

**UNIVERSITY OF KWAZULU NATAL**

**Exploring the Lived Experiences of Midwives Regarding the Kangaroo Mother  
Care Initiative at a Selected Tertiary Level hospital in the Ethekwini district**

**By  
Robyn Leigh Curran  
201506562**

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of  
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Faculty of Health Sciences**

**Supervisor: Joanne Naidoo**

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## **Declaration**

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## **Dedication**

This dissertation is dedicated to those precious fragile lives which have intersected with mine during my life's journey as a nurse, and upon whom Kangaroo Mother Care has impacted in remarkable ways. Also, to the parents of these little ones, whose courage and determination never to stop hoping will be etched in my mind forever. Kangaroo Mother Care has given fragility a voice and has literally touched lives across the world.

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## **Abstract**

As intensive care of preterm infants and high-risk infants has evolved, the practice of close physical contact between parents and their infants has been curtailed, with the separation of mothers and their infants more the norm than the exception (Browne, 2004). However, in the past two decades, the physiologic and socio-emotional benefits of close physical contact between parents and their high-risk infants has been revisited, with the practice of Kangaroo Mother Care (skin-to-skin contact) dramatically increasing in neonatal care units worldwide (Browne, 2004).

Although research on Kangaroo Mother Care's effects is plentiful, literature reveals gaps in the research pertaining to the experiences of midwives and nurses in its practice (Chia, 2006 & De Hollanda, 2008). As the role of midwives/nurses has been identified as crucial for Kangaroo Mother Care practice, this gap was recognised, and impelled this research study to be conducted in order to further extend the practice of KMC for its benefits to infants and their families. Due to current staff shortages and poorly resourced neonatal facilities in our local hospitals, local data on midwives' experiences of Kangaroo Mother Care was perceived to be a vital first step in exploring these experiences.

The purpose of this qualitative study was to explore the lived experiences of midwives regarding the Kangaroo Mother Care initiative at a selected tertiary level hospital in the Ethekwini District. Interpretive phenomenology informed this study design, data collection and analysis. As Kangaroo Mother Care is a complex phenomenon, an interpretive paradigm allowed the researcher to access the meaning of participants' experiences as opposed to explaining their predicted behaviour.

Purposive sampling was used by the researcher to select the eight midwives working in the tertiary hospital in the Ethekwini District. The midwives were selected from the neonatal unit during August 2011. Data was collected through a single in-depth interview with each participant in the neonatal unit. The interviews were recorded and

later transcribed verbatim to facilitate analysis. Colaizzi's method of data analysis and representation was utilised.

Eleven themes emerged from the analysis of the data. Themes were aligned to the research objectives and included the participants' experiences of conceptualisations, experiences, hindering and facilitating factors of Kangaroo Mother Care. Conceptualisations were aggregated into two themes pertaining to a physiological concept of KMC and an emotive concept of KMC. The physiological concept regarded the catalytic action of KMC as a promotive agent in health through its effect in increasing average weight gain. Furthermore, KMC was seen as a protective agent in reducing cross-infection and hypothermia. These findings aligned with findings from authors in the literature review. An emotive concept of KMC was revealed by the participants' input regarding the effect of the skin-to-skin contact in facilitating maternal-infant attachment through bonding. This study finding is supported by current literature. Lived experiences emerged regarding the theme of KMC in maternal instinct and capability, which findings encompassed increased maternal confidence and competence with which several authors concurred. Factors considered as hindering KMC included five themes which emerged as maternal concerns, increased work-load, lack of training, management support and resource scarcity. Contrary to these, facilitators of KMC included the need for motivation and education as well as the provision of a comfortable environment conducive to the practice of Kangaroo Mother Care.

A number of recommendations for nursing practice, nursing education, communities and research based on the findings from the study were made available to relevant stakeholders. If implemented effectively, these recommendations may assist in the continued and increasing practice of KMC; resulting in its beneficial effects changing infants' and families' lives.

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## **Abbreviations**

KMC	-	Kangaroo Mother Care
WHO	-	World Health Organization
UNICEF-		The United Nations Children's Fund
MDG	-	Millennium Development Goal
LBW	-	Low birth weight
SANC	-	South African Nursing Council

## **Chapter One: Introduction to the Study**

This chapter presents the background to the study, the problem statement, a description of the purpose of the research study and details of the research objectives and questions. Also discussed is the significance of the study to the discipline of Nursing and Midwifery.

### **1.1 Introduction**

Low birth-weight and prematurity are often associated with increased morbidity and mortality globally. Conventional care for these infants is expensive and requires highly skilled personnel (Conde-Agudelo, Belizan & Diaz-Rosello, 2003). With 18% of infants in KZN born with low birth-weight according to the 2002 Demographic Household Survey in KwaZulu-Natal, the burden on the health care facilities is heightened. Pieper and Hesseling (2007) and Jones (1998) determined that the ability to deliver neonatal intensive care in South Africa has decreased. Compounding factors have been financial constraints and staff shortages, as well as poor resources, resulting in neonates being denied access to neonatal intensive care facilities (Pieper & Hesseling, 2007).

This situation arouses concern, as it is coupled with the fact that most preterm and low birth-weight infants in South Africa are born to the poorer socio-economic group who are dependent on the public health services for their care (Pieper & Hesseling, 2007). As a result of these shortages and the demand for care, given the low birth-weight and prematurity statistics, institutions have had to develop policies to guide access to the minimal resources available (Pieper & Hesseling, 2007).

State-run hospitals in South Africa do not currently care for babies weighing less than 1000g, in order that infants with a better prognosis, weighing over 1000g can be given preference (Pieper & Hessling, 2007). This eventuality is intensified by the fact that, with surfactant therapy, the survival rates of babies weighing between 855g and 1000g are the same as those weighing over 1000g (Pieper & Hessling, 2007). Despite the

success of surfactant therapy, these fragile lives are largely determined by the South African public health sector which is in a state of upheaval.

Preterm birth exposes the infant to a range of developmental risks. Preterm infants often exhibit lower cognitive and motor skills, a condition which persists into later childhood. These deficiencies often lead to problems in mother-infant interaction (Feldman, Eidelman, & Sirota et al., 2003). Traditionally, these infants, born in hospital, are kept in incubators/ radiant warmers/ warm rooms with open cots. Hospital neonatal intensive care of low birth-weight and preterm infants is difficult in developing countries due to the high cost, difficulty in maintenance and repair of equipment, intermittent power supply, inadequate cleaning of instruments and shortage of skilled staff. Frequently, and often unnecessarily, incubators and radiant warmers separate babies from their mothers, depriving them of the necessary contact (WHO, 2003).

In South Africa, conventional care is poorly resourced and therefore cannot meet the holistic needs of low birth-weight and preterm infants (Pieper & Hesselning, 2007; WHO, 2003). Based on the Saving Babies Report (2006/7), 45% of neonatal deaths in South Africa are a result of prematurity, and due to the fact that the expense of providing conventional care is substantial, a method of care had to be developed to meet the shortage of staff, equipment and the developmental needs of these infants (WHO, 2003).

Kangaroo Mother Care (KMC), known as skin-to-skin contact between the preterm or low birth-weight infant, developed by Rey and Martinez for the purpose of meeting these exact needs, has become a method of care practiced worldwide (Charpak, 2005). With increasing practice, Kangaroo Mother Care has evidenced effects on reducing apnoea, bradycardia and periodic breathing in infants (Ludington-Hoe, Anderson, Swinth, Thompson & Hadeed, 2004). Other effects have been improved maternal-infant bonding (Anderson, 2003).

This initiative has proved successful in reducing mortality and morbidity in preterm and low birth-weight infants as evidenced in a study by Bergman and Jurisoo (1994) in

Zimbabwe. The survival rate of babies under 1500g prior to KMC was 10% which improved to 50%; whereas babies weighing 1500g to 1999g increased from 70 to 90% with KMC (Bergman & Jurisoo, 1994). KMC was found to be effective in reducing mortality due to the proven physiological and psychological effects mentioned, especially with regard to reduced nosocomial infections which are a common cause of mortality. Another related study by Charpak (2001) found these physiological effects on infant mortality to be significant in comparison to conventional care.

A meta-analysis by Lawn (2010) showed that KMC reduces neonatal deaths and morbidity in babies weighing less than 2000g. Fifteen studies were identified reporting mortality and/or morbidity outcomes including nine randomised control trials and six observational studies. In three of the randomised control studies, commencing KMC in the first week of life showed a significant reduction in neonatal mortality [Relative risk: 0.49] compared with standard care. Three of the observational studies suggested significant mortality benefit [Relative risk: 0.68]. Five randomised control trials showed significant reduction in neonatal morbidity for babies less than 2000g [Relative risk: 0.34]. Considering the evidence available with regards to the positive impact KMC has had and still has, it is imperative that the KMC initiative be implemented effectively in the public health sector where the need is the greatest (Charpak, 2005).

## **1.2 Background**

Newborn care has been characterised by major technical advances in the last four decades which has allowed for substantial improvements in the mortality and morbidity of the high risk neonate (Graven, 2008). Technological advances to date include the invention of new modern equipment such as the continuous positive airway pressure. Advances in neonatology have been accompanied by a dramatic increase in the number of neonatal intensive units and neonatologists. Thirty years ago these resources were scarce, and were primarily confined to university medical centres (Goodman et al, 2002).

Although a decline in neonatal mortality has been occurring, it has been slow, and is the main reason why Millennium Development Goal 4 has not been reached (Saugstad,

2011). Despite worldwide advances and increased accessibility to neonatal facilities, the Saving Babies Report (2006/7) in South Africa stipulates that administrative problems occurred most commonly in babies dying as a result of spontaneous preterm birth due to a lack of neonatal facilities. Inadequate facilities or equipment in the neonatal unit/nursery and an inadequate management plan were the common avoidable factors that were health systems-related in infant mortality (Saving Babies Report, 2006/7).

In addition to these factors, there has been a heightened awareness of the psychological and emotional burden encountered by the parents of the preterm neonate (Charpak, 2005). The neonatal intensive care unit can often be an environment of sensory bombardment. From the first moment of extra-uterine life, the neonate's primary care environment is temporarily transferred from mother to the professional caregivers of the neonatal intensive care unit. These circumstances, where the infant is seen to be reliant on doctors, nurses and midwives rather than the parents, could have negative consequences on mother-infant interactions and bonding (Singer, Fulton, Davillier and Koshy et al., 2003); on the infant's development, and on the psychological wellbeing of the mother (Carter, Mulder, Bartram & Darlow, 2005). Although medical care is essential to meet the specific needs of the preterm neonate who has been exposed to a tremendous amount of trauma as a result of a preterm birth, it has become apparent that the neonate requires skin-to-skin contact to fulfill the needs which medical care fails to meet (Charpak, 2005).

In Bogotá, Colombia, Rey and Martinez developed a method of care known as Kangaroo Mother Care in 1978 as an alternative to traditional incubator care for low birth-weight infants, because of the overcrowding and scarcity of resources in their country's hospitals which resulted in high mortality rates from infection (Charpak, Ruiz-Pelaez & Cuervo, 2004). Their hospital, the Instituto Materno Infantil at the San Juan de Dios Hospital is a very large maternity hospital where 11 000 babies are delivered annually. As a result of introducing KMC the hospital has seen a reduction of neonatal morbidity and mortality (Charpak et al., 2004). The reduction in mortality reduced from 5.5% to 3.1%, with a

relative risk of 0.57. Although the results were not substantially significant, a difference was noted (Charpak et al., 2004).

Kangaroo Mother Care through skin-to-skin contact allows tactile proprioceptive stimulation and protects against an overload of adverse stimuli, thus providing an acceptable method for proper stimulation of the baby's neuro-behavioural development (Thukral, Chawla and Agarwal et al., 2008). In addition, skin-to-skin contact has been shown to cause several changes in the body of the baby and mother. It causes a release of oxytocin in the mother's body which positively affects her behaviour and mood (Matthiesen, Ransjo-Arvidson, & Nissen et al., 2001). The "vagal" response stimulated by Kangaroo Mother Care promotes growth and development and speeds up the adjustment from intra-uterine to extra-uterine existence.

The advantages of KMC, as indicated by the studies consulted (Thukral et al., 2008; Matthiesen et al., 2001), impacts on the mothers, fathers, infants and health care providers at different levels (Charpak, 2005). Mothers are found to be less stressed as confidence and bonding are encouraged and, through playing an active role in the care of the infant, they are empowered. Breastfeeding is promoted and less abandonment and neglect occurs. For fathers, the advantages of KMC are that they are able to play a far greater role in the care of their infants, and KMC improves bonding between fathers and infants which is particularly important in countries with high rates of violence towards children. For infants, KMC keeps the infant warm and stable, growth is improved, serious infection is less common and less apnoea occurs. Consequently, the advantages for health care providers include a need for fewer staff and less equipment, as well as earlier discharges resulting in fewer costs (Perinatal Education Programme, 2004). The disadvantages of KMC, however, are minimal, and relate to the fact that KMC is limited to stable infants, as well as being time-consuming for parents and requiring intense commitment (WHO, 2003)

The World Health Organisation conducted a systematic review of the incidence/prevalence of maternal morbidity and mortality from 2002-2007. Data was



extracted from this review to determine preterm birth rates, as currently, data on preterm births is scarce. It was determined globally that 9.6% of births were preterm, which translates to approximately 12.9 million preterm births. Eighty-five percent of this total occurred in Africa and Asia, thus 10.9 million births were preterm. Africa therefore has a preterm birth rate of 11.9% (WHO, 2010). The Saving Babies Report (2006/7) highlights that neonatal morbidity and mortality due to low birth-weight must be reduced. The implementation strategy recommended is that Kangaroo Mother Care be adopted as a standard policy in institutions.

The Saving Babies Report (2008/9) mentions that a lot of attention has been paid to setting up Kangaroo Mother Care units in the country's hospitals. This is due to the fact that, in 2008-2009, 28.2% of deaths were those of infants weighing 1000g-1499g at district hospitals (250.4/1000 births). These deaths, of which 29.6% are immaturity-related, were further affected by sub-standard care. In most district hospitals in South Africa, neonatal care is extremely poor, and there are instances where there are no midwives to care for newborns during the night (Saving Babies Report, 2008/2009). Mortality related to preterm birth was primarily due to inadequate facilities/equipment in neonatal units, and the fact that infants weighing less than 1000g are not offered intensive ventilatory support.

Despite the technical advances in neonatal care mentioned in global literature (Graven, 2008); South Africa's neonatal mortality rates from 2000 to 2009 show no improvement in any levels of care (Saving Babies Report, 2008/2009). With 16% of births being low birth-weight infants, partnered with the fact that neonatal units are inadequately resourced to cope with the demands they are faced with, this further emphasises the need for the practice of Kangaroo Mother Care (Saving Babies report, 2008/2009). Given that this initiative has shown improvement in reducing morbidity and mortality in many situations similar to those currently being experienced in South Africa, it is imperative that KMC be incorporated into neonatal care. Kangaroo Mother Care provides a cheap and effective answer to many of the problems posed by low birth-weight and preterm infants (Pattinson, Woods, Greenfield & Velaphi, 2005).

In South Africa, the importance of KMC has been studied on a narrower scale than that found internationally. Studies focusing on the growth of the baby; the length of the hospital stay of the mother and baby, and the success of breastfeeding were done by Hann, Malan, Kronson, Bergman and Huskisson (1999), and at Kalafong Hospital, near Pretoria by Van Rooyen, Pullen and Pattinson (2002). Both studies found increased weight gain in babies receiving KMC, as well as shorter hospital stays and increased breastfeeding rates.

Kangaroo Mother Care is defined as skin-to-skin contact between the preterm or low birth weight infant and his/her caregiver, where the naked infant is placed in an upright position against the caregiver's chest. KMC may be continuous or intermittent, and may start early or later after birth. The initiation of KMC depends on the degree of prematurity and the severity of illness at birth. In its initial form, KMC served as an alternative to standard in-patient care for stable, low birth-weight infants. It is now widely considered to be the most feasible, readily available and preferred intervention for decreasing neonatal morbidity and mortality in developing countries (Charpak, 2005). Kirsten (2001) mentions three instances where KMC is practiced. These include:

- (i) Hospitals with no appropriate neonatal facilities. Under these circumstances, KMC is the only recommended alternative to the lack of incubators and limited nursing staff.
- (ii) Hospitals with access to resources, but where demand exceeds supply. Under these circumstances KMC allows rational use of scarce resources.
- (iii) Hospitals with adequate access to all levels of care. Under these circumstances KMC is used to improve mother–infant bonding and breastfeeding (Charpak et al., 1996; Cattaneo et al., 1998; Kirsten et al., 2001).

The number of recognised benefits of KMC is expanding as this method becomes practiced more widely. Apart from the obvious popular appeal, KMC has psychological and physiological advantages (Hall & Kirsten, 2008). Psychological benefits result from parents being directly involved with the care of their vulnerable infant, and include

increased confidence levels and competence, as well as decreased maternal and infant stress. A systematic review done by Anderson (2003) found evidence of improved maternal affection and maternal attachment behaviour with KMC implementation.

Physiologically, research has established that there is an absence of apnoea, bradycardia and periodic breathing in infants receiving KMC (Ludington-Hoe, 2004). Further systematic reviews show that skin-to-skin contact reduces hypothermia in low birth-weight infants and increases weight gain with regular practice (Conde-Agudelo et al., 2003). Furthermore, studies by Sloan (1994), and by Charpak et al. (1997) show that KMC aids in the reduction of pneumonia, septicaemia and nosocomial infection. In addition, KMC aids the recovery from the trauma associated with preterm birth (Ludington-Hoe et al., 1992; Affonso et al., 1989; Affonso et al., 1993). With such an extensive number of benefits, KMC appears to have an impact that is seemingly endless.

A phenomenological study was conducted by Reddy and McJerney (2007) on the experiences of mothers who were implementing Kangaroo Mother Care in a Regional Hospital in KwaZulu-Natal. The experience of doubt, fear and apprehension was a common report from the participants in the study prior to commencing KMC. Support from health personnel was one of the key factors responsible for making mothers feel comfortable with KMC. Once mothers had overcome these fears, they began to see the results of KMC such as weight gain and positive bonding experiences. Mothers in this study stated that they could not have done it without the nursing staff (Reddy & McJerney, 2007).

The role of health personnel, particularly nurses, permeates the literature with regard to this role being of great importance (Neu, 1999; Moran et al., 1999). The role of midwives in the implementation of KMC is mainly that of providing support to parents and encouraging KMC practice. However, evidence reported by Chia (2006) and De Hollanda (2008) arouses concern, as it indicates that the midwives, who are the most important role-players in the practice of KMC, find that there are constraints. Due to the lack of resources (staff, equipment and space) seen in the Saving Babies Report

(2008/2009) as a factor contributing to neonatal mortality, there is concern for infant safety and the poor involvement of staff in implementing KMC.

