; Bowling, 2014). Population comprised all mothers who have given birth to the premature babies at the selected hospitals, who were providing Kangaroo Mother Care to their babies and those who met the sampling criteria. The target population was mothers who were practicing Kangaroo Mother Care from day 5 until discharge. The accessible population was mothers who were providing Kangaroo Mother Care, available in NICU by the time of interview and ready to sign informed consent forms.

1.8.5 Sample and Sampling Technique

The non-probability convenience purposive sampling method was used by the researcher to select a sample from the entire population that represented mothers who were providing Kangaroo Mother Care to their premature babies. It is a sampling technique whereby; samples are gathered in a process that does not give all individuals in the population equal chances of being selected (Burns & Grove, 2011). The sample size was determined by data saturation. The sample and sampling technique are further described in detail in chapter 3.

1.8.6 Data Collection

Data collection can be defined as the process of gathering and measuring information on targeted variables in an established systematic fashion, which then enables one to answer relevant questions and evaluate outcomes (Lescroel, Gremillet & Ainley., 2014). The researcher used unstructured individual face-to-face interviews. Preparation for data collection, data collection instrument and data collection process are described in chapter 3.

1.8.7 Data Analysis

Data analysis refers to the breaking up of data into manageable themes, patterns, trends and relationships (Neuman, 2011). The researcher used Tesch's eight steps criteria of analysing data as cited in (Cresswell, 2014).

Step 1: Get a sense of the whole.

Step 2: Review one document.

Step 3: Make a list of topics.

Step 4: Abbreviate topics into codes.

Step 5: Categorize topics

Step 6: Abbreviating the topics as codes.

Step 7: Assembling similar categories of data.

Step 8: Recording the existing data.

Table 1.1 Offers a summative overview of the objectives, design and methods. It indicates the sampling, data collection and analyses in accordance with the first two objectives.

Table 1.1: Objectives, design and methods

Study objectives		Explore and describe lived experiences of mothers when providing Kangaroo Mother Care Explore the challenges experienced by mothers
Research setting		Hospitals in Vhembe district of Limpopo Province
Research methods	Study population	Mothers providing Kangaroo Mother Care
	Sampling method	Non-probability purposive sampling (Hospitals) Non-probability convenience sampling (Participants)
	Sampling size	Determined by data saturation
	Data gathering method	Individual in-depth face to face interviews
	Data analysis	Tesch's eight steps model (Creswell, 2014) were used to analyse data.

1.9 Measures to Ensure Trustworthiness

Trustworthiness is a way of ensuring data quality or rigour in qualitative research (Brink et al., 2012). The researcher proposed four criteria for developing trustworthiness of qualitative study namely: credibility, dependability, confirmability and transferability. It is described in full in chapter 3.

1.10 Ethical Considerations

Ethics is concerned with the matters of right and wrong (Babbie, 2013). Ethical considerations were considered throughout the study. Participants' respect, privacy, the anonymity of information and confidentiality were respected and protected throughout the study (Brink et al, 2012). Ethical considerations are described in full in chapter 3.

1.11 Structure of the Dissertation

The study is presented in separate chapters that reflect different steps of research:

Chapter 1 of an overview and rationale captures a brief introduction to the study, background, problem statement, purpose of the study, objectives, research approach and designs, data collection and data analysis.

Chapter 2 of literature review discusses the literature review related to the lived experiences of mothers when providing Kangaroo Mother Care.

Chapter 3 of research methodology describes research approach and design, research population, sample and sampling technique, data collection and analysis, measures to ensure trustworthiness and ethical considerations.

Chapter 4 of data presentation, analysis and description of the research findings presents the results obtained after analysis of participants transcripts.

Chapter 5 of discussions, limitations, conclusions and recommendations provides a discussion of the findings in relation to existing literature, provides conclusions of the

study and recommendations for addressing challenges experienced when providing Kangaroo Mother Care to the premature babies.

1.12. Summary

This chapter provided an overview and rationale of the study on lived experiences of mothers when providing Kangaroo Mother Care. The chapter captures a brief introduction to the study, background, problem statement, purpose of the study, objectives, and research questions, summary of the research approach and designs, methods and data analysis approach. Chapter 2 presents a literature review, which critically evaluates data related to the lived experiences of mothers when providing Kangaroo Mother Care.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The previous chapter dealt with introduction and overview of the study which included the research problem, purpose, significance of the study, and an outline of the research methodology. This chapter discusses the literature review related to the lived experiences of mothers when providing Kangaroo Mother Care. A literature review is a process whereby the researcher conducts a short survey of relevant work that involves finding and forming conclusions about the published research and theory of a thoughtful analysis and synthesis of the field. It also determines and generates what is already known about the topic to be studied. In this study, the researcher reviewed the previous studies to form the basis for comparison when interpreting the findings for the current study systems. Premature birth is one of the most significant problems in perinatology and it is a significant perinatal problem across the globe, not only in terms of associated mortality but also with regard to short and long-term morbidity and financial implications for health-care (Beck Wojdyla & Say et al., 2010). Literature was searched from journal articles, internet database, Sciencedirect, EBSCOHOST and that is where the following information was found: origin, challenges, support and benefits of Kangaroo Mother Care.

2.2 Origin of Kangaroo Mother Care

Kangaroo Mother Care originated in Columbia, South America, in 1979. The pioneers of this method were two neonatologists, Dr Hector Martinez and Dr Edgar Rey of Maternal institute Bogota, Columbia used the method as an alternative to traditional incubator care for LBW babies, because of the overcrowding and scarcity of resources in Bogota hospitals. Kangaroo Mother Care method does not increase the risk of mortality for premature babies. On the contrary, it provides a physical environment that is as safe for the infant as the incubator (Curran, Genesoni, Ceballos & Tallandini, 2008; Chisenga, Chalanda & Ngwale, 2015). The name 'Kangaroo' was obtained from

the similarities it bears with marsupial care-giving, in which the baby born prematurely is guided into the maternal pouch where he is kept warm with easy access to the mother's breast for unlimited breastfeeding opportunities until maturation (Tarus & Tjale, 2015).

Dr Rey and Martinez developed Kangaroo Mother Care as a method of ambulatory care for premature and LBW babies in their hospital where morbidity and mortality among these infants were high due to overcrowding and sepsis. As soon as the babies are stable and the mothers trained in the Kangaroo Mother Care method, they are sent home, irrespective of weight or gestational age, carried between their mothers' breasts at all times and fed only on mothers' milk (Conde-Agudelo, Belizan & Diaz, 2012).

Despite the recognition, benefits, and longevity of Kangaroo Mother Care, few developing countries have made the intervention available and accessible to families with premature babies. With the exception of Colombia, South Africa, Malawi and Brazil, most developing countries had only a handful of facilities that offer Kangaroo Mother Care services. South Africa, after recognising the benefits of Kangaroo Mother Care, chose to integrate it with facility-based services for LBW babies despite the fact that most of its health facilities had accessible incubator care. South Africa has since been in the forefront of developing Kangaroo Mother Care policies, implementation guidelines, and model hospital units for training (de Graft-Johnson, Mwebesa, Abwao & Ganges et al., 2012).

2.3 Challenges Experienced by Mothers Who Provide Kangaroo Mother Care at the hospitals

The birth of a premature is a distressing event in woman's life, therefore the mother's need for support should be considered by the family members and care providers so that she can overcome the difficulties resulting from the baby health' condition (Davim, Enders & da Silva, 2010). A mother is the central figure of anxiety related to premature birth; she experiences and expresses her feelings about it and is up to the clinical staff to hear what she is feeling (Eutrope, Thierry & Aupetit et al., 2014). Families particularly mothers, are faced with numerous encounters when experiencing a premature birth. Knowledge about mother's efforts regarding premature born babies

helps in the complete understanding of the impact of this incident on the family system and its performance (Arzani, Valizadeh, Zamanzadeh, & Mohammadi, 2015). A literature search indicates that mothers experience physical and emotional challenges.

2.3.1 Physical Challenges of Mothers

Mothers encountered tiredness as their main challenge during the 24-hour Kangaroo Mother Care. This was associated with factors experienced in the Kangaroo Mother care unit such as inadequate sleep, the use of one position for sleeping and rest (supine/back position) leading to a backache, high temperatures from skin-to-skin contact and the ward environment. Furthermore, mother's fatigue during the postnatal period as a consequence of the physical demands of caring for a premature baby is augmented by disturbed sleep (Tarus & Tjale, 2015). A particular postnatal ritual posed a group of Taiwanese mothers with additional difficulty in establishing physical interactions.

However, the Taiwanese mothers created alternative channels of contact with their hospitalised babies using emotional connections, while the physical interactions were certainly limited (Lee, Bore & Long, 2009). Kangaroo Mother Care has been widely implemented in countries such as Nigeria, Madagascar, Malawi, Ghana, Indonesia and South Africa. South Africa is taking a leading role in implementing Kangaroo Mother Care country-wide, initially in KwaZulu-Natal, Gauteng and Mpumalanga hospitals (Ten Ham, Minnie, Karen & van der Walt, 2015).

2.3.1.1 Risks and Health Problems of Premature Babies

When the baby is born prematurely, the lives of family members and the couple are affected because the baby is at risk due to the anatomical and physiological immaturity of organs. Babies born prematurely are at an increased risk for a number of health problems (Boykova, 2008). Many premature infants begin life with an incomplete complement of immature nephrons. They are then exposed to a variety of external stressors that can hinder ongoing kidney development or cause additional nephron

loss such as hemodynamic alterations, nephrotoxic medications, infections, and suboptimal nutrition (Carmody & Charlton, 2013).

Premature birth is essential for accelerating progress beyond Millennium Development Goals (MDG), in addition to its significant contribution to mortality, the effects of premature birth amongst some survivors may continue throughout life, impairing neuro-developmental functioning through increasing the risk of cerebral palsy, learning impairment and visual disorders and affecting long-term physical health with a higher risk of diseases (Howson, Kinney, Lawn & Mcdougal, 2012). Premature babies face feeding difficulties because the suck and swallow process only start at 34 weeks' gestation and they help to feed and are more likely to aspirate (WHO, 2012).

2.3.1.2 Experiences Caused by Long Stay of Mothers at the Hospitals

According to Arzani, Valizadeh, Zamanzadeh and Mohammadi (2015), in Iran lack of attention to mothers and their emotional and psychological concerns in the long term can affect their health and quality of life as sleeping and concentrating disorder. Loss of ability to make decisions and communicate with other family members, friends and infants cause social cognitive, emotional and behavioural development disorders.

2.3.1.3 Job and Income Losses

In Iran the findings of the study by Heidari, Hasanpour and Fooladi (2012) revealed that parents of hospitalised premature babies experienced job and income loss; shattered confidence in parental role; challenges to family dynamics; shame as a social stigma; loss of control; overwhelmed with uncertainties and stress-induced physical and emotional problems. According to Smith and Lucas (2015); Obeidat, Bond, and Callister (2009), premature babies are typically kept in the hospital for an extended period of time, often until their original due date, but very often mothers have careers to return to or other children to provide care at home.

2.3.2 Emotional Challenges

Premature birth is a traumatic experience for mothers and may lead to various emotional responses including stress-related symptoms such as depression and/or acute stress disorder (Jubenville, Newburn-cook, Hegadoren & Lacaze-Masmonteil, 2012). Premature birth is increasingly acknowledged as a very emotional, stressful and demanding experience for mothers during the days, weeks or even months of hospitalisation of a premature baby. Mothers are often overwhelmed by the range of emotions, from feelings of helplessness, anxiety, frustration, and anger (Hoffenkamp, Tooten & Croon et al., 2012). Lee, Bore and (2009:326) found that many mothers did not know what to do or how to mother their tiny infants in NICU. The findings delineating Taiwanese mothers parenting experiences during their stay in hospital indicate that the premature infants' birth, together with the admission of their infants to neonatal intensive care unit, present mothers with unexpected crisis.

A study conducted in Egypt by Hassan, El-Nagger, Hassan and El-Azim (2013) found that the majority of mothers didn't have information about Kangaroo Mother Care and few of them felt distant from the baby compared with Post-Kangaroo Mother Care. Most of those had adequate knowledge about Kangaroo Mother Care and nearly half of them requested to apply Kangaroo Mother Care and they were confident when caring and touching their babies. Mothers experience difficulties in bonding with their tiny babies as well as apprehension in the care of their babies because they have inadequate information about premature birth and premature baby care. Nurses have an important role in the moments of interaction and care of mothers and babies.

The main feelings referred by the mothers regarding their inability to breastfeed their premature babies immediately after delivery were: sorrow, guilt, disappointment, frustration, insecurity, and fear of touching, holding, or harming the delicate babies while breastfeeding (Davim, Enders & da Silva, 2010). The feeding behaviour of the premature babies is a developmental process gained through experience as well as the supportive process leading to the neonates' improved feeding ability from the mother's breast. The mother shows how she helps her baby maintain a stable sucking position and at the same time, the nurse stays with the mother to observe her and the

neonates' position and communicate with them and identify their needs (Valizadeh & Penjvini, 2014).

Ncube (2011) explains that although mothers were provided with information on breastfeeding they could hardly remember probably due to shock. It is recommended that a breastfeeding expert should assist the mothers. The study findings revealed that anxiety about the premature' condition and insensitive treatment of infant by individual nurses had a negative influence on the mothers let down reflex and affected their lactation process. Mothers were motivated to breastfeed their babies because they believed their breastfeeding experience would be very different once their infants were discharged and they felt that if they continued to breastfeed while they were in NICU, they would eventually be able to reach their goal of breastfeeding exclusively when they go home with their infants (Boucher, Brazal, Certosin, Carnaghan-Sherrad & Feeley, 2011).

2.4 Support of Mothers when Providing Kangaroo Mother Care

Mothers are not prepared to have premature babies and they have difficulties in coping with care. Jotzo and Poets (2005) conducted a study in America to ascertain whether a trauma preventative psychological intervention program for mothers of premature babies during hospitalization in the NICU reduced the severity of symptomatic responses to the traumatic impact of premature birth. Results show that mothers who receive intervention program show significantly lower levels of symptomatic response to the traumatic stressors. When mothers of premature babies are not adequately informed and supported, their milk supply can dry up quickly, or may never be properly established (Bliss, 2008).

In a study conducted in Namibia by the registered nurse/midwife Velikoshi (2008) in NCU, the research findings revealed that there was no health education and support program in place. Mothers were just discharged without any preparation for the next step, which is the continuation of the nursing care of the premature baby at home. Mothers revealed that they experienced emotional challenges following premature birth. Mothers of premature infants need efficient communication with the nurses and midwives. This communication should be based on confirmation of their mother role,

evidenced by a mutual exchange of information. It is also important that the relationship between staff and parents is based on respect and that the parents feel like equal partners in the infant's care. It has been suggested that the role of the nursing staff should change from performing the care to guiding parents in taking care of the infants and supporting parents attaining the natural parental role, as the infant's primary caregivers (Heinemann, Hellstrom-Westas, & Hedberg Nyqvist, 2013).

When the family life is affected, mothers would be able to handle the situation if they have received support from their partners and nursing staff. An infant's birth is an exciting event happening for every parent but unexpected birthday of a premature infant is an end of emotions which is replaced by anxiety and stress conversely. A birthday to a healthy infant is the best gift for the mother in delivery time while premature infant causes severe mental problems for parent especially mother (Malakouti, Jabraeeli, Valizadez & Babapour, 2012).

2.5 Benefits of Kangaroo Mother Care

Bhandekar and Malik (2018) study revealed that Kangaroo Mother Care is an effective non pharmacological and safe modality in reducing pain in premature neonates during minor procedure like venepuncture as compared to conventional care. All these studies focused on the effects of Kangaroo Mother Care in terms of the growth of the baby, the length of the hospital stay of mother and baby and the success of breast feeding. In South Africa, the value of Kangaroo Mother Care has been studied at Groote Schuur Hospital in Cape Town and it was reported by Hann, Malan, Kronson, Bergman and Huskisson at Kalafong Hospital, near Pretoria (Reddy & McInerney, 2007).

2.5.1 Benefits to the baby

The mother's body responds to the needs of the infant directly, assisting to regulate temperature more smoothly than an incubator, her milk adjusts to the nutritional and immunological needs of her fragile infant, and the baby sleeps more peacefully (Geetha & Hemavathy, 2015). Physiological functions such as temperature control, cardiovascular stability, respiratory rate, and gastrointestinal adaptation is as good, or better, in infants exposed to Kangaroo Mother Care. The baby remains in a more

restful state gaining comfort from the mother's voice and heartbeat. Infants receiving Kangaroo Mother Care also have fewer serious infections, grow faster and go home sooner. It has been shown that more infants receiving Kangaroo Mother Care breastfeed longer. It is a major benefit in a developing country where malnutrition and gastro-intestinal infections account for a large percentage of infant mortality and morbidity. Kangaroo Mother Care also improves mother-baby bonding which has spin-off. There is some evidence to suggest that Kangaroo Mother Care babies have improved neurons effects on decreasing child neglect and abuse (Desai, Hann, & Ryan et al., 2003).

2.5.2 Benefits to the mother

There is no separation of mother and baby; no need for mother to visit INCU; less acquired nosocomial infections; less stressful environment; rooming in: more social and physical contact with the baby; less feelings of failure; enhance sense of role and identity; better skill development and identity; no handing over the baby's care to a more experienced person and the taking back the responsibility; and the transaction to home is considered to be easier and more welcomed by the mother (Fraser, Cooper & Nolte, 2010).

Kangaroo Mother Care is one such intervention that can substantially contribute to decreasing the risk of death in neonates weighing less than 200g (Lawn, Mwansa & Cousens, 2010). The study conducted in Ghana by (Bergh, Davy, and Quansahasare et al., 2013) states that although most mothers and health workers seemed to understand the benefits of Kangaroo Mother Care, personal and community cultural beliefs and practices may have contributed to resistance and non-compliance with Kangaroo Mother Care following the discharge of some mothers from hospital.

2.6 Summary

Literature review has many aspects of lived experiences of mothers when providing Kangaroo Mother Care globally, nationally as well as in South Africa. This chapter describes and outlines the origin of Kangaroo Mother Care, challenges experienced by mothers when providing Kangaroo Mother Care, support of mothers when providing

Kangaroo Mother Care and benefits of Kangaroo Mother Care. Chapter 3 describes the detailed research methodology.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Chapter 2 described literature review related to the topic of this study. This chapter describes research approach and design, research population, sample and sampling, data collection, data analysis, measures to ensure trustworthiness and ethical considerations. Brink, van der Walt and van Rensburg (2014) state that the purpose of research methodology is to inform the reader on how the investigation was carried out, what the researcher did to solve the problem and respond to the research questions.

3.2 Research approach and design

3.2.1. *Research approach*

A qualitative approach with explorative, descriptive, contextual and phenomenological designs were employed in order to get an in-depth understanding of the lived experiences of mothers when providing Kangaroo Mother Care to their premature babies at the selected hospitals in Vhembe district of Limpopo province. A qualitative researcher is concerned with understanding naturalistic observations with the subjective exploration of reality from the perspective of an insider (De Vos, Strydom & Fouch'e, Delport, 2011). Qualitative methods collect information in the form of words which gives an in-depth understanding of the nature of what people experience. The researcher used this approach as it is appropriate in exploring and describing the experiences of mothers when providing Kangaroo Mother Care in the natural settings of the participants, which were the hospitals.

Qualitative research is a systematic, interactive subjective approach that describes life experiences and give them meaning (Grove, Burns & Gray, 2015). According to Botma, Greef, Mulaudzi and Wright (2010), a qualitative approach is recommended

when little is known about the phenomenon, which allows the researchers to identify, explore and describe phenomena that are poorly understood in that particular context. The qualitative approach focuses on the qualitative aspects of meaning, experience and understanding, and these methods are used to study human experiences from the viewpoint of the research participants in the context in which the action takes place (Polit & Beck, 2012).

Qualitative research is a broad term for a wide range of approaches and methods applied to study natural social life. Primarily, the nature of information or the data collected and analysed is non-numeric and comprises of textual materials such as interview transcripts, field notes, documents, visual materials, and these account for human experiences in social life (Saldana, 2011; Ellis, 2010). The researcher wished to explore the experiences, challenges and the types of support received by mothers when providing Kangaroo Mother Care.

3.2.1.1 Benefits of qualitative approach

According to Leedy and Ormord in de Vos (2011), a qualitative approach is used to answer questions about the complex nature of phenomenon with the purpose of describing and understanding the phenomenon from the participant's point of view and collecting extensive verbal data from a small number of participants. Data is then organised to give coherence and use verbal descriptions to portray the situation studied (De Vos, Strydom, Fouch'e & Delport, 2011). Furthermore, qualitative researchers borrow ideas of people they are studying and place them within the context of natural settings. They examine ideas, themes, distinctions and thoughts instead of variables (Neuman, 2011).

3.2.1.2 Purpose of choosing a qualitative approach

The lived experiences of mothers when providing Kangaroo Mother Care was the focus of the current study, typifying the tradition of qualitative enquiry and mothers were allowed to raise issues which the researcher was likely to include in the research. A qualitative study is an investigation of phenomena, typically, in a holistic fashion through the collection of rich narrative materials using a flexible research design. It is

a way of finding out what people think and feel through observing and interviewing and reading documents (Brink, Van der Walt & Van Rensburg, 2011). It permits the participants to share their views, experiences and opinions freely without being channeled by the closed-ended questions and structured questions used in a quantitative approach. Mothers were allowed to share their experiences freely. It offers freedom to the researcher to use probes and prompts to gain more information and clarification rather than just sticking on initial participants' response. Permission of freedom regarding responses among both the participants and the researcher was ensured (Burns, Grove, & Gray 2015).

Qualitative research was understood to be a form of the social inquiry as the researcher focused on the way participants interpreted and made sense of their experiences based on the world in which they live. Participants used their own words to describe their experiences rather than using wider themes.

3.2.2. Research design

According to Burns and Grove (2011), a research design is a blueprint for the conduct of a study that maximises control over factors that could interfere with the study's desired outcomes. Explorative, descriptive, contextual and phenomenological designs were appropriate for exploring and describing lived experiences of mothers when providing Kangaroo Mother Care to the premature babies.

3.2.2.1. Explorative

Explorative studies are conducted to explore the topic in question or provide a basic familiarity with the topic. The need for exploratory research arises from lack of basic information on a new area of interest, or in order to get acquainted with a situation so as to formulate a problem or develop a hypothesis (De Vos et al. 2011). The researcher's point of departure was that of not knowing the lived experiences of mothers when providing Kangaroo Mother Care to the premature babies. The exploratory research design was appropriate for this study as it provided in-depth information regarding the lived experiences of mothers with regard to Kangaroo Mother Care. The researcher explored the challenges, relationships, support and

knowledge about the lived experiences of mothers when providing Kangaroo Mother Care to the premature babies at the selected hospitals in Vhembe District of Limpopo Province.

The purpose of exploratory research design was to gain insight into a situation, to explore the lived experiences of mothers premature babies during Kangaroo Mother Care. An exploratory research component seeks to explore and give answers in different ways about how phenomena and process occur (Polit & Beck, 2012). Detailed information is gathered by means of in-depth interviews in order to explore the lived experiences of mothers when providing Kangaroo Mother Care. With an exploratory design, a researcher also aims to gain insight to develop new ideas, concepts and theories regarding a problem. The researcher utilised a central question to explore the lived experiences of mothers when providing Kangaroo Mother Care at the selected hospitals in Vhembe District of Limpopo province.

3.2.2.2. Descriptive

Descriptive design was selected in order to describe the explored experiences when mothers provide Kangaroo Mother Care, to justify current practice, make judgements or determine what other professionals in similar situations are doing and to develop theories (Brink et al., 2012). The descriptive design was also used to provide a more intensive description of the phenomenon of lived experiences of mothers when providing Kangaroo Mother Care.

Descriptive design is concerned with gathering information from a represented sample of the population (Brink et al., 2014). It is used in studies where more information is required in a particular field through the provision of a picture of the phenomenon as it occurs naturally. This design describes the variables in order to answer the research question (Brink et al., 2014). Descriptive research design presents a picture of specific details of situation, social setting or relationship, and focuses on “why”, “how” or “what” of the phenomenon being investigated rather than research questions about how many or how much (Thomas, 2010). The researcher therefore began with a well-defined subject and conducts research to describe it accurately. This included hearing,

seeing, feeling, remembering, deciding, evaluating and acting. The researcher described the lived experiences of mothers when providing Kangaroo Mother Care.

3.2.2.3. Contextual

Contextual research design seeks to explore and give answers to different ways about how the phenomena and processes take place (Polit & Beck 2012). Qualitative studies are always contextual as the data are only usable in the specific contexts. The aim of the researcher is to describe and understand events within a concrete, and natural context (Brink et al., 2012). In this study, data was collected at the hospital therefore the research is contextual in nature as it took place in NICU within the hospital setting. The findings of this study were applicable to the NICU of selected public hospitals in Vhembe District of Limpopo Province.

3.2.2.4. Phenomenological

Phenomenology is the thorough, systematic study of human experience that aims to produce insightful descriptions of the way people experience their world (Creswell, 2014). The main idea of using phenomenological design was to capture the meaning attached to the experiences of mothers in the natural setting which is a NICU. When collecting data, the researcher attempted to understand the lived experiences of mothers when providing Kangaroo Mother Care and concerned with understanding mothers' behaviour.

3.3 Study setting

Study setting is a specific place where the data is collected, that is, the real life situation and environment (Brink et al, 2014). Vhembe district consist of seven hospitals but the researcher selected only three hospitals. The study was conducted in the NICUs of DonaldFrazer, Siloam and Tshilidzini hospitals of Vhembe District in Limpopo Province. The majority of people living in this area are Venda speaking. Limpopo province is one of the nine provinces in South Africa. The Limpopo province borders with the Mpumalanga and Gauteng provinces.