In a study on practice, knowledge, barriers and perceptions of KMC, Engler et al. (2002) discovered that major barriers to practicing KMC for certain types of infants included infant safety concerns, as well as reluctance by nurses, physicians, and families to initiate or participate in KMC. The study recommendations were that nurses require educational offerings highlighting the knowledge and skills needed to provide KMC safely and effectively. Although knowledge is of first importance, the question arises as to whether this is the only problem, or whether there is a more complex underlying reasoning for nurses' reluctance to practice KMC.

Literature concerning experiences of mothers and the implications for the infants abounds in journal articles and online databases, but proved to be outdated in some respects; conversely, literature relating to midwives' experiences of KMC is scarce. A review of the literature showed a paucity of information about the attitudes of midwives towards KMC. Although only five articles were located which described the response of nurses to KMC (Bell & McGrath, 1996; Victor & Persoon, 1994; Drosten-Brooks, 1993; Gale et al., 1993; Hamelin and Ramachandran, 1993), these authors concluded that most neonatal intensive care unit nurses responded positively and were keen to implement KMC in their practice. However staff resistance was not uncommon (Drosten-Brooks, 1993; Gale et al., 1993), with some nurses expressing concerns about skin-to-skin holding, especially when this involved very small infants (birth-weight less than 1000 grams) and those requiring mechanical ventilation (Bell and McGrath, 1996; Gale et al., 1993).

Previous research identified that nurses tend to focus more on meeting the medical and technological needs of the infant than on building positive interactions between parents and their infants (Fenwick et al., 2001<sup>a</sup>, 1999). Nurses, however, play a pivotal role in facilitating the attachment process by promoting early parent-infant contact through encouraging parents to touch, hold and care for their infants (Smith, 1996), as well as establishing collaborative and positive relationships with the parents (Fenwick et al.,

2001<sup>a</sup>, 2001<sup>b</sup>). As noted by Neu (1999) and Moran et al. (1999), parents need support from nursing staff to allay their anxieties about handling infants and to promote confidence in using KMC. The types of support found to be beneficial are information on KMC and the infant's response to stimulation, verbal encouragement and reassurance, and the provision of a private and comfortable environment (Baker, 1993). Clearly, the attitudes of nurses are a major determinant of the degree to which KMC is a positive experience for parents. As the infant's primary care providers, nurses are in a position to either advocate or discourage the use of KMC in the Neonatal Intensive Care Unit.

With the current Millennium Development Goal 4 of reducing child mortality by two-thirds from 1990 to 2015 not yet having been reached, as well as the consideration of current statistics and findings in the Saving Babies Report (2008/9); it is essential that those initiatives which promote the wellbeing of the preterm and low birth-weight infants be implemented. In order for this to occur, the active participation and involvement of nurses who have been shown to be a major determinant in KMC implementation, is required (Neu, 1999).

### **1.3 Problem statement**

In the global perspective, neonatal morbidity and mortality is still very high (Saugstad, 2011). Not only has the decline in neonatal morbidity and mortality been slow, but the Millennium Development Goal 4 of reducing child mortality does not seem to be within tangible reach. This potential goal fulfillment is further compounded by the fact that the primary cause of neonatal death is preterm birth (Saving Babies Report, 2006/7); added to the fact that most preterm and low birth-weight infants are born to the poorer socio-economic group who are dependent on the public health sector (Bonduelle & Illif, 1995). The public health sector holds little hope for these little lives, especially since state-run hospitals in South Africa (to date) do not treat infants weighing less than 1000g (Pieper & Hessling, 2007).

Kangaroo Mother Care has emerged as a beacon of hope to curb the neonatal mortality and morbidity rates in South Africa. According to a meta-analysis conducted by Lawn

(2010) this simple low-cost intervention shows a reduction in neonatal mortality by 51%. Other studies by Bergman and Jurrissoo (1994); Pieper and Hessling, (2004) also further support these findings of reduced neonatal mortality. Considering the life saving benefits of Kangaroo Mother Care, it is essential that this low cost intervention be implemented and prioritized to make sure it reached those who need it most.

Smith (1996) highlights the pivotal role midwives play in facilitating the attachment process, however Chia (2006) noted a paucity of information on midwives' roles and perceptions of KMC. This gap in research is therefore seen to be essential to aid implementation and prioritization of KMC in neonatal care facilities to reduce neonatal mortality. As noted by Neu (1999) and Moran et al. (1999), parents need support from nursing staff to allay their anxieties about handling the infants and to promote confidence in using KMC. Without midwives' support, KMC would be difficult to achieve and preterm and low birth-weight infants would be denied this simple method of care. With this in mind, exploring midwives' lived experiences of KMC is fundamental to further extend the scope of current research, to fill the gaps in research, and to examine ways to optimise the use of this initiative to promote improved care for mother and infant.

#### **1.4 Purpose of the study**

The purpose of this study was to explore the lived experiences of midwives regarding the Kangaroo Mother Care (KMC) initiative.

#### **1.5 Research objectives**

The objectives of this research study are therefore to:

- (i) To explore midwives' understanding of the concept of Kangaroo Mother Care in the selected tertiary level hospital in the Ethekeini district.
- (ii) To explore the lived experiences of midwives caring for mothers and infants using Kangaroo Mother Care in the selected tertiary level hospital in the Ethekeini district.

- (iii) To explore the barriers and enabling factors that influence the implementation of Kangaroo Mother Care in the selected tertiary level hospital in the Ethekwini district.

## **1.6 Research questions**

- (i) What is midwives' understanding of the concept / initiative of KMC?
- (ii) What are the midwives' lived experiences of KMC?
- (iii) What do the midwives perceive as factors that enable and inhibit the implementation of Kangaroo Mother Care?

## **1.7 Significance of the study**

The study may be beneficial to the discipline of nursing in the following manner.

### **1.7.1 Nursing/ Midwifery practice**

Owing to the influential nature of the midwives' role in the practice of KMC (Neu, 1999) and the lack of literature on midwives' experiences of KMC practice (Chia, 2006); there is a need to explore these experiences of the implementation of KMC more extensively. In the South African context midwives are generally employed in Neonatal Intensive care units and therefore this is the reason this sector of professionals are the focus of this study. Exploring midwives' lived experiences of KMC may raise awareness of the importance of the role of the midwife in KMC, due to the fact that, in discussing their experiences, midwives may gain an understanding of their role in KMC which could enhance their confidence. Not only may this research improve midwives' perceptions of themselves, but it could positively impact on their patient care. Patients will be offered a method of care that shows evidence of many life-saving benefits (Ludington-Hoe et al., 1992; Affonso et al., 1989; Affonso et al., 1993).

### **1.7.2 Nursing research**

As described by Chia (2006), there is a paucity in nursing research regarding the experiences of midwives in the implementation of KMC. The research study may therefore fill the current existing gaps in research so that KMC can become a method of care that is practiced in all institutions, as recommended by the WHO (2010). It is also hoped that this research may identify enabling or inhibiting factors in KMC implementation, so that further research and strategies may be implemented to reduce neonatal mortality and morbidity considerably in the future.

### **1.7.3 Benefit to patient community**

According to Charpak (2005), KMC is not merely a method of care, its ramifications are seen to affect the infant as well as the family as a whole. By gaining an understanding of midwives' experiences in KMC implementation, not only may neonatal morbidity and mortality be impacted, but the relationships forged between the infant and parent could be positively affected (Smith, 1996).

Psychological benefits resulting from parents being directly involved with the care of their vulnerable infants include increased confidence levels and competence, as well as decreased maternal and infant stress. In addition, KMC will aid recovery from the trauma associated with preterm birth (Ludington-Hoe et al., 1992; Affonso et al., 1989; Affonso et al., 1993). KMC will contribute to an absence of apnoea, bradycardia and periodic breathing in infants receiving KMC (Ludington-Hoe et al., 2004). There will be a reduction in hypothermia in low birth-weight infants and increased weight gain with regular practice (Conde-Agudelo et al., 2003). Furthermore, studies by Sloan (1994), and another by Charpak (1997) indicated that KMC aids in reduction of pneumonia, septicaemia and nosocomial infection.



## **1.8 Definition of terms**

Common terms frequently referred to in the study are defined by the literature as well as the meanings of these terms in the context of the study. These terms are inclusive of the following: (i) Preterm Infants, (ii) Kangaroo Mother Care; (iii) Low Birth-Weight (iv) Experiences, (v) Nurse, (vi) Midwife and (vii) Neonatal Unit.

### **(i) Preterm infants:**

These are defined as any neonate, regardless of birth-weight, born before 37 weeks of gestation. Because exact gestational age is often difficult to determine, low birth-weight is a significant criterion for identifying the high-risk infant with incomplete organ system development (WHO, 2010). In the context of this research study, the preterm infant is considered to include any infant born at less than 38 weeks gestation.

### **(ii) Kangaroo Mother Care (KMC):**

This is where the low birth-weight neonate is nursed in an upright position in skin-to-skin contact with the carer's chest (Cattaneo et al., 1998, p.976; Sloan et al., 1994, p.782). In the context of this study, KMC refers to skin-to-skin contact of the preterm/low birth-weight infant with the caregiver.

### **(iii) Low birth-weight (LBW):**

This term is applied to infants born with a birth-weight of less than 2500 grams (WHO, 2008). The low birth-weight infant in this study refers to infants weighing less than 2500g.

### **(iv) Experiences:**

These are deemed to be knowledge or skills gained by personal observation or practical acquaintance with facts or events (Thompson, 2000, p.304). Within the context of this study, experience will be that of the midwives in the neonatal unit with the implementation of KMC.

**(v) Nurse:**

This term describes a person registered with the South African Nursing Council, who supports, cares for and treats a health care user to achieve or maintain health and, where this is not possible, cares for a health care user so that s/he lives with comfort and with dignity until death (Nursing Act, 2005). For the purpose of this study, the nurse will be a registered nurse with a midwifery qualification working in the neonatal unit at the selected hospital at the time the study was conducted. The nurse should have at least one year's experience in the neonatal unit.

**(vi) Midwife:**

A midwife is a person who is qualified and competent to individually practice midwifery in the manner and to the level prescribed and who is capable of assuming responsibility and accountability for such practice (Nursing Act, 2005). In the context of the study, a midwife would be a registered nurse with additional midwifery qualification with the South African Nursing Council and would be practicing at the selected tertiary level hospital in the neonatal unit for at least one year duration.

**(vii) Neonatal unit:**

This describes a special hospital care unit providing care for preterm and ill infants (WHO, 2010). The neonatal unit at the selected tertiary level hospital consists of a special care unit as well as a neonatal intensive care unit for infants on ventilators.

## **1.9 Conclusion**

This chapter discussed the background to the study, including the purpose of the study the research objectives as well as the significance of the study for nursing practice, nursing research and the patient community. Common terms frequently refereed to in this study are described as well as their contextual use in the study. Kangaroo Mother Care forms an integral role in many facets of neonatal care and understanding lived experiences of Kangaroo Mother Care seems paramount to further its practice.

## **Chapter Two: Literature Review**

### **2.1 Introduction**

Heideggerian phenomenology was chosen as the research design for this study. This design was selected since the goal of this research is to arrive at the essence of the lived experience (Moutsakas, 1994), and a literature review in phenomenology aims at seeking experiential descriptions of the experience, or meaning of the experience as opposed to supporting hypotheses in other paradigms. The literature review forms part of an existential investigation, to deepen understanding of a phenomenon, which, in this case, is “Kangaroo Mother Care”. Not only does it deepen understanding, but serves the purpose of obtaining additional knowledge in order that the researcher can be separated from these descriptions (Munhall, 2010).

Polit and Hungler (2004) specify that a in depth literature review should be done after data collection, to avoid the researcher from being influenced by prior thoughts on the topic. Review of literature prior to data collection allowed the researcher to become familiar with the phenomena of Kangaroo Mother Care. Through familiarising with the phenomena, the researcher could clear any preconceived ideas about Kangaroo Mother Care through bracketing.

Kangaroo Mother Care, which was first introduced in Bogotá, Colombia in 1978, to compensate for technical and personnel shortages is rapidly becoming a standard in neonatal care in developed and developing countries. In addition to promoting maternal-infant bonding and successful breastfeeding, this strategy can be used in sites without appropriate neonatal care facilities, such as incubators. or as an alternative to neonatal minimal care units (Charpak, 1996).

### **2.2 Global statistics**

The frequency of low birth-weight in the developing world (10-30% of all live deliveries) constitutes a heavy burden (Byrne & Morrison, 2004). The deaths of about two million

newborns each year are related to prematurity and low birth-weight (LBW). According to UNICEF, 22% of all low birth-weight infants born in developing countries are born in Africa, furthermore, the number of low birth-weight infants is more than double the number born in developed regions, with South Africa scoring a level of 14.6%. This percentage may increase to as much as 25% in the public sector. The mortality rate of preterm infants is three times higher than in newborns (UNICEF, 2006). Kangaroo Mother Care (KMC) has emerged as a promising means of caring for LBW newborns.

### **2.3 Neonatal morbidity and mortality**

Bergman and Jurisoo (1994) studied the 'Kangaroo method' for treating low birth-weight infants in a mission hospital in Zimbabwe. Results showed that the survival of infants born under 1500 g improved from 10% to 50%, whereas that of infants with a birth-weight between 1500-1999 g improved from 70% to 90%. Similarly, a study conducted in Mozambique by Colonna (1990) further supports the effectiveness of KMC in improving survival rates. KMC's effect on survival is further substantiated by a study in Bogotá in which the survival of infants weighing between 501-1000 g rose from 0 with a conventional special baby care unit care in 1975-76, to 72% in 1979-81 with KMC. Survival of infants weighing between 1001-1500 g rose from 27% in 1975-76, to 89% in 1979-81. In addition, the number of infants abandoned annually fell from 34 to 10 (Whitelaw, 1985).

Three studies in which 1362 infants participated were conducted in developing countries to determine whether KMC reduced mortality and morbidity (Conde-Agudelo, 2000). KMC was associated with the following reduced risks: Nosocomial infection at 41 weeks' corrected gestational age (relative risk 0.49, 95% confidence interval 0.25 to 0.93), severe illness (relative risk 0.30, 95% confidence interval 0.14 to 0.67), lower respiratory tract disease at 6 months follow-up (relative risk 0.37, 95% confidence interval 0.15 to 0.89), not exclusively breastfeeding at discharge (relative risk 0.41, 95% confidence interval 0.25 to 0.68), and maternal dissatisfaction with method of care (relative risk 0.41, 95% confidence interval 0.22 to 0.75). KMC infants had gained more weight per day by discharge (weighted mean difference 3.6 g/day, 95% confidence interval 0.8 to 6.4). The

scores relating to the mothers' sense of competence according to infant stay in hospital and admission to NICU were better in KMC than in the control group (weighted mean differences 0.31 [95% confidence interval 0.13 to 0.50] and 0.28 (Conde-Agudelo, 2000). These three studies by Conde-Agudelo (2000) thus show the effect of KMC on reducing the risk of nosocomial infection, lower respiratory tract infection, severe illness; not exclusively breastfeeding at discharge and maternal dissatisfaction. In addition the KMC infants also showed increased tendency to gain more weight and mothers' sense of confidence was improved.

## **2.4 Physiological effects**

The positive physiological effects of KMC were identified in a study by Feldman (2003) and Ohrgi (2002) in which the effects of KMC on autonomic function, state regulation and neurobehavioural status were investigated. Infants receiving KMC in Feldman's study (2003) showed a more rapid maturation of "vagal" tone between 32 and 37 weeks' GA ( $p=0.029$ ). More rapid improvement in state organisation was observed in KMC infants, in terms of longer periods of quiet sleep ( $p=0.016$ ) and alert wakefulness ( $p=0.013$ ), and shorter periods of active sleep ( $p=0.023$ ). The neuro-developmental profile was more mature for KMC infants, particularly habituation ( $p=0.032$ ) and orientation ( $p=0.007$ ). Results underscore the role of early skin-to-skin contact in the maturation of the autonomic and circadian systems in preterm infants (Feldman, 2003). In Ohrgi's (2002) study, KMC effectively promoted neonatal behavioral organisation and enhanced developmental outcome over the first year of life for LBW infants.

A study conducted by Chwo (2002) in Taiwan established that KMC infants had higher mean tympanic temperature (37.3 degrees C vs. 37.0 degrees C), more quiet sleep (62% vs. 22%), and less crying (2% vs. 6%) all at  $p=.000$  compared to control infants. This  $p$ -value is therefore statistically significant in relation to the hypothesis that KMC practice causes higher tympanic temperature, more quiet sleep and less crying. In a randomised clinical trial studying the effects of KMC on temperature, Ludington-Hoe (2000) showed that toe temperatures are significantly higher during KMC than incubator periods, and maternal breast temperature met each infant's neutral thermal zone requirements within

five minutes of onset of KMC. Another study done by Ludington-Hoe (1996) found that heat loss did not occur during KMC, and that infants slept more during KMC. Kangaroo Care had a comforting effect on infants and their mothers. Apnea and periodic breathing episodes dropped during KMC for incubator infants.

Further substantiating evidence by Bauer (1996) established effects of maternal and paternal kangaroo care on oxygen consumption, carbon dioxide production, energy expenditure, skin and rectal temperatures, heart and respiratory rates, arterial saturation, and behavioral states. Skin temperature (lower leg) increased significantly during both maternal (36.2 +/- 0.9 degrees vs. 36.9 +/- 1.2 degrees C) and paternal (36.3 +/- 0.9 degrees vs 36.8 +/- 0.9 degrees C) kangaroo care. This study concluded that both maternal and paternal kangaroo care have no adverse effects on energy expenditure. Other physiological effects of KMC that occur include higher levels of oxygen in the blood and less variation in oxygenation of KMC infants in comparison to infants receiving traditional care (Legault, 1993 & 1995).

## **2.5 Psychological effects**

Based on the general bonding hypothesis, it is suggested that Kangaroo Mother Care (KMC) creates a climate in the family whereby parents become prone to sensitive caregiving (Tessier, 1998). The study by Tessier (1998) observed a change in the mother's perception of her child attributable to the skin-to-skin contact in the kangaroo-carrying position. This effect is related to a subjective bonding effect that may be understood readily by the empowering nature of the KMC intervention. Moreover, in stressful situations when the infant has to remain in the hospital longer, mothers practicing KMC felt more competent than mothers in the traditional care group. Mothers practicing KMC were more responsive to an at-risk infant whose development had been threatened by a longer hospital stay. The study concluded that the infant's health status may be a more prominent factor in explaining a mother's more sensitive behaviour, which overshadows the kangaroo-carrying effect. Feldman (2003) conducted a study on the contribution of KMC to family interaction, proximity and bonding. Following KMC, mothers and fathers were more sensitive and less intrusive, infants showed less negative affect, and family

style was more cohesive. Among KMC families, maternal and paternal affectionate touch of infant and spouse was more frequent, spouses remained in closer proximity, and infant proximity position was conducive to mutual gaze and touch (Feldman, 2003).

## **2.6 Kangaroo Mother Care in South Africa**

In South Africa, the value of KMC has been studied at the Groote Schuur Hospital in Cape Town and was reported on by Hann, Malan, Kronson, Bergman and Huskisson (1999, p.39), and at Kalafong Hospital, near Pretoria (Van Rooyen, Pullen, Pattinson and Delport (2002, p.6). Both of these studies focused on the effects of KMC in terms of the growth of the baby, the length of the hospital stay of mother and baby and the success of breastfeeding. The study carried out at the Groote Schuur Hospital, Cape Town, by Hann et al. (1999, p.37) was a controlled clinical trial with twenty-eight low birth-weight infants. More recently, van Rooyen et al. (2002, p.6) reported on the value of KMC at Kalafong Hospital. They reported that 466 infants were admitted to the KMC unit over a period of 18 months. The average length of stay in the unit was 13 days, and the average weight gain was 23g per day. For infants weighing less than 1300g the total length of hospital stay was reduced by three days. Reddy and McIerney (2007), on the other hand, studied the experience of mothers in KMC implementation, and found that mothers expressed doubt, fear and apprehension prior to the initiation of KMC, but that these were allayed once KMC was implemented. Additionally, mothers reported the need for support for KMC. Support was most significant when offered by midwives (Reddy & McIerney, 2007).

## **2.7 Kangaroo Mother Care implementation**

Evidence for KMC's efficacy and safety is available from studies in hospitals (Bergman et al., 1994; Cattaneo, et al., 1998) including a randomised, controlled trial. The method has been formally endorsed by the World Health Organisation (WHO) which published a set of KMC practice guidelines in 2003. Yet, despite sound evidence of its effectiveness and safety, KMC is not widely implemented. Many leaders in newborn care have never heard of KMC, and many paediatricians and nurses who have heard of it feel unsure about introducing it into their neonatal services (Charpak, 2006).

A study by Charpak (2006) was conducted to evaluate the implementation of KMC. Some of the following factors were noted as barriers to the implementation of KMC:

- KMC is seen as a low-cost intervention and a “poor man’s alternative” in developing countries by health care professionals.
- It is considered to represent extra work for staff.
- Direct skin-to-skin contact between a naked infant and the kangaroo position provider is considered unusual, or even improper. Professionals, mothers and their families, in cultures where physical contact is restricted, perceive close, skin-to-skin contact between infants and their carers as inappropriate.
- Some mothers and healthcare staff are uncomfortable with the fact that mothers are exposed to strangers while learning the KMC position or breastfeeding their infants.

Charpak (2006) emphasises that the sources of resistance must be actively sought, recognised and understood, as mere recognition of a problem can lead to an effective solution. In the minimal literature from Chia (2006), De Hollanda (2008) and Engler (2002) on nurses’ roles and perceptions of KMC, it was pointed out that constraints on implementation of KMC are a reality however, there is a paucity of information on nurses’ experiences, as established by Chia (2006).

Considering the frequency of preterm and low birth-weight births in South Africa, further compounded by the country’s lack of resources and staff shortage it is crucial that measures be taken to reduce morbidity and mortality. Kangaroo Mother Care has shown evidence of: Increased survival rates (Bergman & Jurisoo, 1994; Cononna, 1990), decreased abandonment (Whitelaw, 1985); decreased nosocomial infection, severe illness, lower respiratory tract disease; more weight gain per day by discharge (Conde-Agudelo, 2000); mature neurobehavioural state (Feldman, 2003); as well as a higher mean tympanic temperature, more quiet sleep and less crying (Chwo, 2002). Additionally, effects of KMC include higher levels of oxygen in the blood and less



variation in oxygenation (Legault, 1993), as well as improved interaction and bonding between the parent and child (Feldman, 2003). With such a vast array of effects that impact on the wellbeing of preterm and low birth-weight infants, one needs to question why KMC is not being practiced more broadly in South Africa where the need is so great. As Charpak's study (2006) identified, resistance to KMC is still an issue, and resistance comes in various forms and for various reasons. Studies showing resistance are not uncommon (Drosten-Brooks, 1993; Gale et al., 1993), with some nurses expressing concerns about skin-to-skin holding, especially when very small infants (birth-weight less than 1000 grams) were involved. In addition, Chia (2006) and De Hollanda (2008) indicate that the nurses, who are the most important role-players in the practice of KMC, find that there are constraints due to lack of resources (staff, equipment and space) and guidelines. Not only were these constraints, which are also present in South Africa. a reality, there was also found to be little supporting evidence of nurses' experience of KMC. For this reason, exploring the lived experiences of midwives in the implementation of KMC is critical in order to determine effective solutions where inhibiting factors exist (Charpak, 2006).

## **2.8 Conclusion**

From Feldman's (2003) findings on the neurobehavioural benefits of KMC, to Bergman and Jurisso's (1994) study on KMC's impact on neonatal morbidity and mortality; it is clear that a deeper understanding of this simple method has been obtained. This is of significance in this phenomenological study, as it forms part of the existential investigation in order that KMC is understood in its entirety. Not only does literature capture the essence of KMC (Feldman, 2003); but the role of the nurse in its implementation is further highlighted in the literature (Chia, 2006; De Hollanda, 2008).

## **Chapter Three: Methodology**

### **3.1 Introduction**

Every individual attaches a specific meaning to an experience or event. It is thus necessary to avoid focusing too greatly on actual behaviour, but rather, to turn the focus towards how the individual perceives and experiences it. Phenomenology is able to provide a much needed understanding of a range of individual experiences that may previously have eluded one's understanding. Of fundamental importance are the individual's relationship with and reaction to life, as well as the quality of the individual experience (Kockelmans, 1987). Phenomenology focuses on the quality of experiences and involves the participant in the acquisition of knowledge (Polkinghorne, 1983).

### **3.2 Research paradigm**

The goal of this study was to understand a human phenomenon, Kangaroo Mother Care, and midwives' experiences of this phenomenon. This goal fits the philosophy, strategy and intentions of the interpretive research paradigm. The interpretive research paradigm is based on the epistemology of idealism (in idealism, knowledge is viewed as a social construction) and encompasses a number of research approaches which have a central goal of seeking to interpret the social world (Higgs, 2001). According to the interpretive paradigm, meanings are constructed by human beings in unique ways depending on their context and their personal frames of reference, as they engage with the world they are interpreting (Crotty, 1998). This is the notion of multiple constructed realities (Crotty, 1998). In this type of study, the findings emerge from interactions between the researcher and the participants as the research progresses (Creswell, 1998). Therefore, subjectivity is valued, and is considered the ontological assumption of interpretive phenomenology. There is an acknowledgement that humans are incapable of total objectivity because they are situated in a reality constructed by subjective experiences. Furthermore, the research is value-bound by the nature of the questions being asked, the values held by the researcher, and the way findings are generated and interpreted.

As Kangaroo Mother Care is a complex phenomenon involving multiple facets, attempting to isolate it from its context ignores its complexity, reality and consequences relating to its practice. The interpretive paradigm was viewed as the most suitable for this research study because of its potential to generate new understandings of complex, multi-dimensional human phenomena, such as those which are explored in this study.

### **3.3 Research design**

Phenomenology, a philosophical approach, was apt for this study due to its consideration of how the subject relates to the experience, understands the experience and values the experience (Van Manen, 1997). It is a “research methodology aimed at producing rich contextual descriptions of the experiencing of selected phenomena of the life world of individuals that are able to connect with the experience of all of us collectively” (Smith, 1997, p.80). Phenomenology is concerned with lived experiences, and was thus ideal to explore midwives’ personal journeys with Kangaroo Mother Care.

Different types of phenomenology exist, including those of Husserlian and Heideggerian, to name but a few. For Husserl (1970), the aim of phenomenology is the rigorous and unbiased study of things as they appear, in order to arrive at an essential understanding of human consciousness and experience (Valle, 1989). In order to do this, Husserl adopts phenomenological reduction which relies on descriptions of experience before they have been reflected upon (Caelli, 2000). Husserl places emphasis on essence and specific experience and how that experience was constructed. Husserl uses the term “natural” to indicate what is original and “naïve” prior to theoretical reflection. A key point to understanding Husserlian phenomenology, as aptly stated by Moran (2000), is that “... explanations are not to be imposed before the phenomena has been understood from within.” Phenomenological reduction, which is necessary in this type of phenomenology, involves reducing the world as it is considered in the natural attitude to a purely phenomenal realm (Valle, 1989). The researcher is therefore required to meet the phenomenon in as free and as unprejudiced a manner as possible, so that the phenomenon can present itself in as free and unprejudiced a way as possible in order to be precisely described and understood.

While Heidegger (1958) agrees with Husserl's emphasis on human experience as it is lived, he disagrees with Husserl's view of the importance of description rather than understanding (Racher, 2003). Heidegger advocates the use of hermeneutics which is founded on the premise that lived experience is an interpretive process. Heidegger believes that the primary phenomenon that concerns phenomenology is the meaning of Being (Cohen & Omery, 1994). The central message is that "existence is its own disclosure" (Baumann, 1978). Man, according to this phenomenology, makes sense of his world from within his existence and not by being detached from it. Conclusively, Heidegger views human action as being understood within a background of practices (bodily, personal and cultural) that is always present, although it can never be made fully explicit (Packer, 1985).

Merleau-Ponty, comparatively surmises that "phenomenology of origins" helps us view our experience in a new light, without relying on the categories of our reflective experience; a pre-reflective experience (Moran, 2000). Another phenomenologist Gadamer, who follows the work of Heidegger, argues that the detachment of our fruitful prejudices which facilitate understanding from those prejudices which obstruct our understanding occurs in the process of understanding itself (Gadamer, 1989). Therefore, in his version of phenomenology, understanding is derived from personal involvement by the researcher in a reciprocal process of interpretation that is inextricably related with one's being-in-the-world (Spence, 2001).

Table 1 is a table which reflects the differences between Husserlian and Heideggerian Phenomenology as adapted from Laverty (2003):

**Table 1: A comparison of Husserlian and Heideggerian Phenomenology (Lavery, 2003)**

Husserlian Phenomenology	Heideggerian Phenomenology
<ul style="list-style-type: none"> <li>• Epistemological questions of knowing</li> <li>• How do we know what we know?</li> <li>• Cartesian duality: mind body split</li> <li>• A mechanistic view of the person</li> <li>• Mind-body person lives in a world of objects</li> <li>• Ahistorical</li> <li>• Unit of analysis is meaning giving subject</li> <li>• What is shared is the essence of the conscious mind</li> <li>• Starts with reflection of mental states</li> <li>• Meaning is unsullied by the interpreter's own normative goals or world view</li> <li>• Participants' meanings can be reconstituted in interpretive work by insisting data speak for themselves</li> <li>• Claim that adequate techniques and procedures guarantee validity of interpretation</li> <li>• Bracketing defends the validity or objectivity of the interpretation against self-interest</li> </ul>	<ul style="list-style-type: none"> <li>• Questions of experiencing and understanding</li> <li>• What does it mean to be a person?</li> <li>• Dasein</li> <li>• Person as self-interpreting being</li> <li>• Person exists as a 'being' in and of the world</li> <li>• Historicity</li> <li>• Unit of analysis is transaction between situation and the person</li> <li>• What is shared is culture, history, practice, language</li> <li>• We are already in the world in our pre-reflective states</li> <li>• Interpreters participate in making data</li> <li>• Within the fore-structure of understanding interpretation can only make explicit what is already understood</li> <li>• Establish own criteria for trustworthiness of research</li> <li>• The hermeneutic circle (background, co-constitution, pre-understanding)</li> </ul>

As can be concluded from this table, Husserl's focus is on the essence of the phenomenon that is free from the interpreter's own normative goals or paradigm. A mechanistic view

of the phenomenon exists, and emphasis is placed on the fact that mind and body are separate entities (Lavery, 2003). Comparatively, Heidegger's view is that a person is a self-interpreting being who exists in a world with a pre-reflective state. Heidegger also emphasises that a person exists as a being in and of the world.

In exploring midwives' experiences of KMC, mere descriptions of experience would not suffice to determine what these experiences meant to them, and how these experiences could be used to add to the current literature. Heideggerian phenomenology as a research design enabled exploration of participants' meaning of experiences in Kangaroo Mother Care.

To Heidegger, we and our activities are always "in the world", our being is a being-in-the-world, so we do not study our activities by bracketing the world, rather we interpret our activities and the meaning things have for us by looking to our contextual relations to things in the world. The focus is toward illuminating details and seemingly trivial aspects within experience that may be taken for granted in our lives, with the goal of creating meaning and achieving a sense of understanding (Wilson & Hutchinson, 1991). Pre-understanding is a structure for being "in the world", according to Heidegger (1927/1962). This pre-understanding constitutes the meanings or organisation of a culture that is present before we understand and become part of our historicity of background. Pre-understanding is not something a person can step outside of, or put aside, as it is understood as already being with us in the world. Heidegger went so far as to claim that nothing can be encountered without reference to a person's background understanding. Koch (1995) described this as an indissoluble unity between a person and the world. Meaning is found as we are constructed by the world, while at the same time we are constructing this world from our own background and experiences. There is a transaction between the individual and the world as they constitute and are constituted by each other (Munhall, 1989). Interpretation is seen as critical to this process of understanding. Claiming that to be human was to interpret, Heidegger (1927/1962) stressed that every encounter involves an interpretation influenced by an individual's background. Polkinghorne (1983) described this interpretive process as concentrating on historical

meanings of experience and their development, and cumulative effects on individual and social levels.

### **3.4 Setting**

A tertiary level hospital situated centrally in Durban, an urban city in the Ethekekwini district of KwaZulu-Natal, South Africa was selected for this study. A tertiary hospital receives patients from and provides sub-specialist support to a number of regional hospitals. Most of the care should be level three (3) care that requires the expertise of clinicians working as sub-specialists or in rarer specialities (Cullinan, 2006). The target population for this study comprised registered midwives employed in a neonatal unit within the Ethekekwini district, with at least one year's experience in the neonatal unit. The hospital in which the study was conducted officially opened a Kangaroo Mother Care (KMC) ward for the sole purpose of KMC practice in 2009. The midwives who participated in the study were sampled from the neonatal unit of this hospital where the preterm and low birth-weight infants are nursed. Kangaroo Mother Care is initiated in the neonatal unit intermittently, and when the infants are stable and only require weight gain they are moved to the KMC ward with their mothers for 24-hour KMC. Midwives from the neonatal unit were selected due to the fact that they have had lived experience of KMC practice.

This tertiary level hospital, which is the second largest in the Southern hemisphere, provides regional and tertiary services to the whole of KwaZulu-Natal and the Eastern Cape. As KZN has a preterm birth rate of 18% according to the Demographic Health Survery (2002), added to the fact that this selected hospital acts as a referral to most clinics and level one hospitals in the Ethekekwini district, the setting was found to be ideal to conduct the research study.

The obstetric unit has 170 beds and approximately 13 000 deliveries are conducted per annum. Due to the magnitude of the population which this hospital serves, and the fact that Kangaroo Mother Care has been practiced at this institution since 2009; this hospital was considered suitable to conduct a study on the lived experiences of midwives with

regards to the implementation of KMC. The selected hospital had 38 registered midwives and nurses employed in the Neonatal Unit. The number of staff represented in the selected NICU comparatively has a representative staff distribution due to its central location and ease of accessibility.

Ethics approval from UKZN, the selected hospital and the Department of Health was obtained. Eight midwives identified by the key informant, the sister-in-charge of the neonatal unit, who met the study criteria were approached to participate in the study. Informed consent (Appendix 2.2) was signed by all participants.

### **3.5 Sampling**

For this study, a non-probability purposive sampling technique was chosen by the researcher. Purposeful sampling, as recommended by several authors for this type of research, is vital in order to select information-rich cases for detailed study (Denzin & Lincoln, 2002; Patton, 2002). The individuals selected were able to share their lived experiences of KMC, which was the central focus of this study (Burns & Grove, 2009). This method of sampling was thus consistent with interpretive paradigm research.

Midwives were chosen to be participants in this study as it was anticipated that they would have a greater breadth of experience in Kangaroo Mother Care, and could have greater insight into the lives of their patients in terms of KMC practice. Midwives are also according to national norm are employed to work in NICU's and thus this is the reason for the selected sample. For this study, the preselected group consisted of midwives working in the Neonatal Unit at the selected tertiary level hospital in the Ethekwini district. The criteria for selecting participants were the following:

#### **Inclusion criteria:**

- (i) Registered Midwives working in the Neonatal Unit at the selected hospital were suitable for the purposes of this study due to the breadth of experience gained in Kangaroo Mother Care as registered midwives.



- (ii) A minimum of one year's experience in a Neonatal Unit. This length of time constituted a sufficient period to obtain lived experiences in Kangaroo Mother Care in order to provide thick, in-depth descriptions.

**Exclusion criteria:**

- (i) Student Nurses. Nurses-in-training do not have sufficient skills and knowledge to provide rich descriptions and experience of Kangaroo Mother Care.
- (ii) Registered Nurses without a midwifery qualification. Nurses without midwifery generally are not employed in NICU's according to national norm.
- (iii) Less than one year's experience in a Neonatal Unit. A shorter duration of experience in the neonatal unit provides insufficient time to gain the knowledge and depth of descriptions required for this study.

Boyd (2001) regards two to ten participants or research subjects as sufficient to reach saturation, and Creswell (1998, pp. 65 & 113) recommends "long interviews with up to 10 people" for a phenomenological study. It was thus determined that eight participants would allow for in-depth data collection, and would provide the possibility for data saturation to be achieved. The achievement of data saturation was subsequently reached and checked during data analysis.

### **3.6 Data collection**

The method of data collection was an open-ended, in-depth interview, in which the participant was given probes to elicit lived experiences. This strategy was chosen as it was congruent with the philosophical framework of the research paradigm and methodology, and enabled access to participants' experiences.

#### **3.6.1 Instrument**

In phenomenological studies, participants are generally asked to describe in detail their experience of the phenomenon being investigated. In this study, the Kangaroo Mother Care (KMC) initiative was the topic of interest. The specific questions asked were

generally very open in nature, with follow-up discussions being led, not so much by the researcher, but by the participants. Openness is critical, and the exchange may be entirely open with a few direct questions asked (Koch, 1996). The reason for this is to encourage the interview process to stay as close to the lived experience as possible. Kvale (1996) cautioned, however, that it is important to look not only for what is 'said', but what is said 'between the lines'; hence verbatim accounts do not necessarily capture all of what is 'really said' in interviews.