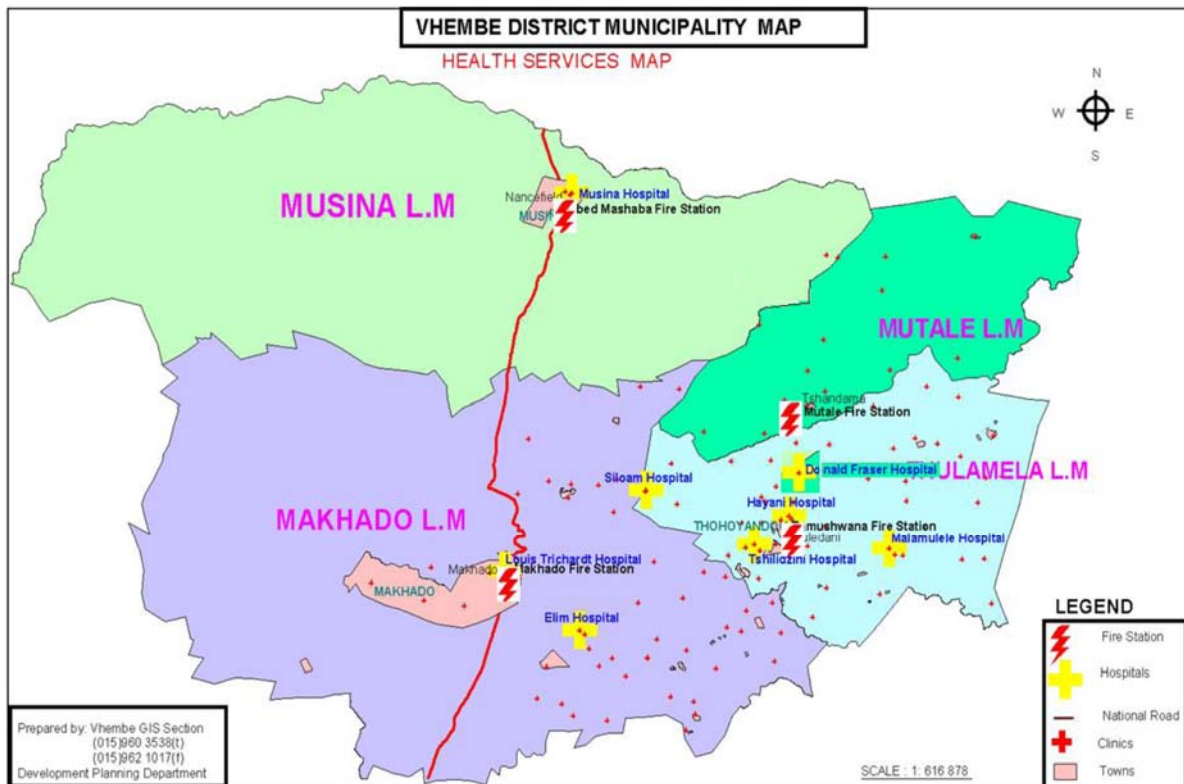


Figure 3.1: Vhembe District Map, Local Municipalities and Hospitals

Figure 3.1: shows the hospitals in the municipalities of Vhembe district. There are seven public hospitals in Vhembe district namely: Musina, Siloam, Louis Trichardt, Elim, Donald Fraser, Malamulele and Tshilidzini.

3.4. Research methods

Polit and Beck (2012) refer to research methods as the steps, procedures and strategies for collecting and analysing data in the research process. The research population, sampling methods and sample, data collection and analysis are described in this section.

3.4.1 Population of the study

Population is all the individuals or objects with common defining characteristics (Polit & Beck, 2012). Population of this study entailed all mothers who were providing Kangaroo Mother Care in the NICU of the selected hospitals in Vhembe District of

Limpopo Province. Population was further differentiated into two types, the target population and the accessible population.

3.4.1.1 Target Population

According to LoBiondo-Wood and Haber as cited in Brink, van der Walt and Van Rensburg (2012), target population is the entire set of elements about which the researcher would like to make generalisations. Target population is the whole group to which the researcher wants to generalise the findings. The target population consisted of all mothers who were providing Kangaroo Mother Care to their premature babies for at least five days or more.

3.4.1.2 Accessible Population

Accessible population refers to a part of target population to which a researcher has reasonable access (Grove et al., 2013). The accessible population comprises of cases from the target population that is accessible to the researcher as a pool of participants (Polit & Beck, 2012; Burns & Grove, 2011). The accessible population were mothers who were providing Kangaroo Mother Care for at least five days or more and were available in NICU by the time the researcher was conducting interviews and ready to sign the consent forms.

3.4.2 Sampling technique and Sample

Sampling technique is a process whereby a group of individuals are selected in order to obtain information regarding a phenomenon in a way that represents a population of interest (Grove, Gray & Burns, 2013). Lincon and Guba (2010) state that the idea of qualitative research is to purposively select the participants who can best answer the research question. Purposive sampling is a non-probability form of sampling and its goal is to sample participants in a strategic way, so that those sampled are relevant to answer the research questions that are being posed (Bryman, 2012). In non-probability sampling, not every element of the population has an opportunity for selection in the sample.

A sample is the selected group of participants or elements included in the study (Grove et al., 2013). The main reason for selecting a sample rather than studying the entire population is to make an accurate conclusion about the whole study population in a more cost-effective and efficient way (Lyons & Doueck, 2010; Maltby, Willams, McGarry & Day, 2010; Polit & Beck, 2010). Once the population was identified, a sample was selected.

3.4.2.1 Sampling of Hospitals

As stated under research setting, there are seven public hospitals in Vhembe district. Non-probability purposive sampling method was used by the researcher to select Tshilidzini, Siloam and Donald Frazer hospitals.

Criteria for selecting the hospitals to be included in the study were:

- Being a public hospital.
- A hospital that practices Kangaroo Mother Care method.
- A hospital with high rates of premature babies on Kangaroo Mother Care.

3.4.2.2 Sampling of the Participants

Non-probability convenience sampling was used in the selection of a sample of mothers who were providing Kangaroo Mother Care. In convenience sampling, also called accidental sampling, participants were included in the study because they were available during the time of collecting data. Convenience sampling is inexpensive, accessible and usually require less time than other types of sampling (Burns & Grove, 2013; Polit & Beck, 2012).

To be eligible for inclusion in the study, participants had to comply with the following criteria:

- Mothers of premature babies who were providing Kangaroo Mother Care.
- Mothers who provided Kangaroo Mother Care for at least five days and more.

- Mothers who speak Tshivenda or English.

3.5 Data Collection

Data collection is gathering of information to address the research questions (Polit & Beck, 2012). The information gathered was relevant to the research purpose, questions and objectives. In-depth information was gathered by means of interviews, in order to explore the lived experiences of mothers when providing Kangaroo Mother Care to their premature babies.

3.5.1 Data Collection Methods

Data collection methods commonly used in qualitative research include interviews, observations, and document analysis (Creswell, 2014). Data collection started after the researcher has received an ethical clearance from the University of Venda's ethics committee ((see Annexure A) and approval from Limpopo Provincial Department of Health Research committee (see Annexure C). Permission to conduct the research was granted from Vhembe district (see Annexure D). Then the researcher use approval letters from the hospitals as a proof that she was given permission to conduct the study (see Annexure F).

3.5.2 Preparation for Data Collection

The first week of July 2017 was spent gaining access to the target population, making initial contacts with participants and conducting a pre-test interview. Pre-testing revealed no challenges. The central question during pre-test interview was clear to two participants and time allocated was enough for interview session and also probing questions. During the initial contacts, issues relating to the purpose of the study, informed consent and ethical considerations such as voluntary participation were discussed. Participants were given the opportunity to ask questions regarding the study at each contact session. The researcher contacted the participants telephonically the day before the interviews in order to verify if they were still available and also to obtain further verbal consent.

3.5.3 Research Instrument

Research instrument is the device used to collect data for example questionnaire, test and observation schedule (Polit & Beck, 2012). The researcher used un-structured in-depth individual face to face interviews. Unstructured interview is an interactive spontaneous communication with a participant, with an interest in understanding the experiences of other people and the meaning they make of that experience (de Vos, 2012).

Unstructured in-depth face to face interviews (see Annexure I) with one central question led by the research objectives was used to gather information from the participants. Central question contained open-ended questions in Tshivenda and English as the researcher did not have the interpreters for the Sotho and Tsonga languages.

“Ndi ifhio tshenzhemo ine vha vha nayo malugana na u thogomela nwana vho mu vhea kha khana tshifhinga tshothe sa mme?”

“What are your lived experiences of providing Kangaroo Mother Care?”

Pre-test

The central question was pre-tested by means of posing questions to two mothers who were providing Kangaroo Mother Care to the premature babies. When the researcher had ensured that the central question was not ambiguous, she then started to conduct in-depth face to face interviews.

3.5.3.1. In-depth Face to Face Interview

The purpose of in-depth face to face interview is not to get answers to questions, test hypotheses and not to evaluate in the usual sense of the term, is an interest in understanding the experiences of other people and the meaning they make of that experience (de vos et al., 2012). In response to the central question, the participants had to describe their experiences of providing Kangaroo Mother Care. Other questions

in the central question were used as probes and prompts, to guide the researcher during the data collection process, and to elucidate in-depth-information from the participants (See Annexure I). Probes were used to increase detailed exploration.

An audio-tape was utilised, to capture the interview process. Each interview lasted for approximately 45-60 minutes. The interviews were conducted in a comfortable and relaxed venue in order to ensure comfort and privacy from the 1st July to the 30th September 2017.

Data collected during the interviews were supported by field notes. The researcher observed the non-verbal behaviours like eye contact, posture, gestures, and crying. Interviews were flexible and they followed the direction taken by the participants. The interviews were conducted as explained by (Brink, van der Walt & van Rensburg 2012; Speziale & Carpenter, 2007; Adams, 2006) as follows:

- Interviews were conducted at the time that was convenient for the researcher and the participant
- Participants were made to feel at home by welcoming and thanking them.
- Participants were interviewed individually in the quiet place where they felt more comfortable.
- Confirmation was done through asking related questions to verify observations of non-verbal cues and to avoid wrong assumptions that might affect the results.
- The researcher was sensitive to the knowledge and background of the participants and reassured them from time to time about confidentiality and respect for human dignity.

The researcher carefully and attentively listened without interruption, thus allowing each participant time to express themselves freely. Good listening skills were sustained to determine the subsequent probing question based on the participants' responses. The following types of probing questions were used:

- **Tracking probes:** - This allowed participants to openly tell their story in their own way by showing interest in the study and through verbal and non-verbal communication during the interviews.

- **Clarification probes:** - Where needed or necessary during the interviews, participants were asked to clarify statements or asked for additional information. For example, “*Can you please tell me more about ...? What do you mean when you say ...?*”
- **Reflective Summary:** - The researcher repeatedly probed participants to make sure that the questions were correctly understood, for example, “*In summary, what you are saying is ...? Did I understand you correctly when I say that ...? Is it, therefore, your experience that ...?*”

Interpersonal interaction during interviews was promoted through the use of minimal encouragers. During the interview, the researcher used field notes to capture observations that could not be captured on audio-tape, including non-verbal gestures, the interview setting and the researchers’ own impressions.

3.5.3.2 Field Notes

According to Polit and Beck (2012), field notes are taken by researchers to describe the unstructured observations they made in the field. In this study, critical areas from the interviews requiring revisiting at a later stage of the interview or even after the interviews were captured and highlighted for such a purpose. Field notes mean describing as literally and accurately as possible that which is observed in the study setting. It is a system for remembering, retrieving and analyzing observations as they trigger the researcher’s memory of what transpired during data collection (Bryman, 2012). The following field notes were applied: observational notes, methodological notes, theoretical notes and personal notes.

- Observational Notes

Polit and Beck (2012) refer to observational notes as an observer’s in-depth descriptions about events and conversations observed in naturalistic settings. These are descriptions of events experienced through watching and listening to participants. Observational notes are also referred to as descriptive notes. The researcher observed for non-verbal cues from the mothers as they imparted their experiences during data collection. These cues were recorded on a notepad. After each interview,

descriptive notes were made in terms of who was interviewed that day, where the interview was conducted, what became apparent and what the environmental situation was like. Further notes on events experienced through watching, listening to provide information about actions and context as completely and objectively as possible were documented.

- Methodological Notes

These are instructions to oneself, including critiques of one's tactics, and reminders about methodological approaches that might be fruitful. The notes collated from this process were explored thoroughly in the discussions. Methodological notes are a description of methods, the justification for using those methods and ideas for changes in methodology. This is used for keeping track of changes in qualitative research (Wilson, 1993).

- Theoretical Notes

Theoretical notes are emergent trends. They describe ideas about what operations to carry out next. Theoretical notes are systematic attempts by the researcher to consciously derive meaning from all observational notes. (de Vos et al., 2013). The researcher has an opportunity to question other possible properties and dimensions of the concept under study. With reflection about what was observed and experienced throughout the process, the tangible meaning is given to the experiences and circumstances which are captured and conceptualized in the study.

The above data collection processes were followed for each participant until data saturation was reached. Data saturation is described as a repetition of data to the point at which no new information can be elicited from participants during the course of a qualitative study and signifies the completion of data collection on a particular phenomenon (Speziale & Carpenter, 2007). A sample size was determined by data saturation after 13 participants were interviewed. The researcher interviewed participants until data saturation was reached, that is until such time as no new information was emerging but what had already been reported was repeated.

3.5.4 Data management

Data management in qualitative research is reductionist in nature, which involves converting large masses of data into small, manageable sizes. To begin the process of reducing the data to a manageable size, the researcher transcribed data verbatim that was captured using an audio recorder (Polit & Beck, 2012). This critical step in preparation for data analysis was ensured by the researcher to accurately and validly reflect the totality of the interview experience. After data collection, information from the tape recorder was transcribed verbatim. The researcher consequently, carefully read and reread the transcriptions to obtain a general sense of data. The researcher reviewed the transcript in order to uncover essences and familiarise herself with phrases frequently used by the participants.