In keeping with the phenomenological methodology, a probe sheet which guided the interview process was compiled (Appendix 1). The probe sheet merely served as a guide and the participants were given free reign in terms of the sharing of experiences with regards to KMC.

### **3.6.2 Technique**

Data collection occurred in August 2011 during day shifts at the selected hospital. A room allocated for midwives, outside the neonatal unit, was used for conducting the in-depth interviews at the preferred time for each of the midwives who agreed to participate in the study. The midwives were given the option of having the interview during their usual tea- or lunch-break, or at another preferred time when the unit manager had approved their interviews if the unit was quiet. Face-to-face, in-depth interviews were conducted by the researcher in English. The interview was tape-recorded with a voice recorder with the knowledge and consent of the participant. A single interview was conducted. On completion of the interview, the researcher verified the information given by summarising each point and obtaining the midwives' approval that the information given had been correctly summarised.

'Memoing' (Miles & Huberman, 1984) is another important data source in qualitative research that was used in this study. Memoing is the researcher's field notes recording what the researcher hears, sees, experiences and thinks in the course of collecting and reflecting on the process.

### 3.6.3 Pilot study

Prior to conducting the research study, the researcher conducted a pilot study to test probing questions, identify barriers in the data collection process and to minimise researcher bias. Due to the researcher's novice interview skills and lack of experience of cues to probe, the pilot study developed these skills and enabled the researcher to identify cues. One participant was interviewed and the researcher realised the importance of ensuring the participant's understanding of probing questions and of identifying concepts during the interview to probe further. The probing guide was adjusted.

## 3.7 Data analysis

The researcher transcribed the recorded interviews and then analysed these transcribed interviews using Colaizzi's (1978) method of data analysis. The exploratory nature of the interviews generated a huge variety of responses to the questions. It was therefore necessary to use a method of analysis which was systematic and simple. For the purpose of this study, Colaizzi's method provided a systematic and simple framework. Colaizzi's method analyses human behaviour within its environment to examine experiences that cannot be communicated.

Colaizzi's (1978) method of data analysis is comprised of seven steps. These steps are presented below with a presentation of the findings in a tabular form (Appendix 6.1 and Appendix 6.2). The basic outcome of this method of analysis is the description of the meaning of the experience through the identification of essential themes (Loiselle, Profetto-McGrath, Polit, & Beck, 2010). According to Colaizzi (1978) the following steps are pertinent to data analysis:

- **Inherent Meanings**:-the researcher reviews the collected data and becomes familiar with it. Through this process the researcher gains an understanding of the subject's inherent meaning.
- **Extracting significant statements**:-the researcher returns to the data and focuses on those aspects of the data that are most important to the phenomena being studied. The researcher therefore extracts significant statements.

- **Meaning formulation**:-the researcher takes each significant statement and formulates meaning in the context of the subject's own terms.
- **Cluster of themes**:-the meanings from a number of interviews are grouped into a cluster of themes. This step reveals common patterns or trends in the data.
- **Exhaustive description**:-a detailed analytical description is compiled of the subject's feelings and ideas on each theme.
- **Fundamental structure**:-the researcher identifies the fundamental structure for each exhaustive description.
- **Member Check**:-the findings are taken back to subjects to check if the researcher has omitted anything.

For the purposes of this study Colaizzi's steps were adapted to suit the design of this study.

### **3.7.1 Acquiring a sense of each script**

The researcher acquired a feeling for, and a familiarity with the descriptions provided by the participants by listening to the recorded interviews between four to five times and then transcribing these interviews verbatim. The researcher then read and reread the transcripts in order to become immersed in the data to enable formulation of the meaning expressed by the participants.

The researcher made notes and developed diagrams to portray the raw data and to establish a deeper understanding of the data. These notes and diagrams assisted the researcher in extracting significant statements (Refer to Appendix 7 for examples of the notes and diagrams).

### **3.7.2 Extracting significant statements**

A total of 82 significant statements were identified from the aggregated data. These were divided into four sections which were aligned to the research objectives of the study. The statements identified were highlighted, and then copied and pasted onto a separate

document stipulating the page number and line number. This procedure enabled the researcher to reread the statements, recognising emerging themes and commonalities.

Of the total number of significant statements identified, 22 described the concept of KMC; 30 described the experiences of KMC; 15 described inhibiting conditions, while 15 significant statements described the enabling conditions with regards to KMC. A table (Appendix 6.1) was developed highlighting the identified significant statements and their location in the transcripts.

### **3.7.3 Formulating meanings**

The reformulation of significant statements into a more general form known as restatements was critical during this stage of analysis. The aim of formulating meanings is to transform the concrete descriptions and language of the participants into the language of science. Science, in the context of this research study, pertains to the derived meaning of the experiences of participants of the phenomenon of KMC. This was accomplished by grouping significant statements into larger themes or groups of meaning. Table 2 (Appendix 6.2) was developed at this point to illustrate the significant statements and their formulated meanings, i.e. moving from inductive to deductive reasoning. During this step, the primary aim is understanding and the reconstruction of experience and knowledge (Beck, 1993).

Understanding was achieved through the researcher becoming immersed in the data in such a way that a measure of understanding of the experience of the participants was grasped. Reconstruction was accomplished through collating similar significant statements and interpreting the meaning of the experiences of the participants regarding the phenomenon.

### **3.7.4 Organising formulated meanings into a cluster of themes**

This stage reveals common patterns or trends in the data. Formulated meanings were then organised into clusters of themes to allow for the emergence of themes common to all participants. Development of clusters of themes was aided by principles of texture

and structure in phenomenological analysis (Creswell, 2007). Themes and sub-themes were elaborated on and their relationship was clarified by the researcher reading and re-reading the transcripts. From this process, the interpretation of the research phenomenon Kangaroo Mother Care evolved. This in-depth interpretation helped identify meanings that the participants could not articulate; considering the complex and tacit nature of the phenomenon being investigated.

Eleven themes were derived from the significant statements extracted from the transcripts. These themes were divided into two themes for conceptualisation of Kangaroo Mother Care, of which each theme was further divided into two sub-themes and one sub-theme respectively. Two themes emerged regarding the experiences of Kangaroo Mother Care; six themes emerged as hindering factors in Kangaroo Mother Care and two themes were elicited as facilitators of Kangaroo Mother Care. These themes are discussed extensively in Chapter Four.

### **3.7.5 Integration of themes into a summary description**

The combination of themes, clusters of themes and formulated meanings were synthesised to obtain an exhaustive description of the lived experiences of the phenomenon of Kangaroo Mother Care. The exhaustive description was developed to gain insights into the structure of the lived experiences of midwives in the implementation of KMC.

## **3.8 Validation of findings**

In order to ensure that the findings of this qualitative study were applicable to other settings, the following were considered for trustworthiness: transferability, dependability and confirmability. Trustworthiness of data was assessed by ensuring credibility, dependability, transferability and confirmability (Lincoln & Guba, 1985).

### **3.8.1 Credibility**

Credibility refers to ensuring that the description of the reality explored is accurately conveyed (Gillis & Jackson, 2002). In this study, credibility was achieved through the use of rich descriptions and, where possible, the participants' words to allow them to speak

for themselves. In addition, credibility was further established by ensuring that participants assisted in the analysis of data. This was done by member checking. Member checking was conducted by contacting participants telephonically after data analysis to confirm that the emergent themes were consistent with their experiences. Telephonic communication was used due to time constraints. In doing this, the researcher ensured that the emerging themes of the reality were true for those who had experienced the phenomenon of KMC.

### **3.8.2 Transferability**

Transferability pertains to the relevance of the study results to other situations (Gillis & Jackson, 2002). To ensure transferability in this study, the researcher provided thick, rich descriptions of the data collection process and analysis. By describing the context explicitly, the reader can judge for him/herself the applicability of the research findings to his/her own context (Koch, 1996).

### **3.8.3 Dependability**

Dependability in research measures how closely researchers with similar levels of experience would make the same observations of the phenomenon. Results from dependable studies should be consistent with different studies done by different researchers (Gillis & Jackson, 2002). In this study, dependability was achieved by using an audit trail to show the data gathered and the methods used. An audit trail is a transparent description of research steps taken from the start of the research steps to the development and reporting of findings (Malterud, 2001). Another researcher should be able to use the data obtained in the study to confirm the conclusions made by the principal researcher (Gillis & Jackson, 2002).

### **3.8.4 Confirmability**

Confirmability refers to whether two researchers are able to assess the data independently and agree on the final results of the data analysis (Gillis & Jackson, 2002). For this study an audit trail was used to ensure confirmability of the study and to promote neutrality. The main component of confirmability is neutrality. Neutrality demands that the results

should not be dependent on the researcher, but on the participants. Kohn and Truglio-Londrigan (2007) noted that an audit trail can be used to assess the confirmability of data. They also noted that an audit trail occurs when the researcher performs an audit of the research process. The researcher documents how the raw data was collected and how the data analysis was carried out. Through the use of the audit trail other researchers should be able to make conclusions similar to those which the original researcher made (Jackson & Verberg, 2007).

### **3.9 Ethical considerations**

Preceding the collection of data, the researcher submitted the research proposal to the School of Nursing Ethics Committee for approval, and then to the Ethics Research Community of University of KwaZulu-Natal for review and approval. Following approval, the proposal was submitted to the tertiary hospital selected for the data collection and then to the Department of Health for final approval.

Once approval was obtained, entry into the setting occurred. In any research study, ethics is considered a priority. In order to ensure that the research study was ethically sound, the following ethical considerations were adhered to as specified by the Medical Research Council of South Africa (2003):

- (i) **Respect for autonomy:-** In this regard the participants were treated as unique individuals within the context of the hospital setting. They were given freedom of choice to participate in the study on a voluntary basis. Respect was awarded to their basic human rights as individuals.
- (ii) **Informed consent:-** The intentions and motives of the study were clearly presented to the participants on an information sheet (Appendix 2.1) and their written informed consent was obtained (Appendix 2.2). The participants were given a copy of the consent form with an information sheet. Contact numbers for both the researcher and her supervisor were given to participants in case they had any queries.
- (iii) **Sensitivity:-** Sensitivity in research implies balancing scientific interest (the research) with general values and norms affecting the human dignity of the



people involved. The researcher was sensitive to the values and norms of the participants and did not impose on or challenge these.

- (iv) **Confidentiality**:-For the purpose of this study names were not used. Each participant was allocated a number to maintain confidentiality. Participants were aware that their participation in the study would remain anonymous. The interview was held in a private seminar room in the neonatal unit and only the researcher and participant were present. The participants were also aware that data would be safeguarded and stored privately, and would only be accessed by the researcher and the supervisor of the study.

### **3.10 Data management**

Hard copies of all transcripts and participants details were kept in a secure cupboard of the researcher's residence. This data will remain in storage for five years. The researcher stored all electronic data on a password-protected personal computer to which only the researcher had access, and also saved data onto a personal USB device to be kept in a locked cupboard in the researcher's residence for two years, if the research study was published, and for five years if no publication occurred, before being destroyed. In addition, no names or personal information appeared on any transcripts.

### **3.11 Conclusion**

This chapter outlined the methodology of this study. Heideggerian phenomenology as a research design enabled exploration of participants' meaning of experiences in Kangaroo Mother Care. The participants in this study were recruited from the neonatal unit at the selected tertiary level hospital in the Ethekwini district during August 2011. Participants were registered midwives with at least one year's experience in the neonatal unit. The midwives were considered to have gained sufficient experience to provide thick, rich descriptions of Kangaroo Mother Care. Open ended in depth interviews were conducted individually for data collection using a probe sheet (Appendix 1) and the data was analyzed using Colaizzi's method of data analysis. Credibility, transferability, dependability and confirmability were strategies used to validate the findings of the study. Ethical considerations for autonomy, informed consent, sensitivity and

confidentiality were maintained as well as consideration for all ethical permission from the relevant institutions.

## **Chapter Four: Data Analysis**

### **4.1 Introduction**

This chapter presents the main findings of the emergent themes aligned to the objectives which were systematically identified through an iterative process. The analysis steps illustrated by Colaizzi (1978) were used to find meaning from the aggregated data. Chapter 3 presents the analysis of the in-depth interviews collected from the eight participants. The research objectives of this study were to:

- (i) Explore midwives' understanding of the concept of Kangaroo Mother Care in the selected tertiary level hospital in the Ethekewini district.
- (ii) Explore the lived experiences of midwives caring for mothers and infants using Kangaroo Mother Care in the selected tertiary level hospital in the Ethekewini district
- (iii) To explore the barriers and enabling factors that influence the implementation of Kangaroo Mother Care in the selected tertiary level hospital in the Ethekewini district.

### **4.2 Description of participants**

A total of eight registered midwives were interviewed. There was a variety in years of experience ranging from 1 to 31 years' experience as registered midwives. The age of the participants varied from 29 years of age to 55 years of age. The duration spent by participants in the neonatal unit in the setting in which the study was conducted ranged between two to seven years. Each transcript was labelled with a number corresponding to the participant's ID number, i.e. Participant 1; Transcript 1. Below is a description of the participants.

**Participant 1** was 38-years-old and had been a registered midwife since 1996. She had been working in the neonatal unit for three years. This participant was initially not forthcoming with information, and further probing was required at some points to further elicit her experiences. The researcher found it difficult to engage the participant in an in-depth conversation as the participant struggled to express herself in a language which was

not her mother tongue. The participant's body language demonstrated openness and trust. The room in which the interview was held was private, and there were no distractions or interruptions during the interview.

**Participant 2** was 35-years-old and had been a registered midwife since 2000. She had been working in the neonatal unit for two years. This participant was very open prior to starting the recording, and began to share information about the mothers' complaints regarding problems with the location of the KMC ward. Once the recording started it became difficult to draw this information out again, and the participant laboured to express her experiences. The participant was asked whether she would prefer that the researcher switch the voice-recorder off, but the participant declined, stating that this was not necessary. There were no distractions or interruptions during this interview.

**Participant 3** was 41-years-old and had been a registered midwife since 1993; she had been working in the neonatal unit for six years. This participant was quite forthcoming about her experiences and difficulties in Kangaroo Mother Care implementation. Her body language was open, as she demonstrated willingness to share her opinions and experiences freely, and little probing was necessary. During the interview a cleaner came into the room to empty the refuse bin, but did not disrupt the flow of the interview which resumed normally thereafter.

**Participant 4** was 55-years-old and had been a registered midwife since 1980; she had worked in the neonatal unit for two years. The participant found it difficult to share in-depth experiences freely, and tended to give short, concise responses to probes. However, after the researcher continued probing and clarified questions, the participant was able to elaborate on her experiences.

**Participant 5** was 45-years-old and had been working in the neonatal unit for six years. She had been a registered midwife since 1991. The participant was very open and spoke freely throughout the interview and little probing was required.

**Participant 6** was 35-years-old and had worked in the neonatal unit since 2004. She had been a registered midwife for one year. The participant did not seem to understand the questions clearly, and the researcher clarified these misunderstandings as and when they arose. After an explanation was given, the participant was able to share her experiences and thoughts. Her body language was open and she was willing to share her experiences of KMC freely and unreservedly. There were no distractions throughout the interview.

**Participant 7** was 29-years-old and had been a registered midwife for five years. She had been working in the neonatal unit for three years. This participant was very nervous, and the researcher found that it was difficult to get her to share her experiences freely. The participant was reassured and was encouraged to share any of her experiences of KMC, and reminded that her participation was confidential and that all information she shared would remain anonymous.

**Participant 8** was 41-years-old and had been a registered midwife since 2003. She had been working in the neonatal unit since 2006. This participant found it difficult to express her thoughts in words and sometimes didn't make sense. The researcher clarified experiences she shared in order to understand her experiences clearly through the transcripts. She was otherwise open and willing to share her experiences.

### **4.3 The Emergent themes**

Encompassed in exploring the lived experiences of midwives were the objectives of how midwives conceptualised Kangaroo Mother Care (KMC); the lived experiences of midwives in terms of KMC, as well as facilitative and hindering experiences in KMC practice. The themes that emerged from the process of data analysis (Section 3.7: Colaizzi's data analysis) were aligned to the research objectives (Appendix 7). The objectives of this study were to present themes in the meaning of KMC in terms of particular lived experiences. These themes include: (A) Conceptualising Kangaroo Mother Care; (B) Experiences of Kangaroo Mother Care, (C) Hindering experiences and (D) Facilitating experiences. The themes were therefore aligned to these objectives.

### **4.3.1 Conceptualising Kangaroo Mother Care**

Participants conceptualised KMC through experience, partnered with theoretical knowledge. The host of meanings participants attached to the concept of KMC was aggregated into two themes: (i) KMC as physiological concept; (ii) KMC as an emotive concept.

#### **(i) Kangaroo Mother Care as a physiological concept**

The data analysis revealed that most participants attached a very clinical meaning to the concept of Kangaroo Mother Care (KMC). These were understood in terms of the physiological effect of KMC on the process of caring and clinical management. Data analysis revealed that participants' learned knowledge of KMC through training pervaded their understanding of KMC, and what KMC meant to them in their experience. KMC as a physiological concept, although in a sense, a reiteration of what participants had learned in theory, was also evidenced in experiences shared by participants which have further shaped their understanding of KMC. Understanding of KMC as a physiological concept has thus been understood as:

#### **A catalyst for health**

A catalyst denotes an agent which fuels something. The data analysis revealed that participants' conceptualisation of Kangaroo Mother Care incorporated its effects on the infant's physical being. In light of this, KMC has been recognised by participants as an agent fuelling the infants' health outcomes in a promotive way and protectively. The sub-themes identified within this theme were KMC as a: (a) A Promotive Agent and (b) A Protective Agent.

#### **(a) Promotive agent**

Participants expanded on numerous ways in which Kangaroo Mother Care (KMC) fueled the infants' health physiologically. The core physiological understanding of the concept from the participants' expression was in terms of its positioning, which optimises the infants' health through promotion of growth and development. The growth was attributed to various reasons, as expressed by the participants; some of these reasons

which emerged from the participants' lived experiences related to the nearness of the mother. It emerged from the participants' iterations that the closeness of the infant on the mother's chest parallels the position of the unborn baby in the womb, which is the ideal environment for preterm infants. The warmth provided by skin-to-skin contact which was characteristic of KMC; the availability of nutrition from the mother's breasts which are in close proximity, and the familiarity of the mother's heartbeat all add to this 'ideal' environment which the womb essentially provides for the infant. This environment was suggested by the participants' comments as stimulating growth and development. The physiological outcome of KMC in fostering development was conceptualised as a positive mechanism to promote infants' health. The following selected excerpts illustrate the participant's conceptualisation:

*"Quick weight gain is a positive thing that has happened from KMC"* (Transcript 3; Line 279).