3.6 Data analysis

Data analysis entails categorizing, ordering, manipulating and summarizing the data and describing them in meaningful terms with the aim of highlighting useful information, suggesting conclusions and supporting decision making (Brink et al., 2012). The researcher examined data for completeness and accuracy by listing individually each piece of data collected. Data was not reported in a raw form, the researcher chose the method of organizing raw data and also to interpret, to answer the research question meaningfully. It was processed and analysed in some orderly coherent fashion so that patterns and relationship will be discerned *using Tesch's eight steps listed as follows* (Creswell, 2014):

Step 1: Get a sense of the whole

All transcriptions were carefully read through and pop-up and random ideas jotted down. Reading the transcript several times helped the researcher to understand and identify the same information.

Step 2: Review one document (One Interview)

Just to make a sense of what data had been collected and what information is contained in a transcript, the shortest interview transcript was reviewed with questions

asked by the researcher “*What was that all about?*” The substance of the information was underlined with thoughts noted in the margins.

Step 3: Make a list of topics

With thoughts written in the margins, a list of clustered topics was developed with similar ones in the same column. Major topics/themes, subtopics/themes, unique topics, and uncategorized ones were arranged accordingly.

Step 4: Abbreviate topics into codes

This is where the checklist developed is patterned against the data and emergent topics are abbreviated as codes. As deemed necessary, additional groups of categories/themes and codes were added and this continued even through data analysis to refine data.

Step 5: Categorize topics

The researcher described the topics and converted them into categories. A total list of categories was reduced by grouping topics that are related to each other. Interrelationships were indicated by drawing lines between the categories.

Step 6: Abbreviating the topics as codes

Formulated topics were abbreviated as codes and closely arranged in appropriate segments of the text, and reviewed to check if new categories or codes emerged.

Step 7: Assembling similar categories of data

Data belonging to each category were assembled and analyzed. This allowed for uncategorized data to be further looked at from other angles and categorized as well. From the data pool, major themes, themes and sub-themes were generated for analysis and discussion.

Step 8: Recoding the existing data

At this stage, the existing data were re-coded to ensure that all data would be considered. Finally, themes and sub-themes identified by both the researcher and coder were compared to the similarities and differences by one external reviewer who was not part of the initial analysis. All the differences were discussed with the researcher, the supervisors and the independent coder until consensus was reached. Finally, a table of themes, sub-themes was drawn.

3.7 Measures to Ensure Trustworthiness

Trustworthiness is the degree of confidence qualitative researchers have in their data (Polit & Beck, 2012). In this study, trustworthiness was ensured throughout so that the study outcomes can represent accurate lived experiences of participants. Research study must be evaluated in relation to the procedures used to generate the findings. Trustworthiness was measured by using criteria such as credibility, transferability, dependability, conformability, and authenticity (Lincon & Guba, 2010).

3.7.1 Credibility

Botma *et al.* (2010) state that credibility means that the researcher reports the perspectives of the participants as clearly as possible. Credibility refers to confidence in the truth of the data and interpretation thereof. Qualitative researchers must strive to establish confidence in the truth of the findings for the particular participants and contexts in the research (Polit & Beck, 2012). The researcher achieved credibility by making sure that the participants understood the question, this was done by rephrasing the question whenever the participants show misunderstanding. The researcher ensured the truth of lived experiences of mothers who were providing Kangaroo Mother Care to their premature babies by dwelling for lengthy periods in the setting during data collection. The researcher engaged with participants and inform them about the study so that they sign the informed consent form during an interview. The researcher did member check by reading back what was discussed with the participants, to re-check that their words matched what they actually intended, and to

ensure that the facts had not been misconstrued since they were tape-recorded. Data was collected until saturation.

3.7.2. Transferability

Transferability refers to the potential for evaporation, that is the extent to which findings can be transferred to or have applicability in other setting or group (Polit & Beck, 2012). Transferability also refers to the ability to apply the findings in another context. In this study, the researcher collected data from three hospitals in order to enhance transferability. Transferability involved presenting an accurate description of the interpretation of the lived experiences of mothers when providing Kangaroo Mother Care.

3.7.3. Dependability

Dependability refers to the stability of data over time and conditions. It also refers to the provision of evidence such that if it were to be repeated with the same or similar participants in the similar context, its findings would be similar (Polit and Beck, 2012; Brink, van der Walt & Van Rensburg). To ensure dependability, the researcher continuously examined the research process. The document was monitored by the supervisors throughout the study. An independent coder was requested to assist with coding during data analysis (Kobus, 2011). The field notes and information from the voice recorder were used, this may display consistency of information gathered in the study (de Vos, Strydom, Fouch'e & Delport. 2012).

3.7.4 Confirmability

Confirmability refers to the potential for congruency of data in terms of accuracy, relevance or meaning. It is concerned with establishing whether data represents the information provided by the participants and that the interpretations are not fuelled by the researcher's imagination (Polit & Beck 2012; Brink, 2014). The findings must reflect the participant's voice and the condition of the enquiry, not the researcher biases, motivation or perspectives. To meet the criteria for confirmability, the researcher used audit trials, in which approaches to data collection, decisions about

what data to collect, interpretation were carefully documented, so that another knowledgeable researcher may arrive at the same conclusions about the data and for protection of human subjects, as required by institutional review boards. The tape recordings and field notes will be kept for at least 5 years after completion of the study.

3.8 Ethical Considerations

Ethics is a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal and social obligations to the study participants (Polit & Beck, 2012). The aspects include permissions to conduct a study, autonomy, confidentiality, and anonymity, protecting the integrity of the study, providing privacy and fair treatment.

3.8.1 Permission to Conduct the Study

The proposal was submitted to the Limpopo Provincial Department of Health Research committee in order to obtain consent to collect data from the mothers who were providing Kangaroo Mother Care in NICU of the hospitals. Ethical clearance was obtained from University of Venda's Higher Degree Committee (see Annexure A). The rights of the participants and the institutions were safe and protected by considering the principle of respect for persons, principle of beneficence, principle of justice and confidentiality and anonymity.

3.8.2 Principle of Respect for Persons

Participants have got the right to decide whether to participate in a study without any risk of penalty or prejudicial treatment. Participants were informed that they may refuse to give information, withdraw from the study and the researcher promised them not use coercion or penalty (Brink, 2012). Participants voluntarily participated and took a decision to sign consent forms (see Annexure H) in case they want to be included in the study.

3.8.2.1 *Informed consent*

Consent is the prospective participant's agreement to participate in a study which is reached after assimilation of essential information (Burns & Grove, 2011). Obtaining informed consent (see Annexure H) from human participants was essential for conducting ethical research. Consent was obtained as the transmission of essential ideas and content from the researcher to the prospective participant. The researcher included the following in the information leaflet:

- Explanation of research activities
- Description of benefits
- Assurance of anonymity and confidentiality
- Researcher's willingness to answer questions
- Option to withdraw

3.8.2.2 *The right to self-determination*

The right to self-determination is based on the ethical principle of respect for persons and it indicates that humans are capable of controlling their own destiny (Burns & Grove, 2011). In this study, the researcher avoided any form of coercion to the participants. In addition, the researcher explained the contents of the information leaflet (see Annexure D) to all the participants (Burns & Grove, 2011).

3.8.2.3 *Respect for human dignity*

The researcher informed the participants of their right to decide whether or not to participate in the research. The researcher respected the norms, values and personal beliefs of the participants. The setting for collecting data was also respected and not changed in any way just because of the study.

3.8.2.4 Privacy

Participant's rights to privacy were respected by interviewing them individually in a quiet room. No participants were forced to talk about issues they were not willing to share. Furthermore, participants were assured that information obtained will not be linked to them and that no raw data will be published.

3.8.3 Principle of beneficence

The right to protection and freedom from harm is based on the principle of beneficence (McMillan & Schumacher 2010). The rights of the participants were respected. The following dimensions were covered by the principle of beneficence: the right to freedom from harm and the right to protection from exploitation. Participants were advised to report any physical, psychological, emotional, spiritual, social and legal. They were all treated fairly. No harm was experienced and reported.

3.8.3.1 The right to freedom from harm

Participants were not exposed to serious or permanent harm. Infliction psychological harm was avoided by carefully considering the phrasing of questions as well as the probing thereof for the central question.

3.8.3.2 The right to protection from exploitation

Mothers were informed by the researcher that participation was voluntary and that they could withdraw at any moment should they wish to do so, without punishment being used against them.

3.8.4 Principle of Justice

Burns and Grove (2011) state that the right to fair treatment is based on the ethical principle of justice, which holds that each participant should be treated fairly and receive what he or she is due. Participation was voluntary and participants were

chosen for the reasons directly related to the research problem and not because they were readily available. The researcher assembled and inform all mothers who met the inclusion criteria for the intended research study.

3.8.5 Confidentiality and Anonymity

Confidentiality was maintained by the researcher through the management of private information shared by a participant. They were promised that information will not be shared with others without permission of the participant (Burns & Grove, 2011). The information was kept confidential. The researcher ensured that personal rights and privacy of participants were adequately protected, by refraining from including their names in the research report. Participant's personal information will remain unknown.

3.9 Summary

This chapter described the research design and methods which included the study setting, study population, sampling and study sample, data collection and analysis. Measures to ensure trustworthiness for each phase of the study and ethical considerations were also discussed. Trustworthiness of the study was described under credibility, dependability, confirmability and applicability. The description of ethical considerations included privacy and confidentiality, freedom of autonomy, permission to conduct research, rights of the institution and protection of human rights. Chapter 4 focused on data presentation, analysis and description of the research findings.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DESCRIPTION OF THE RESEARCH FINDINGS

4.1. Introduction

The previous chapter described the research approach, designs and methods used in this study. Ethical aspects and measures of ensuring trustworthiness of the study were fully addressed in the previous chapter. This chapter focuses on data presentation, analysis and description of the research findings on lived experiences of mothers when providing Kangaroo Mother Care. The first section of this chapter presents the biographical data of participants while the second section discusses the results according to themes, and sub-themes that emerged from data analysis.

4.2. Biographical Profile of the Participants

Description of demographic data of the participants is necessary for qualitative research. It helps to ensure trustworthiness of the study, as it assists in meeting the criteria for transferability (Bryman, Bell & Wagne., 2014). Demographic data enables the readers to understand the sources of data, and also assists in the interpretation of the findings. Participants for the study were 13 mothers, who gave birth to premature babies and providing Kangaroo Mother Care for at least five days after delivery. Participants were referred as Participant 1, Participant 2 and so forth. The participant's profile for mothers who were providing Kangaroo Mother Care included the age, marital status, religion, employment status, parity, educational status and occupation. Table 4.1 shows the summary of the demographic data of the participants.

Table 4.1: Demographic data of the participants

Participant (p)	Age	Marital status	Parity	Educational status	Occupation
P 1	32 years	Married	P2	Grade 12	Policewoman
P 2	24 years	Married	P2	Grade 12	University student
P 3	21 years	Single	P1	Diploma	Contract worker
P 4	35 years	Married	P3	Never studied	Domestic worker
P 5	40 years	Married	P3	Degree	Nurse
P 6	33 years	Married	P2	Diploma	Educator
P 7	37 years	Married	P3	Grade 12	Builder
P 8	35 years	Married	P2	Grade 8	Domestic worker
P 9	18 years	Single	P1	Diploma	Pursuing a degree
P 10	19 years	Single	P1	Diploma	Internship/Student
P 11	23 years	Married	P2	Grade 12	Matric Student
P12	27 years	Married	P2	Grade 7	Housewife
P 13	42 years	Married	P5	Degree	Lecturer

4.3. Presentation and Analysis of Data Obtained from the Participants

Five themes emerged from the data analysed obtained from mothers who were providing Kangaroo Mother Care. They include Challenges of providing Kangaroo Mother Care, causes of premature labour, mother's relationship with nurses and family members, knowledge of mothers about Kangaroo Mother Care and support of the mothers. Five themes are shown in table 4.2.

Table 4.2: Schematic presentation of themes and sub-themes

THEMES	SUB-THEMES
Challenges related to Kangaroo Mother care	<ul style="list-style-type: none"> - Psycho-social challenges - Physical challenges - Academic progress
Causes of premature labour	<ul style="list-style-type: none"> - Mothers spiritual beliefs - Mother's Ill-health - Unknown
Mother's relationship with nurses and family members	<ul style="list-style-type: none"> - Nurse-mother's relationship - Premature baby-mother's relationship - Husband-wife's relationship
Knowledge of mothers about Kangaroo Mother Care	<ul style="list-style-type: none"> - The practice of Kangaroo Mother Care - The rationale behind practicing Kangaroo Mother Care. - Benefits of practicing Kangaroo Mother Care
Support of mothers when providing kangaroo mother care	<ul style="list-style-type: none"> - Instrumental support - Emotional support

4.3.1. Challenges related to Kangaroo Mother Care

Mothers reported that Kangaroo Mother Care had a negative and positive influence in different ways to the premature baby and the Kangaroo Mother Care. It affects the mother of the premature baby and family members academically, socially emotionally and psychologically. The challenges differ according to the family situations of various family members who are supposed to support the mother when providing Kangaroo Mother Care.