*"It's not the same as you feed the baby and put the baby back to bed. It's not the same. There's that warmth and the heartbeat of the mother because the baby is still supposed to be inside the mother. It feels like it is inside...so that makes it grow"* (Transcript 7; Lines 844-848).

*"The child listens to the mother's heart and this facilitates growth"* (Transcript 3; Lines 258-259).

*"And because it's proven that being nearer to the mother makes the baby grow faster. The growth hormone is produced there... and even breastfeeding on demand helps with that"* (Transcript 4; Lines 433-435).

As evident from the above cited extracts, reported mechanisms such as the positioning of the infant, reassurance of the mothers heart beat to the infant were noted as the participants reasons for stating that KMC has a promotive characteristic in the

relationship of the infant of a low birth weight and its progress towards improved health outcomes.

### **(b) Protective agent**

Moreover, the concept of Kangaroo Mother Care (KMC) was revealed by participants to be a protective agent, fostering health. With KMC practice reducing the length of hospitalisation due to quick weight gain, participants conceptualise a protective aspect of KMC, not only by reducing overcrowding due to reduced patient load and less work for the nurses; but in a resulting reduction in cross-infection. Emerging from the interviews, participants noted that the primary goal of preterm infant nursing care is weight gain. Participants' input revealed that through the intervention of KMC, positive outcomes such as weight gain were achieved, resulting in reduced hospital stay. Data analysis revealed that earlier discharge prevents the neonatal unit from becoming overcrowded which is a contributing factor to cross-infections in a hospital setting. It therefore emerged from the participants' experiences, that KMC indirectly protects the infant from harm and maintains optimum health through its effects on reducing hospital stay due to accelerated weight gain, thus reducing cross-infection. The concept of KMC was thus seen as a protective mechanism which indirectly protects the infant and improves health outcomes, as stated by the participants. This protective mechanism is illustrated by participants in the transcripts:

*“It does help, because instead of having lots of babies here... because we used to keep them to gain weight before they go home. I think it used to take... we used to keep them for about two to three months but now with their mothers they just grow fast”* (Transcript 1: Lines 50-52).

*“It is no longer overcrowded. There is less cross-infection; we can give a lot of care, we can supervise those mothers easily”* (Transcript 5; Lines 529-530).

*“Those babies that do KMC hardly get sick unless there is a problem with the baby. There is less work for the nurses and less cross-infection (Transcript 5: 640-642).*



The above excerpts reflect participant's understanding of Kangaroo Mother Care's protective mechanism of reducing length of stay, thus resulting in reduced overcrowding and less cross-infection. Furthermore, data analysis revealed that, although a less overcrowded environment was identified by participants as a factor in decreasing cross-infection; protection was also offered through the isolating nature of Kangaroo Mother Care (KMC). It emerged that participants understand KMC to be an isolated event, where the infant is safely in the mother's care. With the mother therefore having the most contact with the infant, there is less handling of the infant by the nurse who is touching other infants too. KMC therefore capitalises on the sole contact of the infant with the mother, and limits handling by midwives with a resulting reduction in cross-infection. This sentiment is illustrated by the following excerpt:

*“If the baby is with the mother it is safer, because it is just the baby and the mother. If the baby is in the nursery where there are many babies, the nurse is going to touch this baby and that baby. With KMC, the mother and baby are isolated; it is just like in an isolation ward or isolation bay to keep the mother and baby together. No one is going to touch the baby except the hands of the mother”* (Transcript 5; Lines 535-539).

KMC as a protective agent is also evidenced in participants' understanding of its role in prevention of hypothermia. Preventing hypothermia was alluded to by participants as the reason for practicing KMC, due to the fact that KMC offers a position which facilitates the regulation of the infant's body temperature by the mother. This is protective in that the infant is not exposed to changing room temperatures and the infant therefore benefits through maintenance of body temperature by the mother, thus reducing hypothermia. The participant's conceptualisation of this protective element of KMC is evidenced in the following excerpts:

*“The temperature (infant's body temperature) is being maintained (during KMC) as well”* (Transcript 4: Line 410)

*“Kangaroo Mother Care is the care that is mostly given to preterm babies or those babies who benefit from bonding with their mothers, and for prevention of hypothermia and hospital infections”* (Transcript 5; Lines 505-507).

*“What I have experienced is that babies grow faster, more especially when they don’t get hypothermia and they get love”* (Transcript 8: Line 927-928).

The above excerpts encapsulate the protective mechanism of Kangaroo Mother Care in that it is responsible for regulating the infant’s temperature, thus acting as a protection from hypothermia.

## **(ii) Kangaroo Mother Care as an emotive concept.**

Participants’ understanding of KMC also revealed an emotive concept. Knowledge interlinked with lived experiences of KMC has shaped participants’ conceptualisation and created an emotive association with KMC. This emotive concept of KMC relates to its role in bonding and the consequential nurturing process that results. The sub-theme which emerged relating to the conceptualisation of KMC as an emotive concept was ‘Close Enough to Bond’.

### **Close enough to bond**

It emerged that, central to their understanding of Kangaroo Mother Care (KMC) is the fact that it involves close contact of the infant with the mother. This physical close contact referred to by participants tangibly illustrates a closeness that develops as a result on a deeper level. Although the physical closeness is referred to, participants also emphasise the emotive intent of KMC which facilitates the mother and infant’s relationship in drawing them closer. Physical proximity created by the KMC position facilitates this “closeness” which is accomplished. Some of the participants’ statements reinforcing this theme are as follows:

*“It’s when we take the baby and keep the baby with the mother all the time to ‘kangaroo’ them”* (Transcript 1:Lines 16-17).

*“Kangaroo Mother Care is whereby the mother stays with the child”* (Transcript 3; Lines 257).

*“What I understand about KMC is that the mother and child are getting close”* (Transcript 8; Line 893).

These above cited excerpts illustrated participants’ understanding of KMC in terms of an emotive underpinning in that physical closeness of the infant and mother provided by KMC, achieved an emotional closeness. KMC which is recognized as the mother staying with child ongoingly reinforces a closed, intimate environment which facilitates a mother-infant bond.

The outcome of “closeness” rendered through Kangaroo Mother Care bonding and the infant being with the mother is recognised by the participants to be facilitative of bonding. Preterm infants are identified by participants as being in need of bonding, and Kangaroo Mother Care is noted to be beneficial for these infants because of its effects on bonding. By being together, the mother and infant’s relationship is perceived by participants as being enhanced, in that the mother gets to know her baby, and the baby becomes familiar with the mother. It was noted by the participants that bonding is a mutual and interactive process of attachment, and participants predominantly shared how this occurred through Kangaroo Mother Care. This is highlighted in the following excerpts:

*“Kangaroo Mother Care is the care that is mostly given to preterm babies or those babies who benefit from bonding with their mothers”* (Transcript 5; Lines 505-507).

*“KMC is where you take the baby and put it on the mother’s chest here, to promote growth and bonding”* (Transcript 6; Lines 671-672).

*“What I understand is that babies should bond with their mothers; most of them are premature babies so they need to be kept close to their mothers and bond”* (Transcript 7; Lines 819-820).

The above statements outlined further the emotive concept of KMC in terms of its role as a facilitator of bonding.

### **4.3.2 Experiences of Kangaroo Mother Care**

The proverbial ‘learned’ knowledge gained by participants during their training or careers guided much of their understanding of Kangaroo Mother Care, however, individual experiences in the implementation of KMC in practice have shaped participants’ views, and are responsible for the development of the attached meaning of KMC into two themes: (i) Maternal Instinct; (ii) Maternal Capability.

#### **(i) Maternal instinct**

With the infant nestled against the mother’s chest, not only is a bond forged, but participants divulged how maternal confidence is increased. According to participants, this confidence is escalated by KMC as the mother perceives herself as valuable in contributing to her infant’s care. KMC is usually the responsibility of the mother, and this defined task gives mothers the sense that they are really caring for their infants, and that their infants’ care is not solely the responsibility of the hospital staff. A sense of feeling needed adds to the mothers’ self-worth, and subsequently impacts on their confidence. The close and constant contact between the mother and infant sensitises the mother to the infant, and she begins to become aware of the infant’s needs. This maternal instinct is thus awakened in the mother as she spends time with the infant in KMC. Fear, which is an expected response to the fragile appearance of preterm and low birth-weight infants, is overcome in KMC, and further adds to the mothers’ confidence as they feel a sense of belonging. A sense of belonging is also shared by participants as relating to the fact that, without fear, the mother feels proud, which enhances the relationship and bond provided by KMC. The natural tendency of the mother to have a heightened awareness (i.e.

maternal instinct) of her infant, is noted, through the experiences of participants, to become intensified by KMC as described in the following statements:

*“The mother also benefits by gaining confidence that she is really taking care of her baby”* (Transcript 4: Lines 399-400).

*“If they (i.e. Mother and infant) are together it is easier for the mother to see if there is something wrong with the baby”* (Transcript 1: Line 123-124).

*“The baby was tiny and small and she was afraid of taking care of it, but through this experience (i.e. KMC) you could see the pride and she was not afraid anymore. She had a feeling of belonging”* (Transcript 4: Lines 440-442).

Participants’ statements allude to the beneficial effects of KMC in increasing maternal confidence, sensitivity of mothers to their infants’ needs and dissipation of fear.

## **(ii) Maternal capability**

Acquisition of skills and preparedness for discharge are explained by participants as outcomes of the maternal instinct shaped by the close and constant contact that KMC provides. Mother and infant are constantly together, and the mother learns basic skills under the supervision of the nurses as she is always with the infant in KMC. This involvement of mothers is facilitative, and benefits mothers as well as staff in the provision of care, creating a readiness and capability in the mothers which, in turn, further increases their confidence. By virtue of this, mothers aid the nurses and make discharge preparation substantially easier, as they become more capable of caring for their infants. The capability of the mothers is shared by participants in the following excerpts:

*“They (i.e. mothers) learn patient care in preparation for when they leave the hospital and look after the baby at home”* (Transcript 5: Lines 531-532).

*“In the nursery it is easier for us (i.e. midwives), the mothers experience how to look after their babies, they spend a lot of time with them, and after they go home they know what to do with their babies”* (Transcript 6: Lines 715-718).

The above excerpts identify experiences of KMC in facilitating mothers’ capability in caring for their infants so that discharge is easier and mothers feel prepared to leave the hospital and care for their infants at home.

Capability is also an experience noted by participants which aids in improving health outcomes. Maternal capability, enhanced by KMC, equips mothers with skills and instincts which, as experienced by participants has resulted in the reduction of complications after discharge which were previously higher. Some participants also emphasised that, whereas prior to KMC practice they often had mothers returning with infants after discharge, as the infants experienced complications due to aspiration; KMC provided them with experience in learning how to properly manage their infants and such complications would therefore be avoided. This is evidenced in the following statements:

*“ Most of them that do KMC are prems, so when the mother sees the baby is blue, the baby has aspirated, but now we no longer have those problems, the number has been reduced”* (Transcript 6: Lines 729-731) .

*“That (i.e. KMC) makes it easy for us (i.e. midwives) as there are no babies coming back with problems”*(Transcript 6: Lines 723-724).

These statements highlight experiences of KMC in which reduction of complications due to increased maternal capability have been noted.

### **4.3.3 Hindering factors**

Five themes were identified by participants as hindering the practice of KMC: (i) Maternal concerns, (ii) Increased work-load (iii) Lack of training (iv) Management support and (v) Resource scarcity.

### **(i) Maternal concerns**

Implementation of KMC by participants is described by participants as a task which is hindered by the mothers. As the mothers are the key to practicing KMC, without their understanding and co-operation KMC is not likely to be implemented.

Participants indicated that mothers freely shared their worries and concerns with them regarding their dissatisfaction with the environment of the allocated ward for KMC. The fact that mothers felt uneasy about being moved from the familiar post-natal ward to the KMC ward with which they were unfamiliar was highlighted. In the event that a mother and infant are required to practice KMC in the setting of the study, they are moved from their main ward to the KMC ward. This arrangement is noted as being met with by resistance from mothers as they keep getting moved and perceive this as disruptive. With a resistant mindset from the mothers at the outset, KMC is unlikely to be beneficial, as the mothers feel as though they have no say and are forced beyond what is familiar to them. Participants reported that this unfamiliarity resulted in mothers being ill at ease, leading to discomfort and less KMC practice. The resistance to changing environments is evidenced in the following extracts:

*“When there is a need for Kangaroo Mother Care we take the patient out from their ward to the KMC... and some of them are not happy about it”* (Transcript 1; Lines 76-78).

*“I think they should have a ward... that is for mothers who do Kangaroo care only... not to have to take mothers from one ward to another ward. They must have a place for them only”* (Transcript 1: Lines 68-70).

The majority of the participants also conveyed the complaints received from mothers regarding the allocated KMC ward. Concerns regarding the structure of the facility voiced by participants is further validated by the mothers concerns regarding the institution. The ward environment, which is a confined space and a thoroughfare between an obstetric and gynae ward and the toilet facilities, affects the mothers' level of comfort and thus impacts on KMC practice. Their discomfort is such that mothers prefer not to stay in the ward. As the allocated ward is the only place in which KMC can be

practiced continuously, this situation provides cause for concern as mothers are thus reluctant to practice KMC due to their feelings of discomfort. The location of the ward is seen to affect mother-infant bonding, due to patients constantly walking up and down, and the cold environment, which adds to the sense of discomfort and unease, whereas KMC is intended to be therapeutic. KMC, as conceptualised by participants, is an isolated event which requires privacy and space, so the KMC ward should provide the ideal environment for this, however this is not so, and this issue therefore hinders KMC. Maternal concerns with the ward environment are clear from the following excerpts:

*“And they (i.e. mothers) say the other patients, those who have wounds... C/Section (i.e. Caesarian Section)... they pass through there.. .they are not happy to be there... and the ladies say it is cold”* (Transcript 2: Lines 196-199).

*“The mothers are complaining that, while they are busy feeding their babies, other mothers are passing by. It is a lying-in ward, so there are all different people passing through”* (Transcript 3: Lines 311-313).

*“Happy, but some (i.e. mothers) are not happy due to the environment they are in; in this hospital, but other than that they are happy to practice it. Because some of the mothers want to go home early due to the environment, as they say it’s not healthy”* (Transcript 5: Lines 865-867).

Other significant concerns raised by mothers fuelling their dissatisfaction are personal issues, such as that mothers do not feel competent to look after their infants, or, in cases where they are not well physically, this thus hinders KMC practice. As KMC has been shown by participants to be a frightening concept for some, the added sense of the mother feeling inadequate or doubting her own ability to cope would, in combination, render the mother unable to practice KMC. Participants relate how mothers who cannot trust themselves to care for their infants are reluctant to do Kangaroo Mother Care in case something goes wrong; as to them this is indicative of the fact that they cannot look after their infants well. On the other hand, when the mother is willing to practice KMC yet her physical health limits the activities she can participate in, this is also a hindrance.



Hindering factors relating to the mother's belief in her ability to care for the infant and the mother's state of wellbeing are evident from the following excerpts:

*"Others (i.e. mothers) are difficult if they don't like it, they don't trust themselves to be able to look after their babies well"* (Transcript 6: Lines 675-677).

*"What I did experience is that if the mother is sick in the ward, the baby doesn't get a chance to practice KMC, that's what I experience"* (Transcript 8: Lines 997-998).

The above excerpts not only recognise the role of mothers willingness to practice KMC due to issues of feeling inadequate, but the poor physical health of mothers who are willing but unable to practice KMC. These maternal concerns thus hinder KMC practice.

## **(ii) Increased work-load**

Hindrances in the practice of KMC were broadly understood by participants to relate to their perception of KMC as an increased work-load. This view contributes to hindering KMC as added work demands much more input to implement.

Due to the structure of the setting of the study, mothers and their infants eligible to practice KMC are required to move to the allocated KMC ward for KMC practice. This transferring process is considered to create additional work for staff members and therefore they are reluctant to do this, thus inhibiting KMC practice. Data analysis revealed participants' views of Kangaroo Mother Care as an increased work-load. Thus Kangaroo Mother Care is viewed in a negative light, creating a hindrance to its practice. This hindering factor is highlighted in the following extracts:

*"I think it is more work for them (i.e. midwives/nurses) say, if the mother was admitted to that ward, you find that now she needs to move to another ward"* (Transcript 1: Line 85-86).

*"If we can get more staff it would help"* (Transcript 1: 94-95).

### **(iii) Inadequate preparation for Kangaroo Mother Care**

Further to the perception of KMC as more work, participants expressed that inadequate preparation for KMC was a hindrance to KMC practice. Lack of in-service training and education in KMC constrains its practice, as staff do not have a clear understanding of its importance and up-to-date research findings regarding its effects. Without understanding of and training in KMC, staff are less inclined to encourage KMC practice. Understanding of KMC is seen as essential for the practice of KMC to be maximised. The inadequate preparation for KMC is noted by participants in the following significant statements:

*“They (i.e. management) should educate much more... do more in-service about its importance”* (Transcript 3: Line 320-321).

*“I think more training will help so that we can know and understand better how it is going to help us (i.e. midwives/nurses)”* (Transcript 1: Lines 56-57).

### **(iv) Management support**

The responsibility of instituting training and communicating changes or additions to nursing practice is felt by participants to rest with management as mentioned in the above excerpt. Management is seen by participants to be the primary role-player in KMC practice, and communication by management, or lack thereof inhibits implementation and sustained KMC practice in the ward setting, as staff members do not understand the importance and benefits of KMC. Coupled with this is the fact that staff members develop attitudes and resistance to KMC as it is felt to be forced upon them, and is viewed as an additional task. This misunderstanding of whose responsibility KMC is was conveyed by participants who explained that nurses allocated to the KMC ward viewed KMC as the responsibility of neonatal unit staff and therefore referred any problems to them. KMC is thus linked to nursery responsibility, which hinges on the fact that the role of management in its implementation has resulted in miscommunication or misrepresentation to staff, thus inhibiting KMC practice. Management’s role and impact is clearly outlined by the participants in the following excerpts:

*“If we’re positive improvements can happen... it’s that the matrons should communicate... you know. It should be something that should have been evaluated at intervals since it was implemented”* (Transcript 3: Lines 372-374).

*“Because I think the baby bond which is one of the best things that needs to be promoted. The hospital and management need to promote it”* (Transcript 4: Lines 448-449).

*“Okay..it has to start from management according to my understanding.. .they should actually educate much more... do more in-service training as to the importance of it. We know very well the importance of it, but if management could inform us so that it is enforced... you know”* (Transcript 5: Lines 320-323).

The above excerpts further emphasise confusion amongst staff in terms of whose role KMC. The lack of support from management made their role of advocacy difficult thus inhibiting maximised KMC practice.