4.3.1.1. Psycho-Social Challenges

Psycho-social challenges experienced by mothers when providing Kangaroo Mother Care included fear of hurting the baby and concern about the family members left at home.

4.3.1.1.1 Fear of hurting the baby

Some of the mothers of premature babies claimed that they experience fear resulting from the small structure and how fragile the premature baby was. They further explained that they were afraid to touch the baby whose skin is transparent with visible blood vessels, crying as if he or she is in pain. Participants expressed fear:

Participant 8

“The day when the baby was born I was really scared, I was scared because the baby was so tiny, and I asked myself as to how would I manage such a small baby? Holding the baby was scary as he was fragile, but now I am used to that”.

Participant 9 supported

“Initially it really scared me off, and I could not understand it, however after several days I managed to understand that it is my premature baby, and this developed while I was bonding and STS contact to the baby”.

4.3.1.1.2 Concerns about the children who were left at home

Some of the mothers were concerned about the children left at home. They reported that providing Kangaroo mother care affects the family members left at home negatively. Mothers explain that their children who were left at home explained that they were missing their mothers. In the absence of the mother, children may be absent or arrive late at school as there is no one to wake them up in time to prepare themselves for attending school lessons. The following excerpts corroborated this:

Participant 1

“Eish! I left my daughter with the father. Ever since I came back to the hospital, did not return. My 8-year-old child says she is bored since others are with their mothers, while she is not. Last week when I spoke to her she said I should come back. This situation is frustrating me because the father gets to work by 03h30 in the morning. She remains alone at home when the father goes to work and no one wakes her up for school”.

Participant 4

“From May, I was admitted to the hospital as I was not feeling well”.

Participant 6

“Initially I got a call from the teacher who wanted to know the reason why the child always arrive late while on other days she does not go to school et all. It really disturbed me. When I interrogated, she said she wakes up late and it has been a month. We ended up buying a phone so that we can call to wake her up. Even the father calls her when he gets at work”.

Participant 2

“I stay with my husband together with my two kids. I used to have a problem immediately after the birth of the baby as to how will the other children manage since I had to spend time in the hospital. Will the father manage to take care of the kids? Fortunately, my mother in law took over the responsibility of taking care of them and I psychologically felt better”.

4.3.1.2. Physical challenges

Mothers of the premature babies experienced instrumental challenges related to Kangaroo Mother Care. They complained about tiredness, lack of hospital materials and academic delay. Mothers complained that emotional challenges emanated from

the fact that they hardly could estimate the day on which the premature baby will achieve the required body weight.

4.3.1.2.1 Fatigue

Positions attained by mothers when providing Kangaroo Mother Care are exhausting as babies should always be kept between the breasts sitting on the chair or sleeping on the bed. Mothers further complained that they were also expected to sit or lay in one area day in and out which they felt is boring. The following excerpts avow this:

Participant 8

“Kangaroo Mother Care is not an easy thing to do because I have to sit by one side. However, having realised that it helps the baby to grow faster, I don’t worry anymore because usually there are pillows supporting me on the back”.

Participant 3

“When I sleep, I have to change positions but it is not possible and when they are two it implies that each baby has his/her own weight. I put one on the left side and the other on the right side of my chest, and when I have to wake up, Ohh! It becomes very difficult ”.

Participant 5 supported

“I feel tired on my vertebral column as if I had been carrying a heavy load on my back but now my focus is on helping my babies to grow. My time to relax will come when my babies gain the expected weight”.

Participant 1 further supported

“It is just that it is a painful thing to spend most of the time lying on your back in the evening and even in the morning it is the same. I move from bed to chair and move around like that”.

4.3.1.2.2 Lack of hospital materials

Mothers providing Kangaroo Mother Care were not supplied with clean dresses and bed linen. They repeated one dress for days. They sometimes used bed linen previously used by the discharged mothers of premature babies. They are responsible for washing linen used by those mothers whose premature babies get discharged, so that they can use them. Participants reaffirmed this:

Participant 4

“Ever since the child was admitted, I was compelled to wash the nightdresses and that I get another night dress if one of the mothers is discharged. Sometimes we change our dresses after three days. We wash our own dresses because nurses do not give us clean ones”.

Participant 8

One may give birth today, sleep over with the same dress and it may not be easy for me to walk around using the very same dress. I spent three days wearing the same dress but have identified a nightdress put off by someone, I took it and washed it with warm water”.

Participant 9

“ Yesterday the nurse on duty gave us night dresses to change even the one that I am wearing I got it yesterday”.

Participant 5

“Some of the mothers do not wash night dresses because they do not have a washing powder. You may find a woman sometimes wearing a dress drenched in breastfeeding milk and it smells bad. It compels one to change the dress twice a day. I wash one and wear the other one. Family members bring packets of washing powders from home”.

Participant 6

“I tried to ask the reason why nurses did not supply us with clean nightdresses and bed linen but I was told that they cannot give us since we are not ill. I asked if I could use my own bed linen. I changed the bedding after washing it. This is the very same blanket I am using which I washed following the discharge of one of the mothers. However, this has been going on like this ever since.”

Participant 9

“I remember the first time I was admitted I never saw any nurse bringing the clean bedspread. I see mothers using the very smelling bedding used by the woman who had occupied and discharged. The nurses say that the bed linen is being used elsewhere by patients and I responded by saying it is ok”.

4.3.1.2.3. Academic progress

Participants who gave birth to premature babies stated that it took a long time without going to class or do the school activities. They were worried about their long stay in the hospital of which they concluded that it may delay their academic progress.

Participant 10 indicated this:

“When the baby was born prematurely, I was still attending the school lessons, but now I can no longer get back because the baby is underweight and I don’t know when he will be discharged”.

4.3.2. Causes of Premature Labour

Participants had a different understanding of the causes of premature labour. They took it from a spiritual point of view and anticipated that it was God’s wish to give birth to a premature baby, whereas some of them did not know the cause of premature

labour which led to giving birth to a premature baby. Some of the mothers knew that the cause of preature labour was ill-health during pregnancy.

4.3.2.1 Mother's spiritual beliefs

Mother's spiritual beliefs determined how they accepted premature labour. Mother's believed that premature labour was God's way of preventing them from experiencing complicated labour. It gave them contention that practicing Kangaroo Mother Care is important and therefore never blamed themselves.

Participant 11 stated that:

"I think that giving birth to a premature baby is the grace of God. He protected me from something because if I had waited for the complete duration of normal pregnancy, something wrong would have happened".

4.3.2.2 Unknown cause

Some of the participants did not know the reason why they gave birth to a premature baby. They had no knowledge of the cause of premature labour. Mother's knowledge of premature labour was not determined by their educational status. They were surprised when they were informed about the initiation of labour.

Participant 13 expressed that:

"I do not know why I gave birth to a premature baby because it is for the first time, I just felt the labour inducing pains and when I came to the hospital, I was told that the child is to be born today before the ninth month".

4.3.2.3. Mother's Ill-health

Mothers believed that premature labour was caused by ill-health during pregnancy leading to giving birth to a premature baby. Mothers were not specific about the cause

of ill-health. They referred to the frequency of admissions to the hospital as an indication of the fact that they were not well.

Participant 12 asserted that:

“I personally think that ever since I missed my periods, I constantly felt an urge to give birth resulting from mild labour pains as from my second month henceforth. I was always in and out of the hospital due to ill-health”.

“The doctor tried to remedy the situation but in vain. I had to deliver my twin babies prematurely. I had already accepted it because the doctor had already told me that he was just discharging me temporarily and I would be readmitted again”.

4.3.3. Mothers’ Relationship with Family Members, Nurses and the Premature Babies

Mothers’ relationship with family members, nurses and the premature babies differs according to their perception of providing Kangaroo Care and the structural home situation. Mothers of the premature babies explained different scenarios of the mother’ relationship with the nurses, family members at home and the baby.

4.3.3.1 Nurse-Mother’s Relationship

Nurses play a vital role in caring for the premature baby and helping mothers to make a relationship with the baby and are the most basic members of the treatment team. The findings revealed that relationship between the mother and family members was good whereas between the mother and nurses was not always good. Some of the nurses portrayed good relationship. Mothers further indicated that the perception towards practicing Kangaroo Mother Care was determined by the nurse-mother relationship.

The following statements evidenced this:

Participant 2 had to say:

“My relationship with the nurses is good. We are able to talk to them if one needs something they listen to us and help us”.

Participant 4 expressed it this way:

“Nurses sometimes caution us for putting the baby on the bed and we were not aware that it was wrong. I wanted to eat having put the child on the bed. Now even when you sleep, the child would be protected in between the breasts”.

Participant 10 indicated that:

“The nurses treat us so well because they even demonstrate to us how to handle the premature babies. The babies have to be breastfed always. One more thing is that they tell us not to put a baby on the bed as it is only for the mother. Instead, the baby has to be always kept between the breasts.

Participant 6 attested that:

“If you need clarity on something concerning the baby they help us”

4.3.3.2. Premature babies-mothers' relationship

Bonding between the premature baby and the mother is simple as they are expected to always maintain skin to skin contact day in and out providing Kangaroo Mother Care. A participant stated this in the following highlights:

Participant 5

“My relationship with the baby is good, I love her so much, it is a wonderful lovely experience since I am with the baby all the time breastfeeding her.” I started cuddling and embracing my baby from the first day telling her that she is my future doctor”.

4.3.3.3 Husband-wife's relationship

The husband-wife relationship is affected by the long-term hospitalisation of the mother and the premature baby. The husband takes the family's responsibility as she is providing Kangaroo Mother Care. Participants mentioned the following statements:

Participant 7

"My husband is not happy about this situation which makes me to be away from home. I got this over the phone through my conversation with him because he is not staying with me at home. He is staying far away from us. Another thing is that since the babies were born, I did not go home and it is true he did not take that well. Another thing I have left my eldest child with the father".

Participant 11

"From the time my baby was born, his father did not understand it but now he understands".

4.3.4. Mother's knowledge of Kangaroo Mother Care

The knowledge of Kangaroo Mother Care was revealed by the research findings when the mother explained how they practice kangaroo mother care method. The findings also revealed that there are the benefits of providing Kangaroo Mother Care to the premature the baby and the mother.

4.3.4.1. Providing Kangaroo Mother Care to Premature Babies

Mothers had knowledge of what is expected of them when providing Kangaroo Mother Care. They explained that the main aim of putting the baby between the breasts is to transfer the skin warmth to the baby. They further explained that keeping the premature baby's body temperature normal, increases the weight. Participants stated the following:

Participant 3

“Kangaroo Mother Care is when I put the baby here (pointing on the chest) and provide warmth for the babies making sure that the child is not affected by cold at all. If I give warmth to the child, the weight will be normally increased”.

Participant 8

“When I provide Kangaroo Mother Care warmth will be transferred from my skin to my baby skin. When I provide kangaroo Mother Care the to baby, I normally put the baby inbetween the breasts wearing a diaper only. The main idea is to make the child grow through the warmth from the mother’s”.

Participant 6

“The child was born weighing 1,100Kg. I am counting because I am about to leave and I was told that the child is discharged weighing 1,800 Kg. May the Lord make a miracle. Every day I see changes on my baby. When I wake up, I thank the lord for all the blessings. Today his body weight is 1,590Kg”.

Participant 11

“Mmm! I have to put the baby between the breasts and at times I put the baby on the bed while going to bath. The truth is that the child has to be on my chest all the time. I can only put the child down when urged to visit the toilet, while bathing and while breastfeeding the baby or while going outside”.

Participant 5

“Above all, I have to seek permission from the nurse that I will be going out to the gate only when the nurse is weighing the child on the scale or giving the child medications. I have to monitor the baby’s temperature and the colour”.

4.3.4.2 Benefits of Providing Kangaroo Mother Care

There are benefits of providing Kangaroo Mother Care to the mother and the premature baby. Kangaroo Mother Care increases the premature baby's chances of survival by reducing severe illnesses, infection and breast-feeding problems. Furthermore, it improves mother-baby bonding. Skin to skin contact regulates and stabilises the premature baby's body temperature.

4.3.4.2.1 Benefits to a Premature Baby

The research findings revealed that mothers who provide Kangaroo Mother Care are always close to their babies, observing changes in their breathing patterns, body temperature, and colour changes. Mothers explained that they should always maintain warm premature babies' body temperature. The normal body temperature of the baby is maintained by always keeping them between the breasts and cover them with warm baby blankets. Mothers also observe and feel the heart beats and report to the nurses in case of unusual changes. They mentioned the following verbatim quotes:

Participant 13 stated that:

“Being always close to my baby helps me pay attention to his heart. When I provide kangaroo mother care, I do it for the baby to grow faster so that I can get discharged early”.

Participant 5 asserted that:

“Kangaroo Mother Care brings health to the baby and equally strengthened the relationship between me and my baby”. It is good for the baby. We often encourage one another as mothers here in the hospital unit”.

Participant 8 affirmed that

“Babies are growing indeed, for now, I have to sleep on my back. I have no choice because I am doing it for the babies. Even when I sit on the chair I have

to place them on my chest, and I can feel it on my back that I have carried a load”.