#### **(v) Role clarification**

A sub theme which emerged through the data centred around the hindering nature of role clarification for midwives. The excerpt below reflects a participant's lived experience of staff that lack clearly defined roles and understanding of these thus impacting on advocating KMC. Lack of role clarification escalates staff attitudes as without set roles staff are uncertain of boundaries.

*“The nursing staff attitude. The problem with the postnatal ward staff is that they don’t think KMC belongs to them. They usually think KMC has something to do with babies, so the nursery staff have to take care of those babies”* (Transcript 6: Line 596-598).

#### **(vi) Resource scarcity**

Resources were reported by participants as assisting in the provision of care, and when these are not available, or there is a shortage, this inhibits KMC practice. An example of

this is the fact that there were no heaters in the KMC ward. As a heater is a necessity in an environment in which preterm and low birth-weight infants are nursed due to infants' lack of ability to maintain body temperature; the lack of this resource makes the environment cold and mothers are less likely to practice Kangaroo Mother Care. As infants are required to be naked against the mother's chest during KMC, a cold ward environment due to lack of heaters further deters mothers from KMC practice. Although KMC requires little in terms of resources, the lack of these essential elements is likely to discourage mothers and staff from its practice. The provision of these resources is noted as stemming from a lack of finances provided by the government. Consequently, participants felt this lack impacts on and hinders KMC practice, as they cannot provide optimum care due to this lack. Participants indicated that, added to the lack of sufficient resources, space was also an issue. The KMC ward which currently has eight beds cannot accommodate the need for beds, which inhibits KMC and possibly delays the initiation of KMC and its effects. Space, as reflected in participants' understanding of KMC, is essential for the privacy and "closeness" achieved by KMC, and in order to allow mother-and-infant interaction as an isolated unit. Resource scarcity is clearly seen as a hindrance to KMC in the following statements:

*"Our institution does not have enough facilities... in fact, enough equipment to take care of those mothers. Like it was very cold in winter, so we did not have enough heaters"* (Transcript 5: Lines 598-601).

*"We are still waiting for the government to give the money, but there's no money"* (Transcript 6: Lines 697-698).

*"The problem is there is not enough space for the mothers to do KMC 24 hours"* (Transcript 8: Lines 962-963).

#### **4.3.4 Facilitating factors**

Two forms of facilitating factors emerged from the shared experiences of midwives, namely: (i) Motivate and Educate and (ii) No place like home.

### **(i) Motivate and educate**

Participants felt that motivation and education work hand-in-hand to enable KMC practice. As essential as education is, the added motivation by management is acknowledged as facilitating practice. Staff training, which would inform the staff of up-to-date research on KMC, is thought to serve as a motivator to nurses to practice KMC as they would better understand how it is beneficial in clinical practice. Moreover, implementation of KMC requires measures to sustain its practice which are achieved through monitoring and evaluation. Monitoring and evaluation were thought to be best accomplished through allocation of an individual for this task. Participants feel that if a person is allocated for the purpose of monitoring and evaluating KMC, then the inhibitors could be addressed and the enablers strengthened in order for KMC to be used to its full potential. Involvement of staff in the implementation of KMC by management, as well as bench-marking with other hospitals was mentioned by participants as a means of ensuring that KMC is practiced as it should be. Staff involvement is associated with a sense that participants feel valued and part of decisions, a factor which boosts morale, and enhances staff willingness to implement initiatives like KMC.

*“I think more training will help so that we can know and better understand how it is going to help us” (Transcript 1: Lines 56-57).*

*“Continuous monitoring, to ascertain whether the appropriate principles and guidelines are followed... so there needs to be a person available who can ensure that this is done. There needs to be at least a Kangaroo co-ordinator” (Transcript 3: Line 323-325).*

*“We need to motivate the nursing staff to accept that it really helps” (Transcript 5: Lines 639-640).*

### **(ii) No place like home!**

The need for a better environment, as mentioned frequently by participants, and the lack thereof was the reason for mothers' complaints which served as inhibitors. The essentials of an environment conducive to KMC referred to as a place like “home” were recognised

to constitute two aspects, namely: (a) A conducive environment and (b) Resources. These two sub themes are discussed in detail below with supporting extracts

### **(a) A conducive environment**

Participants repeatedly emphasised the facilitative role of a suitable environment for KMC practice. This was seen to be possible through provision of a specific room that was not a thoroughfare, but which offered privacy for KMC and breastfeeding. As the concept of KMC encompasses an understanding of privacy and closeness, the current environment limits this practice, and the provision of a private, enclosed room is suggested by participants to be what is required. The importance of this room as being a homely environment where mothers feel relaxed and comfortable was seen as imperative to enable KMC practice. A home is known to be a place of safety and refuge, a place where mothers can be themselves and not feel limited; and such an environment is considered ideal, as, when mothers are at ease, the infants can relax too and thus both parties mutually benefit. Facilitators of a homely environment are identified by participants in the following excerpts:

*“If we can have that specific room for the Kangaroo Mother Care, it will be fine...”*  
(Transcript 1: Line 110-111).

*“I think a homely environment... wherever they are, they should be able to... because the mothers now must be able to feel at home... in fact, even making their tea... it should be there... according to me, it should have that homely atmosphere”* (Transcript 4: Lines 465-468).

### **(b) Resources**

Further to this, the participants remarked on the need for comfort in the KMC position which would be facilitated by a baby-carrier for KMC support. Participants reported a lack of linen to be one of the inhibitors, as linen was often used for KMC. For KMC to be facilitated, the comfort experienced by mother and child in terms of positioning as well as exposure are seen as important. An element of safety is seen as needing to be

incorporated with the need for comfort, as when an infant is securely in KMC the mother feels s/he is safe. Other resources further creating a homely environment were furniture and heaters which are seen to facilitate KMC practice.

*“More heaters... better furniture... comfortable sofas”* (Transcripts 3: Line 350).

*“I think something like a carrier would help so that they can hold their babies... something like an imbeleko (Zulu word meaning Baby-Carrier)... in Zulu it is imbeleko... a baby-carrier* (Transcript 2: Lines 223-224).

*“More KMC clothes I can say, because sometimes we are short of linen and we don’t have enough to support the baby”* (Transcript 7: Lines 859-860).

#### **4.4 Summary description of the phenomenon**

The depth and breadth of experiences shared by the participants relating to Kangaroo Mother Care were extracted, aggregated, classified and interpreted into a host of meanings according to the research objectives. These meanings were reduced to sub-meanings within each objective according to the participants’ experiences.

Conceptualisation of KMC aligned to the first objective elicited two contrasting meanings which described the physiological aspect of KMC, as well as the emotive aspect of KMC. Participants’ views of KMC as a physiological concept pervaded the descriptions given during interviews. The clinical connotation of KMC was alluded to as well as the reasons for conceptualisation of KMC as a catalyst for health. KMC was seen as a contributing agent to health, and within this interpretation were a view of KMC as a promotive agent in growth and development, as well as a protective agent in reducing cross-infection through less overcrowding, and prevention of hypothermia. The emotive concept of KMC related to the “closeness” of the positioning in KMC, fostering the bond between the mother and infant.

The experiences of the participants regarding KMC as the second research objective captured the physiological and emotive outcomes of the mother and infant practicing KMC. Maternal instinct and maternal capability developed through KMC practice are described by participants at length, and are seen to increase maternal confidence, facilitate acquisition of skills and preparedness for discharge; thus improving health outcomes.

Thirdly, in classifying the research objectives, hindering experiences were extracted from the participants' descriptions. Meanings that emerged of hindrances were that of the increased work-load of KMC as viewed by participants. Inadequate preparation for KMC, poor management support and role clarification were also seen as hindrances, as evidenced by participants, and also as the reason for staff attitudes and resistance regarding whose responsibility KMC is. Maternal concerns were also highlighted as a significant hindrance to KMC practice, as mothers play an important role in implementing KMC, and without their support, the practice of KMC is severely constrained. Maternal concerns that participants referred to were complaints about the ward environment; mothers' inability to trust themselves, and poor health. Finally, resource scarcity was considered a hindering factor for KMC due to the fact that the lack of finances hindered the comfort provided by certain equipment and space deemed necessary for KMC practice.

Facilitating experiences classified as the fourth research objective were divided into two meanings. The first facilitating factor participants mentioned was that of the importance of motivation and education. Management's promotion of KMC, accompanied by relevant training, is a key factor expressed by participants in facilitating KMC practice. Secondly, the provision of a homely environment conducive to the needs of KMC is thought to facilitate KMC. This is clearly shown by the fact that maternal concerns with the ward environment have hindered KMC practice. KMC requires an environment that is comfortable, and the reason for this facilitator is because there is 'no place like home.'



## **4.5 Conclusion**

Eleven themes emerged from participants' iterations which explicate the lived experiences of midwives regarding Kangaroo Mother Care. Data analysis which was informed by Colaizzi (1979) provided a framework which enabled the researcher to make meaning of the phenomenon in a way that was credible and maintained faithfulness to the participants and their interpretations. Participants' descriptions which were extracted, formulated, clustered into themes and integrated; revealed the phenomenon of Kangaroo Mother Care in alignment to each of the research objectives. Lived experiences of Kangaroo Mother Care shaped participants' conceptualisation of Kangaroo Mother Care according to a physiological as well as an emotive concept. Additionally, exploration of the participants' lived experiences resulted in the emergence of themes relating to hindering and facilitating factors of Kangaroo Mother Care. Using the interpretive paradigm enabled understanding of the research phenomenon in context from the experiences of the participants.

## **Chapter Five: Discussion of Findings, Limitations and Recommendations**

### **5.1 Introduction**

The philosophical stance of the researcher, which was that of an interpretive approach, guides further discussion of the findings which emerged. According to Schultz (1996), “In contrast to the causal mode of functionalist analysis interpretive analysis is associative.” For the interpretivist, what is meaningful emerges from the data, therefore the process is inductive. In presenting results, it is the narrative of the participants that speaks. Analysis using an interpretive approach is essentially the hermeneutic circle which proceeds from naïve understanding to an explicit understanding that emerges from explanation of data interpretation (Allen & Jenson, 1990). A second literature review following emergence of the themes was thus conducted to validate findings of the study and create a framework for relating new findings to previous findings.

This study was designed to fill a gap in current research regarding the lived experiences of midwives in relation to Kangaroo Mother Care. These lived experiences are considered paramount to Kangaroo Mother Care practice, as midwives are significant role-players in KMC implementation. By exploring midwives’ experiences regarding the concept of KMC, lived experiences and perceived hindering and facilitating factors to its practice, this study aims to contribute to current research and to aid midwives in fulfilling their roles in implementing KMC across different spheres.

### **5.2 Discussion of findings**

The experiences implicitly shared by participants were aggregated in alignment with the research objectives of the study; which included lived experiences of the concept of KMC, experiences of KMC, as well as hindering and facilitating experiences governing their practice.

### **5.2.1 Conceptualisation**

Emergence of two separate conceptualisations of Kangaroo Mother Care occurred during data analysis. Participant's iterations were divided into the concept of the physiological aspect of Kangaroo Mother Care (KMC) and the emotive aspect of KMC.

#### **5.2.1.1 Kangaroo Mother Care as a physiological concept**

Central to the participants' knowledge, thoughts and experiences of Kangaroo Mother Care (KMC) was the understanding of this method of care as a clinically oriented concept. KMC as a physiological concept pervaded the descriptions of participants' experiences. This conceptualisation focused on the physiological outcomes of KMC and data analysis revealed this theme as a catalyst for health.

The sub-theme of the catalytic action of Kangaroo Mother Care as a promotive measure, improving infants' health outcomes was noted by the participants. Promotion of health emerged through participants' comments regarding the effect of Kangaroo Mother Care on the infants' growth and development. Participants revealed that KMC resulted in increased weight gain due to the close proximity of the infant to the mother which encouraged breastfeeding and facilitated a nurturing environment similar to that of the womb.

In this study, KMC was thus expressed by participants to be a promotive agent with a catalytic action on infant health. The study's findings illuminated the gap in current research regarding the actual physiological processes which result in KMC's impact on weight gain over a shorter time period. The reasons for these positive health outcomes were merely surmised by participants through a logical thought processes. Aligned to these findings, several authors, namely Conde-Agudelo (2000); Hann et al. (1999) and Gupta, Jora and Bhatia (2007), in separate studies, explored the effect of Kangaroo Mother Care on weight gain, and all of these studies indicated that KMC practice resulted in increased weight gain. These studies thus demonstrated that KMC affected average daily weight gain which is the experience revealed by participants in the study.

Further to this, data analysis revealed the catalytic action of Kangaroo Mother Care in terms of its protective effects as a second sub-theme. The protective mechanism of KMC is revealed in participants' experiences of shorter hospital stays due to quick weight gain, thus reducing overcrowding and consequentially preventing cross-infection. Additionally, the protective action of KMC is further revealed in its prevention of hypothermia through the mothers regulating body temperatures.

This physiological conceptualisation of KMC in terms of its action as a protective agent is revealed in this study's findings. This protection is offered by the reduction in cross-infection due to its promotive effects, as well as through its prevention of hypothermia. Aligned to the findings regarding reduction in cross-infection, several authors, namely Conde-Agudelo (2000) and Venencio and Almeida (2004), in separate studies, determined the effect of KMC on nosocomial infections. These authors' findings both indicated that KMC reduces nosocomial infection which is in alignment with the findings of this study. In addition, it is postulated that the baby is colonised by the mother's commensal organisms reducing the risk of hospital infections (Lawn, 2010). Studies conducted separately by several authors, namely Kadam, Bimoy and Kanbur et al. (2005) and Ali, Sharma and Alam (2009) explored, in addition to other effects, the effect of KMC on hypothermia in comparison to conventional care. Each of the author's studies showed that KMC resulted in the reduction of hypothermia. Participants' conceptualisation of KMC in this study with regard to its protective measure of the prevention of hypothermia is therefore in alignment with the findings of these authors.

#### **5.2.1.2 Kangaroo Mother Care as an emotive concept**

Kangaroo Mother Care (KMC) as an emotive concept was also determined through a data analysis of the aggregated data, and the reason for segregation of the participants' conceptualisation. Evident from this study's findings, it was noted that participants attached a somewhat emotional underpinning to the concept of KMC through descriptions of KMC as a facilitator of bonding through close bodily contact. The closeness attained through physical touch was revealed by participants' iterations to be understood to draw the mother and infant closer emotionally, creating an attachment

referred to as a 'bond'. Through the data analysis it thus emerged that bonding in preterm infants was thought to be beneficial and necessary and fulfilled by Kangaroo Mother Care.

In this study, the emergent emotive theme of conceptualisation of Kangaroo Mother Care centred on its bonding effect facilitated by the physical closeness of KMC practice. Aligned to these findings, several authors, namely Charpak, Ruiz-Pelaez & Figueroa de Calume (1996); Kirsten, Bergman & Hann (2001) and Anderson (2003), in separate studies, established the importance of KMC in improving maternal-infant bonding. Further to this, in Feldman's (2003) study on the contribution of KMC to family interaction, proximity and bonding, the author noted that infant proximity was found to be conducive to mutual gaze and touch facilitating the bonding process. Feldman's (2003) findings regarding the proximity or closeness referred to by participants in promotion of the bonding process offer supportive findings to the conceptualisations of participants in this study. The importance of bonding in preterm infants expressed by participants is also aligned to Feldman's (2003) study, which highlighted the development risks of preterm birth leading to mother-infant interaction problems, and is the reason why bonding is seen as vital to avoid this.

### **5.2.2 Experiences**

Exploring the lived experiences of participants evoked an array of outcomes relating to KMC's mutually beneficial effects on the mother. Participants were forthcoming regarding experiences of the domino effect of KMC. Emergent themes in this study pertaining to participants' experiences filtered through to the mother and facilitated maternal instinct and maternal capability.

#### **5.2.2.1 Maternal instinct**

Data analysis revealed that, as a result of the close contact with the infant provided by Kangaroo Mother Care, mothers became sensitised to the needs of the infants. This can be noted in the following two extracts:

*“In the nursery it is easier for us (i.e. midwives), the mothers experience how to look after their babies, they spend a lot of time with them, and after they go home they know what to do with their babies”* (Transcript 6: Lines 715-718).

*If they (i.e. Mother and infant) are together it is easier for the mother to see if there is something wrong with the baby”* (Transcript 1: Line 123-124).

This awareness elicited the theme regarding the lived experiences of KMC in awakening the maternal instinct. Participants’ responses also revealed that this maternal instinct is concurrently associated with increased confidence. The increased confidence was seen as a response to the mothers feeling a sense of pride, worth and belonging in that they could provide their infants with a beneficial method of care that no one else could offer, even the most advanced technology. Trepidation prior to practicing KMC was noted by participants as dissipating with KMC practice which further boosted confidence.

The findings of this study regarding the experiences of the participants revealed Kangaroo Mother Care’s effect on the maternal instinct and confidence levels. In alignment with these findings, several authors, namely Singer, Fulton, Davillier et al. (2003); Carter, Mulder, Bartram et al. (2005) and Hall and Kirsten (2008) confirmed KMC’s effect on the confidence levels of mothers, in that parents involved directly in the care of their vulnerable infants experienced increased confidence levels. Furthermore, another author, Tessier (1998), observed a change in the mother’s perception of her child attributable to skin-to-skin contact in the kangaroo-carrying position. KMC was noted by Tessier (1998) as creating a climate of sensitive caregiving. These authors’ findings reinforce participants’ experiences as revealed in this study regarding the link of maternal instinct and the resultant increased maternal confidence.

#### **5.2.2.2 Maternal capability**

It emerged from participants’ input that Kangaroo Mother Care enhanced mothers’ acquisition of skills in caring for their infants, and improved competence. Thus the theme of maternal capability was revealed through these experiences. Participants

recounted that mothers practicing KMC were involved in their infants' care and thus acquired skills due to their involvement which developed competence. Consequentially, participants noted that the acquired maternal capability fashioned by KMC reduced complications following discharge such as aspiration.

In this study, the theme of maternal instinct is linked to rendering the mother capable of infant care. The data analysis revealed through the lived experiences of participants, that Kangaroo Mother Care equips mothers with skills to further add to their competence in caring for their infants. Aligned to these findings, several authors, namely Tessier (1998), Hall and Kirsten (2008) and Conde-Agudelo (2000), in separate studies, observed that KMC practice, which requires parents to be directly involved in the care of their vulnerable infants was found to improve competence, which is in alignment with the experiences of the participants. Conde-Agudelo's (2000) scores for the mothers' sense of competence in the KMC group in his study were better than those who gave conventional care which is similar to the participants' experiences in this study. Tessier's (1998) findings supported the hypothesis that skin-to-skin contact, practiced in KMC, induces a positive perception and a readiness to detect and respond to infants' cues. These studies concur with the study findings of the lived experiences of participants in observing Kangaroo Mother Care to be a facilitator of maternal capability.

### **5.2.3 Hindering factors**

Despite the extent of positive experiences and benefits pervading the descriptions revealed by participants; hindrances to KMC practice do exist. These hindrances were identified by participants at different levels. The themes that emerged through the data analysis were: (i) Maternal Concerns, (ii) Increased work load, (iii) Lack of training (iv) Management Support and (v) Resource Scarcity.

#### **5.2.3.1 Maternal concerns**

A major hindrance that emerged as a theme was maternal concerns. As Kangaroo Mother Care is reliant on the mother for implementation, as revealed by participants, maternal concerns which participants relayed, such as complaints regarding the KMC

ward environment being unsuitable are noteworthy hindrances. Maternal concerns are not limited to environmental concerns, but participants also stated that mothers don't trust their ability to care for their infants, and therefore prefer not to practice KMC. In some situations, mothers are physically unwell and cannot practice KMC. Thus maternal health problems can as voiced by participants inhibit KMC practice. These factors create discomfort and unease both of which hinder the practice of KMC.

The study findings revealed that the hindering factor posed by maternal concerns is compounded by the ward environment. Central to the mothers' concerns was the unsatisfactory ward environment in which Kangaroo Mother Care is practiced. WHO (2003) guidelines emphasise the role of a supportive environment for KMC practice which is in alignment with the study findings, as the lack thereof has created an unsupportive environment. Other concerns such as mothers' disbelief in their own capabilities were less significantly alluded to in participants' responses. Aligned to these study findings, several authors, namely Neu (1999) and Moran et al. (1999) established that mothers need support from nursing staff to allay anxieties about handling the infants and to promote confidence in using KMC. These authors' findings thus support the fact that mothers who doubt in their own abilities will be reluctant to practice KMC without adequate support and encouragement from nursing staff. A similar study by Calais, Dalbye, Nyqvist and Berg (2010) found that support was imperative to promote KMC and that lack of this support was a hindering factor.

#### **5.2.3.2 Increased Work-load**

During data analysis it emerged that Kangaroo Mother Care was associated by participants with an increase in their work-load. Change or added tasks in any setting are prone to spark resistance and an individual's perception of a task such as KMC as extra effort or more work carries significant hindering implications.

Participants' association of Kangaroo Mother Care with increased work is clearly revealed in the study findings as well as providing the reason for the emergence of this theme. Aligned to these study findings, several authors, namely Kambarami, Chidede



and Kowo (1998) and Lincetto, Nazir and Cattaneo (2000), in separate studies, reported implementation problems with Kangaroo Mother Care due to perceived increased work-load on staff. Charpak (2006), in a study evaluating the implementation of KMC, identified that a factor noted as a barrier to KMC implementation was the view that KMC was considered to represent extra work for staff. Contrary findings by Parmar, Kumar and Kaur et al. (2009), in a study which explored experiences with Kangaroo Mother Care in a neonatal unit, revealed that 79% of the staff reported that it did not increase work-load.

### **5.2.3.3 Inadequate preparation for Kangaroo Mother Care**

The hindering factor of the lack of training for staff in Kangaroo Mother Care emerged from the data analysis. Participants' comments revealed that the lack of knowledge regarding KMC stemmed from a lack of in-service training. This lack of adequate and relevant knowledge and training posed a hindrance to KMC practice, as participants felt uncertain and incompetent in implementation.

The role of inadequate preparation as a hindrance to Kangaroo Mother Care emerged in the data analysis. Aligned to these study findings, Engler (2002) recognised that a major barrier to KMC was the reluctance of nurses to practice. The reasons for this reluctance were not clear, but the study recommendations highlighted that knowledge and education were essential to provide KMC effectively. This author's findings are similar to the experiences of the participants, in that lack of training is a hindrance to KMC practice, and a common reason for the reluctance of midwives/nurses to practice KMC.

### **5.2.3.4 Management support**

The emergent theme of the contribution of the lack of management support in Kangaroo Mother Care as a hindering element is markedly significant. Poor implementation by management through miscommunication or failure to involve staff in new care strategies/interventions is the reason for the resulting resistance by and attitudes of the staff as revealed by the participants.

The study findings thus pinpoint the emergent theme of management support and lack thereof as a hindering factor to Kangaroo Mother Care. In alignment with this theme, Lincetto, Nazir and Cattaneo (2000) also found that managerial difficulties were obstacles or constraints to Kangaroo Mother Care practice. Despite doing a thorough systematic search of electronic databases including Cochrane Libraries, PubMed, and all World Health Organisation Regional Databases, no other literature related to this theme could be extracted. These findings thus illuminate the gap in current research with regard to the role of management in the implementation of Kangaroo Mother Care.

#### **5.2.3.5 Resource scarcity**

Compounding the hindrances posed by maternal concerns and increased work-load is the emergent theme of the lack of resources. Participants acknowledged the following issues as inhibitors of Kangaroo Mother Care practice: Space, essential equipment and finance. The implementation of KMC is viewed by participants to be reliant on adequate space and the provision of basic essentials such as heaters and linen to facilitate the comfort of mothers and their infants. Lack of these resources inhibits KMC practice.

Studies by Chia (2006) and De Hollanda (2008) show that there are constraints in the practice of KMC attributable to a lack of resources such as space and equipment. The authors' findings are congruent with participants' experiences of a lack of resources as being a constraint in the hospital setting for KMC practice.

#### **5.2.4 Facilitating factors**

Two themes emerged from participants' comments regarding facilitators of Kangaroo Mother Care practice and included those of: (i) Motivate and Educate and (ii) No place like home.

##### **5.2.4.1 Motivate and educate**

Motivation and education of staff in cognisance of the view of participants regarding the increased work-load of KMC is an essential facilitating factor. Motivation from management and adequate in-service training to equip staff to practice KMC knowledgeably was indicated to be of importance. Through management's promotion

and staff involvement KMC is perceived as likely to be better accepted, and less likely to be fraught with resistance. As mentioned by Engler (2002), the importance of equipping staff with knowledge and skills regarding Kangaroo Mother Care is essential to facilitate its practice. This author's findings agree with those of the participants regarding the need for training as a facilitator. However, no literature regarding the role of motivation as a facilitator in KMC practice could be found in a thorough systematic search of electronic databases including Cochrane Libraries, PubMed, and all World Health Organisation Regional Databases . It is conceivable however, that motivation as a facilitator in implementing most innovations and/or changes would be regarded as crucial to the success of these, so it is possible that literature exists regarding motivation as a vital factor in introducing a new concept/method/theory/policy in health care or other fields, but that there is simply no literature available on this aspect regarding KMC.

#### **5.2.4.2 No place like home**

‘No place like home’ was cited by participants as an additional facilitative factor for KMC practice. This facilitating factor counteracts the inhibitors of maternal concerns which centred on the ward environment as well as resource scarcity. Participants emphasised the importance of a comfortable environment as an essential element in creating a homely atmosphere where mothers are able to practice KMC freely. Resources such as equipment, i.e. heaters, to maintain the temperature of the environment and KMC clothes were also indicated to be enablers for the purpose of KMC promotion.

The study findings of the role of a comfortable environment as a facilitator of Kangaroo Mother Care emerged clearly from the data analysis. Aligned to the study findings, Baker (1993) established in his study that the provision of a private and comfortable environment is essential to support KMC practice. According to Baker (1993), this homely environment is paramount, and this assertion supports participants' statements regarding the need for a homely supportive environment.

### **5.2.5 Conclusion**

This study presented the lived experiences of participants in the practice of Kangaroo Mother Care, which explored midwives' conceptualisations, experiences and perceived hindering and facilitating factors and revealed themes and sub-themes aligned to each of the study objectives. Colaizzi's method of analysis, as well as the researcher's interpretive paradigm enabled the essence of the phenomenon to be explored, and the interpretations to remain faithful to the participants' constructs and to remain grounded in the data.

The study objective regarding midwives' understanding of the concept of Kangaroo Mother Care was fulfilled through participants' statements describing their conceptualisation of KMC as both a physiological and emotive concept. The physiological conceptualisations encompassed their understanding of KMC in its role in growth and development sparked by the nearness of the infant to the mother. Authors' findings in alignment with the conceptualisations of this study were those of Conde-Agudelo (2000); Hann (1999), and Gupta, Jora and Bhatia (2007). These authors determined that KMC resulted in increased weight gain. Although these findings are supportive, the study findings illuminated a gap in the actual physiological processes responsible for Kangaroo Mother Care's effect on increased weight gain.

The protective concept of Kangaroo Mother Care also emerged in the study in relation to an understanding of KMC's role in reducing cross-infection and hypothermia. These lived experiences were aligned to studies by Conde-Agudelo (2000) and Venencio and Almeida (2004), which reported a reduction in nosocomial infection through KMC practice. Similarly, studies by Conde-Agudelo (2003); Kadam, Bimoy and Kanbur et al. (2005) and Ali, Sharma and Alam (2009) were aligned to the study findings of KMC's thermoregulatory effects.

Kangaroo Mother Care was exposed as an emotive concept through participants' observations in terms of the effects of the skin-to-skin contact offered by KMC on the maternal-infant attachment. Bonding between the mother and infant emerged through the

data analysis as a natural response to KMC. These study findings were in alignment with studies by Charpak, Ruiz-Pelaez and Figueroa de Calume (1996); Kirsten, Bergman and Hann (2001) and Anderson (2003), as well as Feldman (2003) in which each separate study highlighted this emotive concept of KMC in its role of bonding facilitated through skin-to-skin contact.

Aligned to the study objective regarding the exploration of the experiences of midwives regarding Kangaroo Mother Care; were the participants' experiences of the effect of KMC on maternal instinct and capability. The experiences elicited these central themes when aggregated together. Literature aligned to these findings was noted by several authors, namely Tessier (1998); Hall and Kirsten (2008); Conde-Agudelo (2000); Singer, Fulton, Davillier et al. (2003) and Carter, Mulder, Bartram et al. (2005). These authors, in separate studies, determined the effect of KMC in increasing maternal confidence, levels of competence and sensitive care-giving.

Perceived hindering factors revealed through the participants' descriptions of their lived experiences varied from maternal concerns, to the view that Kangaroo Mother Care constitutes an increased work-load, and included resource scarcity, lack of training and management support. Authors' findings in agreement with the study's theme of maternal concerns as a hindering factor were those of Neu (1999); Moran et al. (1999) and Calais, Dalbye and Nyqvist (2010) and emphasis was placed on the necessity of support for mothers to practice KMC. The hindrance posed by the view of KMC as an increased work-load was also reported by authors such as Kambarami, Chidede and Kowo (1998); Lincetto, Nazir and Cattaneo (2000) and Charpak (2006). Lincetto, Nazir and Cattaneo (2000) also supported the perception of the role of managerial difficulties as a hindrance. The literature search for the role of management support in KMC highlighted a gap in research to be further explored. Engler's (2002) findings on constraints to KMC confirmed the study findings regarding the role of the lack of training as a hindrance. Finally, the lack of resources revealed through data analysis was supported by the evidence of Chia (2006) and De Hollanda regarding the constraining factor of resource scarcity, particularly in terms of resources such as space and equipment.

Besides the hindering factors experienced by participants, there were also those factors which facilitated Kangaroo Mother Care practice. These themes that emerged through the aggregated data were specific to the need for motivation and education, as well as the provision of a homely environment. Studies which supported the study findings with regard to factors which served as facilitators were those of Engler (2002) who determined the importance of education for practice, while Baker (1993) highlighted the fact that KMC necessitates a comfortable environment.

The findings in this study regarding the lived experiences of midwives in terms of Kangaroo Mother Care shed light, not only on the broad conceptualisations of this method of care, as well as personal experiences relating to its maternal outcomes; but also highlighted several hindering and facilitating factors which will prove helpful for practice. All of the themes and sub-themes which emerged were aligned with much of the current available research on Kangaroo Mother Care; however gaps in the literature emphasising the need for further research were illuminated. These gaps were those related to the physiological response caused by KMC which results in increased weight gain; as well as the importance of managerial support for KMC implementation.

### **5.3 Limitations**

The limitations of the study were that, due to staff shortages, the time allowed for conducting the interviews was limited to fifteen minutes or less which may have reduced the extent of the experiences that participants could share. Longer sustained interviews would have yielded rich data. The limited time restricted the flow of rich data from the participants. This factor was further compounded by participants being tense. Some of the participants tended to appear nervous due to the fact that interviews were being tape-recorded which may have limited the detail of the information that they were able to share due to their own inhibitions. Participants were offered the option of not using the tape-recorder, but all agreed that they were happy to have the interview tape-recorded.

The researcher also felt that most participants, whose main language was IsiZulu, were limited in describing their experiences due to the fact that the interviews were conducted in English. This could therefore have restricted the descriptions of lived experiences shared by participants as they may have been unable to find the right English words to describe their experiences. Future studies should ensure interviews are conducted in the participants local language. Use of the participants local language allows for a more inductive exploration of the phenomenon. Albeit the participants were in a setting where English is the accepted language for practice, use of the local language would have allowed for the nuances that cannot be expressed in English to be explored.

Another limiting factor was that only one hospital was used by the researcher for data collection. Use of only one hospital could bias results, as some of the experiences of participants may be contextual to this hospital only. Certain hindering factors present in the environment under study may not necessarily be present in other hospitals.

## **5.4 Recommendations**

Kangaroo Mother Care which was developed due to a shortage of incubators and overcrowding in a maternity hospital in Bogota, Colombia, is progressively becoming a method of care, the benefits of which are exceeding its original purpose. Findings from the study indicate that midwives' experiences of KMC filter through many aspects of the infants' and mothers' lives, the effects of which are far-reaching.

The fact that KMC emerges as a bonding experience is noted in the study, as well as in the literature, besides its positive effect on maternal confidence and preparedness for discharge. The ramifications of KMC on the wellbeing of the infant, and thus the reduction in the length of hospitalisation result in less overcrowding of the neonatal wards with a subsequent reduction in cross-infection. Furthermore, some of the nursing literature and the findings in the study reveal that there are inhibiting and enabling factors which govern KMC implementation. A lack of in-service training, involvement of staff and management miscommunication; as well as constraints reported regarding the ward environment and mothers' discomfort in this environment, compounded by their doubt in

their own abilities to care for their infants were identified in this study as obstructing KMC practice. Enabling factors mentioned were adequate staff training, allocation of a KMC co-ordinator to supervise KMC practice, bench-marking with other hospitals, and the provision of a well resourced, “homely environment”. With these considerations in mind, the researcher recommends the following to: (i) Nursing/Midwifery practice, (ii) Nursing/Midwifery education, (iii) Community (iv) Research.

#### **5.4.1 Nursing/Midwifery practice**

- Adequate training and in-service training in Kangaroo Mother Care should be provided in all maternal/neonatal services for staff on a regular basis.
- New research findings and updated information should be made readily available to staff in order to promote Kangaroo Mother Care and motivate staff.
- A member of staff on each shift (i.e. day/night) should be allocated to monitoring and evaluating KMC practice in the neonatal unit/ward.
- Nursing management should involve staff directly in implementing new programs and in decision-making to avoid resistance and negative or non-conducive staff attitude.

#### **5.4.2 Nursing/Midwifery education**

- A separate curriculum should be instituted in all nursing training colleges/universities providing education in Kangaroo Mother Care, to be offered to basic midwives/nurses as well as advanced midwives. This would help ensure that KMC is practiced knowledgeably by all trained staff.

#### **5.4.3 Community**

- Mothers and families in communities should be educated about Kangaroo Mother Care before entering the hospital through ante-natal clinics and community awareness programmes. The benefits and outcomes of KMC



should be shared extensively to allay fears and encourage KMC practice where it is most needed.

#### **5.4.4 Nursing research**

- The research findings of this study are most applicable to the setting in which the study was conducted, due to the fact that some relate to infrastructure and environment problems which were perceived as hindrances. Facilitating and hindering factors could differ from one setting to another, It is therefore imperative that similar studies be conducted in other settings to explore the lived experiences of midwives regarding Kangaroo Mother Care.
- Gaps identified in this study were those highlighting the need for research on the actual physiological processes which cause the effects of KMC on increased weight gain.
- Another gap to be explored in research is that of the role of management in KMC implementation.
- Participant's provided much information pertaining to mothers and more research should be conducted where mothers are the primary source of information, in order to understand the KMC phenomenon comprehensively.
- The importance of language should be addressed in future studies and interviews should be conducted in the participants native language.

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## **APPENDICES**

### **APPENDIX 1**

#### **Probe Sheet**

**“Exploring the Lived Experiences of midwives regarding the Kangaroo Mother Care initiative at a selected Tertiary Level Hospital in the Ethekewini district.”**

1. What is your understanding of Kangaroo Mother Care?
2. What are your experiences of Kangaroo Mother Care?
3. Can you share an incident that stands out for you when you used the KMC initiative? Elaborate on or describe this.
4. What do you perceive as factors which enable the implementation of Kangaroo Mother Care?
5. What do you see as factors which inhibit the implementation of Kangaroo Mother Care?

## **APPENDIX 2.1**

### **Information Sheet**

Dear Colleague

I am a Master's student in Nursing Research at the University of KwaZulu-Natal. In my research study I am exploring the lived experiences of midwives regarding the Kangaroo Mother Care initiative at a selected tertiary level hospital in the Ethekwini district.

**Why this research study?** Research shows that the benefits of Kangaroo Mother care (KMC) are numerous, but there seems to be a lack of research regarding midwives' lived experiences of Kangaroo Mother Care. Midwives play a key role in implementing KMC and offering a method of care which impacts on the lives of fragile neonates as well as the parents. For this reason it is important that enabling and inhibiting factors relating to the implementation of KMC be addressed so that KMC becomes a standard of care for preterm and low birth-weight neonates.

**What is expected of you?** If you are willing to participate in this research study, a one- on-one interview will be scheduled with you at your convenience which will last approximately 30 minutes. The questions asked during this interview will include your experience of KMC and these will be tape-recorded. All the information you share as well as your identity will remain anonymous and confidential at all times. Your name will not be reflected on any of the documents in this study, and you will instead be allocated a number should you decide to participate in this study. In addition, the researcher and her supervisor will store the information you share on a personal protected database which no one else will have access to.

**May you withdraw from the study?** You are free to withdraw from the study at any time without being required to provide any reason for this. Remember, this study is voluntary, and not taking part in it, or withdrawing from it carries no adverse consequence of any kind.

If you have any questions or require any further information you can contact me on this number: 083 463 5082. If you are happy to continue with this study please sign the attached informed consent form.

Thank you

Robyn Curran

## **APPENDIX 2.2**

### **Informed Consent**

#### **Exploring the Lived Experiences of midwives regarding the Kangaroo Mother Care initiative at a selected Tertiary Level Hospital in the Ethekekwini district**

I \_\_\_\_\_ (Name) have been informed about the study entitled “Exploring the Lived Experiences of midwives regarding the Kangaroo Mother Care initiative at a selected Tertiary Level Hospital in the Ethekekwini district” by Robyn Leigh Curran.