4.3.4.2.2 *Benefits to the Mother*

The mother stated that it is her benefit to be closer, observing and feeding the baby on demand. Talking to and continuously observing the baby relieves her stress and improves her mood. Mothers also gain knowledge from those who are providing Kangaroo Mother Care to the premature baby for the second time.

Participant 13 claimed that:

“I constantly observe my baby for breathing patterns and body temperature and how she sucks from the breast. All the time when she cries I am closer to him”.

Participant 5 said that:

“All the time I must regularly check that there is nothing that disturbs my baby. I also have to check if the temperature is fine and to find out if the baby is not changing the colour since it is common that a child at times will change the colour”.

Participant 2 affirmed that:

“When I put the child between the breasts it helps the child to grow faster and weigh better and even get warmth and grow faster making the baby to be discharged for me to go home”.

4.3.5. Support of Premature Baby’ Mother during Kangaroo Mother Care

Nurses and family members’ supported mothers when they provide Kangaroo Mother Care. Mothers who were supported gave an impression that they feel happy knowing that, family members understand the reason behind providing Kangaroo Mother Care.

Lack of help with Kangaroo Mother Care practice and other obligations was also a mother's concern.

4.3.5.1. Instrumental Support

Instrumental support is characterised by rendering tangible assistance, such as physical assistance or aid in the form of advice or knowledge needed to complete a task. Instrumental support is evidenced in the following statements.

4.3.5.1.1 Lack of Material Supply

Participants stated that there were days on which they were not supplied with diapers for the babies. Mothers were compelled to buy diapers and they ended up sharing to those who could not afford. Support of mothers during Kangaroo Mother Care differs in accordance with nurses' understanding of the woman's situation.

Participant 4 had to say:

“Nurses informed us that there are no diapers. Last week one of the mothers of twin premature babies did not receive visitors and there was no supply of diapers from the nurses and we had to donate at least two diapers each to her”.

Participant 3 affirmed that:

“Some of the baby blankets are not warm. I ended up arranging that blankets be brought from home for the baby to get requisite warmth. If you can check for yourself, those blankets are not warm and may not serve the right purpose for the better warmth of a baby”.

Participant 10 stated that:

“Nurses look after me very well, however in the evening when I request for extra formula baby's milk they don't give me. They only give me extra formula milk in the afternoon as nurses who work during the evening don't listen to me but they

simply say that I am lazy to breastfeed the baby whereas my breasts do not produce enough milk to feed the baby”.

4.3.5.1.2 Possibility of Burning a Premature Baby

Participants explained that premature babies are prone to burns as mothers put them between the breasts whilst drinking hot tea. They do not put them on the bed when drinking tea as the instruction from the nurses indicated that they can only be relieved when going to the toilet and bathing. Mothers were aware of the fact that there is no one to hold the baby.

Participant 5 confirmed:

“I only put the baby on the bed whilst visiting the toilet but when I drink tea, the baby should be kept warm between the breasts. It is tough since I may end up spilling hot tea to the baby”.

Participant 6 stated that:

“I am suppose to put the child between the breasts when drinking tea or eating. The issue is that these nurses don't say the same things related to Kangaroo Mother Care practice. One nurse will tell you this today and the other will tell you a different story tomorrow and you we end up taking the responsibility as a mother”.

4.3.5.2. Social/ Emotional support

The findings revealed that emotional support creates good experiences for mothers who provide Kangaroo Mother Care. Family members emotionally supported mothers during Kangaroo Mother Care by indicating that they understand that the mother is compelled to be away from home in order that the premature baby gains weight faster.

Participant 5 asserted that:

“Those at home welcomed the move for me to provide Kangaroo Mother Care for the premature baby to gain the weight faster and be discharged”.

Participant 9 avowed that:

“Nurses tell us that we must always keep the baby between the breasts and that we are not ill, but we must stand up and move around and also do the same at home not in the hospital only. The breast milk is coming out properly and she sucks well”.

Participant 7 affirmed that:

“Family members pay me a visit and comfort me telling me not to worry or to think too deeply about the disadvantages of this situation as it may negatively affect production of breast milk”.

Participant 1 explained that:

“My husband visits us and he has accepted the situation caused by giving birth to a premature baby and of staying long in the hospital. He always says that he wishes that the baby comes home soon. Even the grandmother of the child has accepted it”.

Participant 9 avowed that:

“My husband said I should not worry because if I complain the child won't get an adequate breast milk. Nurses encourage us to practice kangaroo method all the time. I have accepted that I cannot be discharged before the child weighs 1,800kg”.

Participant 1 claimed that:

“My husband has accepted the fact that I am providing Kangaroo Mother Care, but he complains of my long stay at the hospital as he would like to be involved in taking care of the baby”.

Participant 4 claimed that:

“From relatives, I am getting a great support, they often come to pay a visit all the time”.

4. 4 Summary

The chapter presented a detailed description of the study findings in relation to the lived experiences of mothers when providing Kangaroo Mother Care. Five themes and sub-themes that emerged from the data were presented. Chapter 5 deals with the discussion of the findings, recommendations, and conclusions of the study.

CHAPTER 5

DISCUSSIONS, RECOMMENDATIONS AND CONCLUSION

5.1. Introduction

Based on the data obtained from the study participants, the findings of the study were presented in chapter four. This chapter presents an overview of the study and the discussions of the research findings, within the perspective of the literature review. The researcher summarises the study and gives the recommendations based on the findings.

5.2 Overview of the Study

The fundamental aspects of the study present an overview of the study, including the purpose and objectives of the study. Significance of the study in relation to the objectives were introduced. The rationale for a qualitative approach was articulated to support the chosen methodologies adopted for the study. The significance of this study was explained in detail.

The objectives of the study are to:

Objective 1: Explore lived experiences of mothers when providing Kangaroo Mother Care.

Objective 2: Explore the challenges experienced by mothers when providing Kangaroo Mother Care.

Objective 3: Determine the support received by mothers when providing Kangaroo Mother Care.

The study was conducted at Siloam, Tshilidzini and Donald Frazer hospitals (see Annexure G) in Vhembe district of Limpopo Province, South Africa. The study used a qualitative approach with exploratory, descriptive, contextual and phenomenological

designs to explore and describe the lived experiences of mothers of premature babies when providing Kangaroo Mother Care to the premature babies. The sample comprised mothers of the three selected hospitals in Vhembe district of Limpopo Province. Data were collected from 13 conveniently selected participants using unstructured in-depth individual face to face interviews. The sample size of the study was determined by data saturation. Data saturation for this study was obtained after 13 participants were interviewed. When the utilizing an unstructured and open ended question format, a divergent range of the participants' perceptions regarding experiences, challenges, relationships, knowledge and their support needs were elicited. In order to ensure the rigor of the study, the researcher maintained trustworthiness by following Lincoln and Guba (1985) criteria of credibility, transferability, dependability, confirmability, and authenticity. Ethical issues were adhered to throughout the study.

Thematic analysis using Tesch's structured approach of data analysis was performed through the process of coding in eight steps to create established, meaningful themes. The steps include: familiarization with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report with regard to the range of challenges, relationships, knowledge and support during Kangaroo Mother Care. The researcher adhered to all of the above prescriptions of thematic analysis as described in Tesch's framework for analysis. Data were interpreted and discussed. Five themes emerged from data analysis.

5.3 Discussion of the Research Findings

Findings of the study identified the important themes about the lived experiences of mothers when providing Kangaroo Mother Care. Discussion of the research findings is about interpretation and summary of the results and the researcher present them in relation to the existing literature. The discussion section connects the findings with similar studies (Brink, van der Walt & van Rensburg, 2014). The Discussion of the findings also covers the demographic data and thematic categories that were emphasised by the participants.

5.3.1 Demographic Data

Demographic data was discussed focusing on marital status, age, number of children, educational qualification and the occupation.

5.3.1.1 Marital Status

The findings of the study revealed that married mothers who were providing Kangaroo Mother Care were also concerned about their home responsibilities and their long stay at the hospital. Their marital status determined the socio-emotional and instrumental experiences during their long stay at the hospital when providing Kangaroo Mother Care. Married mothers stated that they were supported emotionally and instrumentally during their stay at the hospital by their husbands and their mother in-laws. Single mothers did not complain about family members' responsibilities during their stay at the hospital when providing Kangaroo Mother Care.

Some of the participants stated that they were responsible for the daily home chores of their children and husbands. The participants also experienced disturbances educationally and occupationally. Providing Kangaroo Mother Care takes the mothers away from home which makes it impossible for them to support their children and husbands at home.

5.3.1.2 Age

The age range for the participants was between 20 and 42 years which is mainly a child bearing age. However the findings of this study revealed varied experiences determined by the participant' age. Mother's age determined their socio-emotional experience when providing Kangaroo Mother Care.

5.3.1.3 Parity

The number of children had an influence on the mother' experiences when providing Kangaroo Mother Care. Mothers with only one child could not experience the same challenges as compared to those with more than one children. Mothers with two or more children left at home were concerned about the daily provision of food personal hygiene and education.

5.4. Findings of the study

In this section, findings of the study about the lived experiences of mothers when providing Kangaroo Mother care are discussed based on the five themes which have emerged from data analysis of narratives of the participants namely: Challenges related to providing kangaroo mother care, mothers' knowledge of causes of premature labour, mothers' relationship with family members, nurses and the premature babies, mother's knowledge about Kangaroo Mother Care and support of the mothers when providing Kangaroo Mother Care.

5.4.1. Challenges Related to Provision of Kangaroo Mother Care

Mothers of premature babies who are providing Kangaroo Mother Care experience psycho-social challenges and physical challenges. Psycho-socially, mothers are mostly more concerned about what is happening to their family members who remain at home who depended on them for home chores.

The findings of the study conducted in Sweden revealed that family life was affected in different ways by having a baby born premature and on Kangaroo Mother Care. Families could not spend time together, which result in mothers longing for the rest of the family and experiencing a sense of loneliness. Mothers who had children at home were longing for their older children, stating that it was hard to be away from them (Lindberg & Öhring, 2008).

Mothers were scared of managing a very tiny baby who looked so fragile. A study conducted in Johannesburg city of SA in one of public hospitals, by Ntswane-Lebang and Khoza (2010) supported that mothers are fearful when reality dawns with the delivery of low birth weight premature infant.

Mothers also complained of fatigue caused by attaining one position in which the babies are supposed to be always held between the breasts. Academic progress was also negatively affected as mothers were compelled to be always in close skin to skin contact with the premature baby in order to breastfeed and transfer heat.

Tarus & Tjale, (2015) supported the idea when they state that mothers of premature babies used one position for sleeping and relaxing on the coach (supine/back position) leading to a backache, increased body temperatures from skin-to-skin contact with the baby and the ward environment. Furthermore, mother's fatigue during the postnatal period as a consequence of the physical demands of caring for a new-born baby is augmented by disturbed sleep.

5.4.2. Mothers Knowledge of Causes of Premature Labour

Mothers had different understanding of the causes of premature labour which resulted into giving birth to a premature baby. They believed that it was through God's grace that they have given birth to a premature labour as they might have experienced difficulties with a full-term baby. Mothers who knew that they gave birth to the premature baby because they were ill could not specify the exact cause of illness which resulted into premature labour. Some of the mothers could not even identify what has caused them to give birth to a premature baby.

According Cockcroft (2012), following a premature delivery, mothers find themselves in crisis, consisting of guilt and failure that they were unable to endure the pregnancy and sorrow over the lost dream of the full-term baby. Furthermore, these feelings can be so extreme that mothers find it difficult to cope and they can feel guilty of not being able to take care of the baby.

5.4.3. Mothers' Relationship with Family Members and Nurses

Mothers' long stay at the hospital when providing Kangaroo Mother Care had a negative and positive impact on their relationship with family members and nurses in different ways. The nurse-mother's relationship was determined by the nurse's knowledge and attitude towards the mother's status of not being a patient. Nurses expected mothers to do their own laundry stating that they were not ill, although they were expected to transfer their body heat by keeping the premature babies between the breasts.

The premature baby's siblings were feeling lonely and not happy about their mother's long stay at the hospital. The premature baby's fathers were patiently waiting for the wives to come back home and continue with her family roles and functions.

The lived experiences of mothers when providing Kangaroo Mother Care are related to increased bonding between mother and baby, reduction of the infant's time of separation from the family, besides leading to increased competition and confidence in the parents to take care of their child, even before discharge, improving the mother's relation with the family, inside the family and with the team that takes care of the baby (Arivabene & Tyrell, 2010).

Blomqvist (2012) stated that parents want to be together with their infant in the NICU and be actively involved in the infants' care. Although parents may experience Kangaroo Mother Care as exhausting and uncomfortable, they still prefer Kangaroo Mother Care to conventional neonatal intensive care as it supports their parental role.

Mothers' husbands gave ineffective support to the premature baby's siblings. During the mother's long stay at the hospital, they were late and sometimes absent from school. Mothers appreciated their continuous closeness to their premature baby which makes it simple for them to observe their breathing patterns, body temperature and the skin colour.

Findings of the study on Kangaroo mother care and mother-premature infant dyadic interaction revealed a better mother-infant interactive style, a significant decrease in maternal emotional stress, and better infant ability to make requests and respond to parental interactive style in the Kangaroo Mother Care group (Tallandini & Scalembre 2006). Phuma-Ngaiyaye and Kalebo (2016) state the nurses and the midwives built a trusting relationship with the mothers by ensuring that they did not express judgment during their interactions. Nurses need to be active in initiating strategies to facilitate early maternal–newborn bonding and attachment.

5.4.4. Mother's Knowledge about Kangaroo Mother Care

The mother' knowledge about Kangaroo mother care was based on their explanations and demonstration of Kangaroo Mother Care method and the benefits to the mother and the premature baby. Mothers of the premature babies' explanation of the practice

of Kangaroo Mother Care method and their demonstration evidenced that they had knowledge of what was expected of them.

The rationale behind the practice of Kangaroo Mother Care method to the baby outweighed its disadvantages to the mother. Mothers explained that the baby's body weight increases more faster. Babies do not experience disadvantages related to this method. There are more benefits of practicing this method to the baby than to the mother. Curran, Genesoni, Ceballos & Tallandini (2008); Chisenga, Chalanda and Ngwale, (2015) argued that Kangaroo Mother Care method does not increase the risk of mortality for premature infants. It also provides a physical environment that is safe for the baby as the incubator.

Roba, Binoy and Naganuri (2017) confirmed that mothers mentioned the benefits of Kangaroo Mother Care correctly. They felt positive regarding implementation of Kangaroo Mother Care for they knew that it corrects the temperature, increase attachment and improve the growth of their small babies. They also believed that Kangaroo Mother Care has positive effect on breast feeding. Mothers practiced Kangaroo Mother Care in hospitals and also willing to continue at home.

5.4.5. Support of the Mothers when Providing Kangaroo Mother Care

Some of the mothers of the premature babies received instrumental support from their mothers-in law through taking care of the of premature baby's siblings. For those whose mothers-in law were available, they were less worried about what may be happening to other children left at home.

Mothers experienced inadequate supply of hospital materials in items such as bedding, night dresses and baby napkins. They went to an extent of buying powdered soap to wash bedding and night dresses. They were sometimes compelled to arrange with the family members to bring along the napkins. In case of severe hospital shortage of napkins, those who had twin premature babies were supplied by those who gave birth to one baby.

Supply of napkins and extra formula milk from nurses was not assured as the request would sometimes be turned down. Supply of milk was determined by the nurses'

attitude towards the mothers. Some of the nurses did not supply milk to mothers and they told them that they were lazy to breastfeed.

Husbands were supporting their wives emotionally by emphasising the importance of practicing Kangaroo Mother Care method for the benefit of the baby. They also indicated their wish for their wives to return home sooner than expected. Some of the mothers believed that it was God' will to have given birth to a premature baby. Furthermore, mothers went through turmoil and other difficulties when taking care of their babies and they used various coping strategies like prayers and trust in God. Receiving emotional support and information about Kangaroo Mother Care was important to mothers.

Physical and emotional support should be given to mothers when Kangaroo Mother Care is practiced. The nursing and medical staff should give support to the mother to assist and encourage her to provide Kangaroo Mother Care. Family members should be informed about Kangaroo Mother Care. They may also need to be supported by the staff. In turn, the family should support the mother. The partner' role is important in supporting the mother. The support of the mother-in-law is also useful. The mother's own mother has a very important role to play in helping her to give Kangaroo Mother Care. The community should also be told about the advantages of Kangaroo Mother Care. A supportive attitude by the community helps the mother to succeed with Kangaroo Mother Care. Without support, it is difficult to get mothers to give Kangaroo Mother Care successfully. Pregnant women should be informed and educated about Kangaroo Mother Care from their first antenatal visit (Reddy, & McInerney, 2007).

Davy and Van Rooyen (2011) support that a Kangaroo Mother Care clinician is an advocate for securing the infant's safety. It is important that the neonatal nurse ensures the correct practice of Kangaroo mother care. It is essential for the nurse to support the mother in the caretaking tasks of the infant in order to identify problems quickly or, if possible, prevent any that may occur. A clinician's role is to demonstrate the correct practice of Kangaroo Mother Care as well as the details involved in taking care of a vulnerable preterm infant. In keeping with this role, the Kangaroo Mother Care' clinician should incorporate teaching, educating or training of parents and all

other role players and stakeholders to make certain that quality care is optimally provided in the hospital and at home.

The nurses and the midwives acknowledged that a newborn's hospitalization in the NICU was a stressful ordeal for mothers. Thus, the nurses and the midwives ensured that the mothers were supported through counseling and guidance.

5.5. Recommendations of the Study

The recommendations are made based on the findings and to relevant structures in order to ensure that mothers challenges are addressed. Knowledge about Kangaroo Mother Care should be disseminated to all pregnant mothers and good relationship should be maintained between the family members and nurses.

5.5.1. Recommendations to Address the Hospital and Personal Challenges Experienced by the Mother when Providing Kangaroo Mother Care.

- The hospital should increase the budget for purchasing the bed linen, nightdresses, and disposable napkins.
- The unit manager should compare the importance of mothers washing their bed linen with the continuous provision of Kangaroo mother care.
- Strategies to relieve the mother's fatigue should be discussed with the relatives, nurses, and midwives.
- The premature baby's father should be given chance to practice Kangaroo Father Care in order to relieve the mother from tiredness
- Academic disturbances should be prevented by ensuring that assignments and examination with lecturers be arranged.

5.5.2. Recommendations to Address Inadequate Knowledge about Provision of Kangaroo Mother Care

- The practice of Kangaroo Mother Care should be demonstrated to mothers by the nurses who have attended the related seminars.

- During pregnancy, mothers should be supplied with pamphlets highlighting the causes and benefits of Kangaroo Mother Care.
- There should be good communication between nurses and mothers about the responsibilities during Kangaroo Mother Care.
- Nurses and midwives should be trained in the care of mothers during Kangaroo Mother Care.

5.5.3. Recommendations for enhancing support of mothers during Kangaroo Mother Care

- Relatives should frequently visit mothers as a way of supporting them emotionally, psycho-socially and instrumentally.
- Nurses should record how often the close family members visit the mother in order to determine the support they provide to the mother.
- When introducing Kangaroo Mother Care into a hospital or clinic, the staff often also need support.
- Kangaroo Mother care clinicians should be trained so that she/he will teach mothers, nurses and family members.
- Mothers should discuss their challenges with nurses and address them together

5.5.4. Recommendations for further research

- Practicing Kangaroo Mother Care at home under the supervision of home-based caring women.
- Experiences of the husbands when mothers are providing Kangaroo Mother Care.
- Support of mothers by family members during Kangaroo Mother care
- Nurses' responsibilities towards mothers who are providing Kangaroo Mother Care

5.6 Limitation of the study

There was lack of literature on similar subject. The researcher has therefore recommended that further research be conducted on the following; lived experiences

of husbands when mothers when providing Kangaroo Mother Care, support of mothers during Kangaroo Mother Care, nurses responsibilities towards mothers who are providing Kangaroo Mother Care, practicing Kangaroo Mother Care at home under the supervision of home-based carers.

5.7. Conclusion

This study reflects the purpose, objectives, research methods, study findings, limitations and recommendations for further research. The findings of the study revealed ineffective support provided to mothers by nurses and family members. Nurses do not give mothers health education on how they should provide Kangaroo Mother Care. Mothers receive conflicting knowledge from nurses resulting in contradictory statements hence confusion. Mothers of premature babies who provide Kangaroo Mother Care, experience psycho-social, and instrumental challenges. No one was responsible for the cleanliness of mothers' bed linen and nightdresses which contributed to poor personal hygiene as they sometimes repeated night dresses that were smelled breast milk. Mothers became anxious due to uncertainty and fear. Furthermore, they experienced inadequate supply of hospital materials of items such as napkins, bed linen, and night dresses. During the early days of the premature' life, mothers experience fear when handling a fragile tiny baby.

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ANNEXURE A: APPROVAL FROM THE UNIVERSITY OF VENDA

RESEARCH AND INNOVATION
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:

Ms TM Mulaudzi

Student No:

11502031

PROJECT TITLE: Lived experiences of mothers when providing Kangaroo mother care at the selected hospitals of Vhembe District in Limpopo Province, South Africa.

PROJECT NO: SHS/17/PDC/06/1603

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr ND Ndou	University of Venda	Promoter
Prof LB Khoza	University of Venda	Co- Promoter
Ms TM Mulaudzi	University of Venda	Investigator – Student

ISSUED BY:

UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE

Date Considered: March 2017

Decision by Ethical Clearance Committee **Granted**

Signature of Chairperson of the Committee: 

Name of the Chairperson of the Committee: Prof. G. E. Ekosse

UNIVERSITY OF VENDA DIRECTOR RESEARCH AND INNOVATION 2017 -03- 2 2 Private Bag X5050 Thohoyandou 0950
--



University of Venda

PRIVATE BAG X5050, THOHOYANDOU, 0950, LIMPOPO PROVINCE, SOUTH AFRICA
TELEPHONE (015) 962 8504/8313 FAX (015) 962 9060

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ANNEXURE B: A LETTER TO REQUEST FOR PERMISSION TO CONDUCT RESEARCH FROM DEPARTMENT OF HEALTH: LIMPOPO PROVINCE

P.O. Box 7436
Thohoyandou
0950

Provincial Department of Health
Research ethical committee
Polokwane
0700

Request for permission to conduct a research.

Topic: Lived experiences of mothers when providing Kangaroo Mother Care at the selected hospitals in Vhembe District of Limpopo province, South Africa.

Dear sir/ madam

I Mulaudzi Thivhavhudzi Mavis am a registered professional nurse and midwife at Tshilidzini hospital and a student at the University of Venda in the school of Health Sciences. I am presently conducting a study entitled “**Lived experiences of mothers when providing Kangaroo Mother Care at the selected hospitals in Vhembe District of Limpopo province, South Africa**”. This study was conducted under the supervision of DR Ndou N.D and Professor Khoza L.B from the school of Health Sciences at the University of Venda.

The main objective of this study is to explore and describe the lived experiences of mothers when providing Kangaroo Mother Care at the selected hospitals in Vhembe District Limpopo province, South Africa. To complete this study, I need to conduct an interview with mothers regarding their lived experience while providing Kangaroo Mother Care. The interview will be audiotaped and the taped information will be erased after five years to ensure confidentiality. Anonymity will be safeguarded by omitting the use of names and information related to the interviews will only be accessible to the researcher and the independent coder. The results of the study may assist nurses to understand the mothers lived experiences when providing Kangaroo Mother Care to premature babies, and it may contribute towards improving the relationship between

nurses and mothers of premature babies, the findings of the study may be disseminated to the hospital authorities and this may further be communicated to midwives to improve quality nursing care for mothers in Limpopo Province.

For further information contact the researcher on the following numbers:

(015)964 4225 (WORK), 0736420162 (CELL).

Thank you

Mulaudzi T.M.

.....
Signature	Student no	Date
.....	
Signature of supervisor		Date
.....	
Co-supervisor's signature		Date

ANNEXURE C: APPROVAL FROM DEPARTMENT OF HEALTH



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Enquiries: Stols M.L (015 293 6169)

Ref:4/2/2

Mulaudzi TM
University of Venda

Greetings,

RE: Lived experiences of mothers when providing Kangaroo Mother care at selected hospitals of Vhembe District in 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.


Head of Department

Date

12/06/2017

18 College Street, Polokwane, 0700, Private Bag x9302, POLOLKWANE, 0700
Tel: (015) 293 6000, Fax: (015) 293 6211/20 Website: <http://www.limpopo.gov.za>

The heartland of Southern Africa – development is about people

ANNEXURE D: LETTER OF PERMISSION FROM THE DISTRICT

DEPARTMENT OF HEALTH VHEMBE DISTRICT

Ref: S5/6
Enq: Muvuri MME
Date: 03. JULY 2017

Dear Sir/Madam

PERMISSION TO CONDUCT A WORKPLACE BASED
EXPERIENCE FOR MULAUDZI TM AT VHEMBE DISTRICT PHC
AND HOSPITALS.
FROM: 05 JULY 2017 UNTIL 05 JULY 2020.

1. The above matter bears reference
2. Your letter received on the 03/07/2017 requesting for
3. permission to conduct a workplace based experience analysis at Vhembe health institutions is hereby acknowledged
4. The District has no objection to your request .
5. Permission is therefore granted for the study to be conducted within Vhembe District.
6. You are however advised to make the necessary arrangements with the facilities concerned.
7. Wishing you success in your studies

.....
DISTRICT CHIEF DIRECTOR

3/7/2017
.....
DATE

Private Bag X5009 THOHOVANDOU 0950
OLD parliamentary Building Tel (015) 962 1000 (Health) (015) 962 4958 (Social Dev) Fax (015) 962 2274/4623
Old Parliamentary Building Tel: (015) 962 1848, (015) 962 1852, (015) 962 1754, (015) 962 1001/2/3/4/5/6 Fax (015) 962
2373, (015) 962 227

ANNEXURE E: A LETTER SEEKING CONSENT FROM HOSPITALS

P.O. BOX 7436
THOHOYANDOU
0950

The Chief Executive Officer
Hospital in the Vhembe District
Vhembe
Limpopo

Request for permission to conduct research.

I Mulaudzi Thivhavhudzi Mavis, a Masters student at the University of Venda requesting to conduct research as a requirement for my studies.

My research topic is: **Lived experiences of mothers when providing Kangaroo Mother Care at the selected hospitals in Vhembe District of Limpopo province, South Africa.**

The purpose of the study is to explore the lived experiences of mothers when providing Kangaroo Mother Care. The findings of the study may be disseminated to the hospital authorities and it may assist nurses to understand the experiences of the mothers when providing Kangaroo Mother Care.

There were no potential risks as the name of the hospital and of the participants will be kept confidential and will not be revealed in the reporting/publication of the findings. Data will be kept under lock and key where only the researcher has access and it will be permanently destroyed after the findings are reported to relevant stakeholders. Feedback on the research the findings will be provided to the selected hospital's management and participants.

Thanking you in anticipation

Mulaudzi TM (Researcher)

Student no..... Date.....

ANNEXURE F: LETTER OF PERMISSION FROM THE HOSPITALS



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

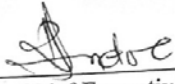
DEPARTMENT OF HEALTH
SILOAM HOSPITAL
Confidential

Ref : S4/2/1/1/3
Enq : Mushaphi N.T
Date : 21 August 2017

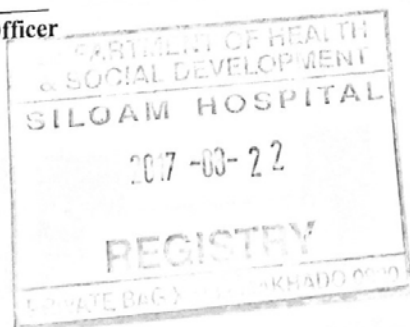
To: Mulaudzi T.M

RE: PERMISSION TO CONDUCT RESEARCH: YOURSELF.

1. The above matter refers.
2. The Hospital highly acknowledges the receipt of your letter dated 04 July 2017 regarding the above matter.
3. Kindly note that the institution is granting you permission to come and conduct your research.
4. You are kindly requested to adhere to the conditions as set out in your approval from the Provincial Office.
5. Hoping you will find the above in order


Acting Chief Executive Officer

22.08.2017
Date



Private Bag X2432, Makhado, 0920
Tel (015) 973 0004/5/6, 015 973 1447/8, 015 973 1977, 015 973 1892/4/9 Fax (015) 973 0607.

the heartland of Southern Africa – development is about people



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
DONALD FRASER HOSPITAL

Ref: 4/2/2
Enquiries: Mphephu VF
Tell no. 072 1880 436
Ext. 9306
15/08/2017

TO: MRS Mulaudzi TM
University of Venda
Private Bag x505
Thohoyandou
0950

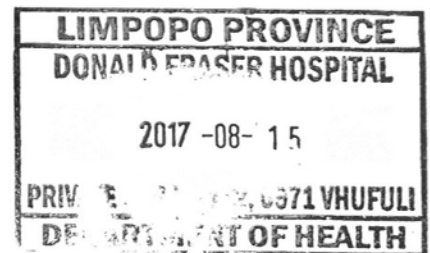
RE: Permission to conduct Research study at Donald Fraser Hospital on lived experiences of mothers when providing Kangaroo Mother care at selected public hospitals of Vhembe District in Limpopo Province ,South Africa.

The above matter refers.

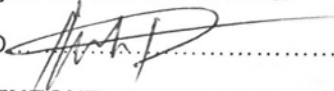
1. Permission to conduct the above mentioned study is hereby granted.
 - Kindly be informed that:- In the course of your study there should be no action that disrupts the services.
 - You are to give report to quality assurance manager of Donald Fraser Hospital after completion of research study at Donald Fraser Hospital.
 - After completion of the study, a copy should be submitted to our institution to serve as a resource.
 - The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
 - You are therefore requested to contact nursing administration office number 7, OPD basement for logistic arrangements.

4. Please bring along the following documents:

- Permission letter granted from department of health.
- Permission letter granted from educational institution.
- This letter.



Hoping you will find this in order

SIGNED Date 15/08/2017

CHIEF EXECUTIVE OFFICER

Private bag X1172, Vhufuli 0971
Tel: 015 963 1778/9, 015 1783 1791/2 • Fax: 015 963 1773, 015 963 1796
Cell: 083 248 0184

ANNEXURE G: INFORMATION RELATING TO INFORMED CONSENT

Dear participant

REQUEST FOR CONSENT FROM PARTICIPANTS

Mrs Thivhavhudzi Mavis Mulaudzi is a registered professional nurse and student at the University of Venda in the school of Health Sciences. I am presently conducting a research on the topic **“Lived experiences of mothers when providing Kangaroo Mother Care at the selected hospitals in Vhembe District of Limpopo province, South Africa”**. The purpose of the study is to explore lived experiences of mothers when providing Kangaroo Mother Care. The findings of the study will assist nurses to understand mothers experience and it will also contribute towards improving the relationship between midwivess and mothers, improve the relationship between the mothers and nurses and improve the quality of midwifery.

Taking part in the study would mean you will be interviewed on personal questions about what you understand, think, feel and experience about lived experiences of providing Kangaroo Mother Care. You are invited to participate a research study. You have the right to withdraw at any stage of the research if you wish to do so. There is no harm or threats expected to you through participating in the study, all the information was given by you will be confidential. The interview will be audio recorded, transcribed and verified with you and an independent person, I invite you to voluntarily participate in this study. The recorded information will be erased on completion of transcribing the records to ensure confidentiality. Your anonymity will be safeguarded by not using names. The information related to the interview will only be accessible to the researcher and independent coder. No data will be linked to your name.

For any information on your participation, contact the researcher on the following number (015) 9644225 (Work), 0736420162(Cell).

Thanking you in advance

.....

Mulaudzi T.M (Researcher)

.....

Date

.....

Researcher's signature

ANNEXURE H: CONSENT FOR PARTICIPATION IN THE RESEARCH

I.....voluntarily participate in the study on
**'Lived experiences of mothers when providing Kangaroo Mother Care at the
selected hospitals of Vhembe District in Limpopo province, South Africa'**.

I understand that my participation is voluntary and that I may withdraw at any time.

.....

.....

Signature of participant

Date

.....

.....

Researcher 'signature

Date

ANNEXURE I: CENTRAL QUESTION

The main objective of this study is to explore the lived experiences of mothers when providing Kangaroo Mother Care.

1 Demographic information of mothers who were providing Kangaroo Mother Care

1.1 Mothers age (tick the appropriate age on the dotted line)

18 – 30 Years.....

31 – 40 Years.....

41 – 50 Years.....

1.2 Marital status

1.3 Qualifications (tick the appropriate one on the dotted line)

Primary level

Secondary level

Certificate

Diploma

Degree

2 Research questions to guide interviews (themes)

2.1 Central question

“What are your lived experiences of providing Kangaroo Mother Care?”

“Ndi ifhio tshenzhemo ine vha vha nayo malugana na u thogomela nwana vho mu vhea kha khana tshifhinga tshothe sa mme?”

2.2 Probing questions

2.2.1 What challenges are you experiencing when providing Kangaroo Mother Care?

2.2.2 Tell me more about your relationship with the family members and nurses

2.2.3 Tell me about the support you receive from the close family members and nurses?

ANNEXURE J: INTERVIEW TRANSCRIPT

TRANSCRIPT FROM FACE TO FACE INTERVIEWS

Researcher: Morning and how are you?

Participant: I am fine and you?

Researcher: Share with me your lived experiences as a mother of a premature baby when providing Kangaroo Mother Care

Participant: When the child was born he was weighing 1,080Kg. When I moved out of nurse to kangaroo unit, I was told that I had to provide Kangaroo Mother care so that the child would get to 1800 Kg. They told me that I had to breastfeed often so that the child would weigh as expected and they also told me that I don't have to put the child down. I can only put the child down while going to the toilet or bathing only.

Researcher: What are the benefits of providing Kangaroo Mother Care?

Participant: The child is growing ever since I was moved out the nursery. While doing kangaroo, I am transferring warmth to the child so that the very same warmth will help the child grow. When I kangaroo the child I normally put the child between the breasts wearing a dipper only. The main idea is to make the child grow through the warmth from the mother's warmth.

Researcher: Tell me about the challenges you experienced related to Kangaroo mother care

Participant: The day when the baby was born I was really scared, I was scared because the baby was so tiny, and I asked myself as to how would I manage such a small baby? Holding the baby was scary as he was fragile, but now I am used to that

Participant: Initially it really scared me off, and I could not understand it, however after several days I managed to understand that it is my premature baby, and this developed while I was bonding and Skin to skin contact to the baby".

Researcher: Who is taking care of your children at home?

Participant: Eish! I left my daughter with the father. Ever since I came back to the hospital did not return. My 8-year-old child says she is bored since others are with their mothers, while she is not, last week when I spoke to her she said I should come back.

This situation is frustrating me because the father gets to work by 03h30 in the morning. She remains alone at home when the father goes to work and no one wakes her up in preparation for the school.

Researcher: For how long and why are you admitted?

Participant: From May, I was admitted at the hospital as I was not feeling well.

Researcher: What is Kangaroo Mother Care?

Participant: Kangaroo Mother Care is when I put the baby here (pointing on the chest) and provide warmth for the babies making sure that the child is not affected by cold et all. If I give warmth to the child the weight will be normally increased.

Researcher: What are the benefits of Kangaroo Mother Care?

Participant: I constantly observe my baby for breathing patterns and body temperature and how she sucks from the breast. All the time when the she cries I am closer to him. It is said that Kangaroo method brings health to the child and equally strenthed the relationship between me and the child.

Resarcher: Do you know what caused you to deliver the baby prematurely?

Participant : I personally think that ever since I missed my periods. I constantly felt an urge to deliver of prompting labour pains from my second month henceforth. I was always sinck. I was always in and out of the hospital. The doctor tried to remedy the situation but in vain. I had to deliver my twin children prematurely.

Researcher: What is your responsibility during Kangaroo Mother Care?

Participant: All the time I have to regularly check to see if the child is sucking properly or not? I should also check the temperature normality and to check whether there is a change of the child's skin colour.

Researcher: What are the expectations from the nurses during Kangaroo mother Care?

Participant: The child has to be kept between the breasts; I don't have to put the child down to avoid cold.

Researcher: Tell me about your relationship with nurses and family members

Participant: The nurses treat us so well because they even teach us on how to handle the children. And that children have to be breastfed always.

Participant: My child says she is bored since others are with their mothers while she is not, last week when I spoke to her she said I should come back. One more thing is that they tell us not to put a child on the bed, the bed is for the mother. Instead the child has to be kept between the breasts.

Researcher: How did you deal with the fact that you have delivered a premature baby?

Participant: I had already accepted it because the doctor had already told me that he was just discharging me temporarily I would be readmitted again. And he also said that if I feel labour pains, I should come back because there is a great possibility for me to deliver prematurely.

Researcher: How does Kangaroo Mother Care affects the life of those who remained at home?

Participant: From the birth, my child's father did not understand it but now he understands. This issue did not go well with me because the father gets to work by 03h30 and the child remains alone at home alone.

Researcher Tell me more about the challenges you experience when providing Kangaroo Mother care

Participant: Yesterday the nurse on duty gave us dresses to change even the one that I am wearing I got it yesterday. Others are not washing because they do not have a washing soap. You may find yourself wearing a dress drenched in breastfeeding milk and it smells heavily. It compels one to change the dress twice a day. I wash one and wear the other one.

Researcher: How do you practice Kangaroo Mother Care?

Participant: I always have to put the child on the chest and at times I put the child down while visiting the toilet and going to bath. The truth is that the child has to be on my chest all the time. I can only put the child down when urged to visit the toilet, while bathing, while breast feeding the child or while going outside above all I have to seek permission from the nurse that I will going out by the gate only when the nurse is

All the time I must regularly check that there is nothing that disturbs the child. I also have to check if the temperature is fine and to find out if the baby is not changing the colour since it is common that a child at times will change the colour.

Researcher: How did you manage a premature baby?

Participant: Initially it really scared me off, and I could not understand it however, after several days I managed to understand that it was my baby, and this developed while I was bonding and staying closer to the child.

Researcher: How is your relationship with nurses, your relatives?

Participant: The relationship with the nurse is perfect. The relationship with the people at home is good. They regularly visit me and comfort me.

Researcher: How is the baby feeding?

Participant: I breastfeed the child and give the baby extra formula milk and when I notice that the child is crying hysterically I breastfeed him. My breast do not produce enough milk.

Researcher: Who is looking after your children left at home?

Participant: Those at home welcomed the move for the child to come here for him to gain the weight faster and be discharged they will accept it that even getting back to school I will get back to school the following year. Because when the child was born I did not quit schooling but now I can no longer get back because the child is not growing and I will spend more time in the hospital.

ANNEXURE K: PROOF OF EDITING

Proof of editing

STATSHELP EDITORS
620 Park Street
Arcadia 0083
Pretoria
Cell: 0632192809
E-mail: statshelp66@gmail.com

Date: 3 April 2018

To Whom It May Concern

This is to confirm that STATSHELP EDITORS edited the dissertation for

Name and Surname: Thivhavhudzi Mavis Mulaudzi

Title: “Lived experiences of mothers when providing Kangaroo Mother Care at selected hospitals in Vhembe District of Limpopo province, South Africa”

The onus is, however, on the student to make the changes suggested and to attend to the language editor’s queries.

Please direct any enquiries regarding the editing of this dissertation to me.

Kind regards

Alfred



Dr. Alfred Kanu

Acting Director