- ✓ I understand the purpose and procedures of the study.
- ✓ I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.
- ✓ I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any treatment or care that I would usually be entitled to.
- ✓ I understand that my participation in this study, as well as all the information I disclose, will be kept confidential and anonymous at all times by the researcher and her supervisor.
- ✓ If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher, Robyn Leigh Curran, at telephone number: 083 462 5082 or the supervisor, Joanne Naidoo, on 031 260 2213.

\_\_\_\_\_  
**Signature of Participant**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature of Witness**

\_\_\_\_\_  
**Date**

## APPENDIX 3.1

**Hospital/Nursing Service Manager  
Selected Tertiary Level Hospital in Ethekewini District**

Dear Sir/ Madam

**Re: Request for Permission to conduct a study to explore the lived experiences of midwives with regards to Kangaroo Mother Care**

I, Robyn Leigh Curran, a Master's student in Nursing Research at the University of KwaZulu-Natal would like to request your permission to conduct a phenomenological study in your hospital concerning the lived experiences of midwives with regards to Kangaroo Mother Care.

Kangaroo Mother Care, which was developed in 1979 in Bogota, Colombia due to a shortage of incubators and overcrowding in that country's hospital is fast becoming the solution for, not only the physiological and psychological wellbeing of infants, seen in reduced morbidity and mortality; but also, the substantial effects on parents and caregivers. Research shows that much focus has been directed at the effects of Kangaroo Mother Care while there is little research focusing on the midwives/nurses' experience of Kangaroo Mother Care. As midwives/nurses are key role-players in the implementation of KMC it is essential that this gap in research be filled.

For this reason I would like to conduct my research in your hospital's Neonatal Unit by interviewing approximately 10 midwives with regards to their lived experiences in Kangaroo Mother care. Midwives who are registered with the SANC and have at least one year's experience in a neonatal unit will be interviewed after informed consent has been obtained. The interviews will be conducted in the unit at the convenience of the midwives during the period of June/July 2011. Interviews will be approximately 30 minutes in duration and will in no way impact on the care given by the midwives or interrupt any of the neonatal unit's routines.

All the data, as well as the names of midwives participating in this study will be kept confidential and anonymous, as well as the name of your hospital. Once the research study has been completed, all results obtained will be disseminated to you for your benefit, as well as the positive impact it will have on the care of the neonates in your hospital.

I hope to hear from you shortly and look forward to working together with you in bettering patient care to reduce morbidity and mortality of the babies in your care.

Kind regards  
Robyn Leigh Curran

## APPENDIX 3.2



health

Department:  
Health

PROVINCE OF KWAZULU-NATAL

## OFFICE OF THE HOSPITAL CEO

KING EDWARD VIII REGIONAL HOSPITAL

Private Bag X02, CONGELLA, 4013

Corner of Rick Turner & Sydney Road

Tel. 031-3603853/3015; Fax. 031-2061457;

Email: [rejoice.khuzwayo@kznhealth.gov.za](mailto:rejoice.khuzwayo@kznhealth.gov.za);

[www.kznhealth.gov.za](http://www.kznhealth.gov.za)

Ref.: KE 2/7/1/ (29/2011)

Enq.: Mrs. R. Sibiya

Research Programming

11 July 2011

Miss. RLCurran  
School of Nursing  
Faculty of Health Sciences  
Howard College Campus  
UNIVERSITY OF KWAZULU-NATAL

Dear Miss. Curran

**Protocol : "Exploring lived experiences of midwives regarding the Kangaroo Mother Care Initiative in a selected tertiary level hospital in the Ethekwini District"**

Permission to conduct research at King Edward VIII Hospital is provisionally granted, pending approval by the Provincial Health Research Committee, KZN Department of Health.

Kindly note the following:-

- The research will only commence once confirmation from the Provincial Health Research Committee in the KZN Department of Health has been received.
- Signing of an indemnity form at Room 8, CEO Complex before commencement with your study.
- King Edward VIII Hospital received full acknowledgment in the study on all Publications and reports and also kindly present a copy of the publication or report on completion.

*The Management of King Edward VIII Hospital reserves the right to terminate the permission for the study should circumstances so dictate.*

Yours faithfully

**SUPPORTED/NOT SUPPORTED**

  
DR. O.S.B. BALOYI  
ACTING CEO & MEDICAL MANAGER

  
DATE

uMnyango Wezempilo . Departement van Gesondheid

*Fighting Disease, Fighting Poverty, Giving Hope*

## APPENDIX 3.3



health

Department:  
Health  
PROVINCE OF KWAZULU-NATAL

### Health Research & Knowledge Management sub-component

10 – 103 Natalia Building, 330 Langalibalele Street

Private Bag x9051

Pietermaritzburg

3200

Tel.: 033 – 3953189

Fax.: 033 – 394 3782

Email.: [hrkm@kznhealth.gov.za](mailto:hrkm@kznhealth.gov.za)

[www.kznhealth.gov.za](http://www.kznhealth.gov.za)

---

Reference : HRKM107/11  
Enquiries : Mrs G Khumalo  
Telephone : 033 – 3953189

15 July 2011

Dear Miss R L Curran

**Subject: Approval of a Research Proposal**

1. The research proposal titled '**Exploring the lived experiences of midwives regarding the Kangaroo Mother Care initiative at a selected tertiary level hospital in the eThekweni district**' was reviewed by the KwaZulu-Natal Department of Health.

The proposal is hereby **approved** for research to be undertaken at **King Edward VIII Hospital**.

2. You are requested to take note of the following:
  - a. Make the necessary arrangement with the identified facility before commencing with your research project.
  - b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.
3. Your final report must be posted to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-102, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to [hrkm@kznhealth.gov.za](mailto:hrkm@kznhealth.gov.za)

For any additional information please contact Mrs G Khumalo on 033-3953189.

Yours Sincerely

Mrs E Snyman

Interim Chairperson, Health Research Committee

KwaZulu-Natal Department of Health

Date: 01/08/2011

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uMnyango Wezempilo . Departement van Gesondheid

*Fighting Disease, Fighting Poverty, Giving Hope*

## APPENDIX 4



Research Office, Govan Mbeki Centre  
Westville Campus  
Private Bag x54001  
DURBAN, 4000  
Tel No: +27 31 260 3587  
Fax No: +27 31 260 4609  
[mohunp@ukzn.ac.za](mailto:mohunp@ukzn.ac.za)

27 June 2011

Miss RL Curran (201506562)  
School of Nursing  
Faculty of Health Sciences  
Howard College Campus

Dear Miss Curran

**PROTOCOL REFERENCE NUMBER: HSS/0386/011M**

**PROJECT TITLE: Exploring lived experiences of midwives regarding the Kangaroo Mother Care Initiative in a selected tertiary level hospital in the Ethekwini district**

In response to your application dated 22 June 2011, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

**PLEASE NOTE:** Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

  
.....  
**Professor Steven Collings (Chair)**  
**HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE**

cc. Supervisor: Ms J Naidoo  
cc. Mr S Reddy, Faculty of Health Sciences , Westville Campus

## APPENDIX 5

### 10    **Transcripts**

11

12    PTID: 1

13    Venue: King Edward VIII Hospital, Nursery, Seminar Room

14    Date: 17 August 2011

15    Time: 11h00

16    Duration: 10:38

17

18    **Researcher: Thank you so much for agreeing to be part of this research study on Kangaroo**  
19    **Mother Care and the lived experiences of midwives**

20    Midwife: Sure

21

22    **Researcher: May I start by asking what your understanding of Kangaroo Mother Care is?**

23    Midwife: Kangaroo Mother Care is when the mother is... okay it's when we take the baby and  
24    keep the baby with the mother all the time to kangaroo them... Yes...

25

26    **Researcher: And when you do Kangaroo Mother Care, how is, is the baby placed directly**  
27    **on the skin or... ?**

28    Midwife: The mother places the baby direct on the skin...

29

30    **Researcher: Okay...**

31    Midwife: Also just to prevent the hypothermia of the babies, so with the mother's temperature it  
32    helps to prevent hypothermia of the baby.

33

34    **Researcher: Thank you very much! And how long have you been practicing Kangaroo**  
35    **Mother Care as a midwife?**

36    Midwife: Here in this institution it is about two years now.

37

38    **Researcher: What experiences of Kangaroo Mother Care have you had?**

39    Midwife: What I saw... With the Kangaroo Mother Care... it helps, because the babies here in  
40    this ward, instead of them staying for two weeks, they are there with the mother who kangaroos  
41    them. Maybe it reduces the time of keeping them... Instead of keeping them for two weeks here,  
42    maybe they stay for one week when they are with the mother. They grow fast with the mothers.



43 It also reduces the... the baby has like *amabugs*... the mother produces *amaantibodies* that will  
44 help the child.

45

46 **Researcher: Okay, so overall...?**

47 Midwife: It also promotes the bonding between the two.

48

49 **Researcher: Is there any particular mother and child that you remember seeing that**  
50 **impacted on you with regard to Kangaroo Mother Care? Is there any experience that**  
51 **stands out in your mind over the years?**

52 Midwife: Over the years... experiences... what I saw is that they grow fast when they are with  
53 their mothers and they have this bond between them and it reduces the risk of infections.

54

55 **Researcher: Thank you and what do you perceive as factors that help Kangaroo Mother**  
56 **care being practiced in this hospital, in your experience?**

57 Midwife: It does help, because instead of having lots of babies here... because we used to keep  
58 them to gain weight before they go home. I think it used to take... we used to keep them for  
59 about two to three months but now with their mothers they just grow fast.

60

61 **Researcher: Is there anything specific, like with, maybe staff, maybe equipment that**  
62 **enables practice of KMC, like more training? What makes it better?**

63 Midwife: I think more training will help so that we can know and understand better how it is  
64 going to help us.

65

66 **Researcher: Have you had much training here in Kangaroo Mother Care?**

67 Midwife: Ja

68

69 **Researcher: Do they do a workshop or... ?**

70 Midwife: Even when we have new staff they have something like orientation that we get to know  
71 about it.

72

73 **Researcher: And do you find that the ward environment is conducive to practice Kangaroo**  
74 **Mother Care... like space?**

75 Midwife: Ja... no with me, I think they should have a ward... that is for mothers that do  
76 Kangaroo Care only... not to take mothers from one ward to another ward. They must have a  
77 place for them only.

78

79 **Researcher: Do you find that the mothers are very willing to practice Kangaroo Mother**  
80 **Care or do you find that some are maybe scared, or... ?**

81 Midwife: Ja they are, with our institution, they are not happy if you take them from their ward  
82 now. Sometimes they come before they give birth and they show them we are giving them this  
83 ward. So when there is a need for this Kangaroo Mother Care we have to take the patient out  
84 from their ward to go to the KMC ward. Which we are using for KMC... and some of them are  
85 not happy about it.

86

87 **Researcher: Why do you think they are not happy?**

88 Midwife: Just to move them from their ward to a place they don't know.

89

90 **Researcher: And the staff, are they willing to implement Kangaroo Mother care or do you**  
91 **find... ?**

92 Midwife: I think it is more work for them, say if the mother was admitted to that ward, you find  
93 that now she needs to move to that ward...

94

95 **Researcher: So it is more work... ?**

96 Midwife: It is more work.

97

98 **Researcher: When you do intermittent KMC in the nursery, are the staff comfortable, or**  
99 **do they feel like it is more work?**

100 Midwife: Otherwise with us since we are getting more and more babies with Kangaroo Mother  
101 Care they go home more fast. We understand that. If we can get more staff it would help.

102

103 **Researcher: So you definitely feel that it takes more time and more resources to practice**  
104 **Kangaroo Mother Care?**

105 Midwife: Ja... even though for me, as I am working here, I understand the need, so as I said  
106 maybe it will be better if they can have a room that stands on its own for Kangaroo Mother  
107 Care... and more staff. Staff should be allocated to this ward, then I think it will be easy in this  
108 way.

109

110 **Researcher: Okay, and do you see anything that stops Kangaroo Mother Care from being**  
111 **practiced?**

112 Midwife: No *sisi*.

113

114 **Researcher: So there is nothing in your hospital that prevents it from being practiced?**

115 Midwife: If we can have that specific room for the Kangaroo Mother Care, it will be fine.

116

117 **Researcher: SO over all, is there anything else you would like to share about Kangaroo**  
118 **Mother Care that stands out in your mind?**

119 Midwife: No, I can say it promotes bonding. It creates bonding between the two; there is no  
120 need for us to separate the child from the mother. The mother is always with the baby, they're  
121 always together. Bonding also reduces the risk of infection. I see no need to separate the two.

122

123 **Researcher: As a midwife, in what ways do you see the bonding change after the mother**  
124 **has practiced Kangaroo Mother Care?**

125 Midwife: You see, instead of keeping the child here and the mothers are in the ward, they just  
126 come at that specific time. If they are together it is easier for the mother to see if there is  
127 something wrong with the baby.

128

129 **Researcher: So she is more sensitive to the baby's needs?**

130 Midwife: Yes.

131

132 **Researcher: Is that compared to the mothers who aren't really involved with their babies?**

133 Midwife: Yes.

134

135 **Researcher: Thank you so much for your contribution and your time, I really appreciate it.**

136 Midwife: Thank you... thank you.

137

138 Fieldnotes: This participant was initially not forthcoming with information and further probing  
139 was required at some points to further elicit her experiences. I often found it difficult to engage  
140 the participant in an in-depth conversation as I think it is quite complicated to express oneself in a  
141 language which is not one's mother tongue. The participant's body language demonstrated

openness and trust. The room in which the interview was held was private and there were no distractions or interruptions during the interview.

PTID: 2

Venue: King Edward VIII Hospital, Nursery, seminar Room

Date: 17 August 2011

Time: 11h20

Duration: 10:36

**Researcher: Thank you so much for agreeing to be part of this study on Kangaroo Mother Care and the lived experiences of midwives. I would just like to know what your understanding of Kangaroo Mother Care is?**

Midwife: Kangaroo Mother Care is when the baby is put in skin-to-skin between the mother's chest to keep them warm. When they are warm they grow faster... uh... even their heart rates are regular!

**Researcher: How long have you been practicing Kangaroo Mother Care?**

Midwife: 2009... I'm not sure, but I think since 2009.

**Researcher: What have your experiences with Kangaroo Mother Care been like?**

Midwife: I want to say that the babies are growing faster, they're kept warm. Premature babies need a warm environment... yes...

**Researcher: Is there anything that stands out to you in Kangaroo Mother care, maybe one particular mother and baby over the years?**

Midwife: So far there is nothing really, the Kangaroo Mother Care is fine. There is no disadvantage or problems.

**Researcher: And did you find that Kangaroo Mother Care is easy to implement in your experience?**

Midwife: It's easy in nursery, we don't know how they are practicing when they are in the wards... in post-natal wards... because Kangaroo Mother Care ward is in the post-natal ward. So we don't know if they are supervising them, or they do their own thing... we don't know. But on our side in nursery, we try to help them and tell them to put their babies inside, in their chest.

176 **Researcher: And what do you perceive as factors that help in the implementation of**  
177 **Kangaroo Mother care... factors that help... maybe things in the environment, the mothers**  
178 **or the nurse... what helps for it to be practiced more?**

179 Midwife: I think we, the nurses, also encourage them. They are relaxed when they are talking to  
180 us about all their problems...

181

182 **Researcher: So they are open about their problems?**

183 Midwife: Yes, the nursery nursing staff and mothers.

184

185 **Researcher: You mentioned the environment... what... what makes it conducive to**  
186 **practicing Kangaroo Mother Care? ... So that the mothers are able to practice it properly?**

187 Midwife: Here after feeding... after feeding they Kangaroo their babies so that they burp... they  
188 burp easily.

189

190 **Researcher: And the mothers or the staff, is there anything that inhibits the practice of**  
191 **Kangaroo Mother Care... the environment?**

192 Midwife: Not that I know.

193

194 **Researcher: You mentioned that the environment, the mothers were complaining?**

195 Midwife: Yes, in the post-natal ward, they are next to the toilet, so they can hear everything you  
196 are doing in the toilet. And they say the other patients, those that have got wounds... C/section...  
197 ja... they pass through there... they are not happy to be there... and the ladies say it is cold. It is  
198 not like here... we have heaters... and on that side there are no heaters.

199

200 **Researcher: So therefore it is not really conducive to practicing Kangaroo Mother Care in**  
201 **that environment?**

202 Midwife: Uhh, I'm just relating the complaints... They can do the Kangaroo Mother care... they  
203 can do it perfectly, and properly under supervision... yes.

204

205 **Researcher: So it is just that they are not that comfortable in that environment due to the**  
206 **smells... ?**

207 Midwife: Yes, they can't even eat in that environment... maybe if they change the venue...  
208 maybe somewhere else not in that particular area... ja... I think it will be more conducive.

209

210 **Researcher: So the mothers don't not practice Kangaroo Mother Care, they're just not**  
211 **happy?**

212 Midwife: They do practice Kangaroo Mother Care... these are just their complaints.

213

214 **Researcher: I understand. So, over all, is there anything more that you'd like to share on**  
215 **your experiences of Kangaroo Mother Care that we haven't mentioned?**

216 Midwife: I think we have touched on everything.

217

218 **Researcher: Are you happy with the way Kangaroo Mother Care is being implemented? Is**  
219 **there anything that can be done to make it easier?**

220 Midwife: I think something like a carrier would help so that they can hold their babies...  
221 something like *imbeleko*... in Zulu it is *imbeleko*... a baby-carrier. Something like that. If they  
222 have got that they can hold their babies nicely and cover them.

223

224 **Researcher: At the moment are they just putting them inside their gowns?**

225 Midwife: Ja... they put them inside their gowns, but I don't know what they are using there but  
226 here we are using a sheet. Just tie it and put the baby inside... on the chest. If there is something  
227 designed for Kangaroo Mother Care...

228

229 **Researcher: It would be more comfortable.**

230 Midwife: Yes, it would be more comfortable.

231

232 **Researcher: So you have nothing else to...**

233 Midwife: (laughs)... What else... I'll probably remember when I go back to the ward... (laughs).

234

235 **Researcher: Well you can always contact me if you think of anything else. Thank you so**  
236 **much for your contribution to the study. We really appreciate it.**

237 Midwife: Thank you.

238

239 Fieldnotes: This participant was very open prior to starting the recording and began to share  
240 information about the mothers' complaints regarding problems with the location of the KMC  
241 ward. Once the recording started it was difficult to draw this information out again and the  
242 participant found it difficult to express her experiences. There were no distractions or  
243 interruptions during this interview.

244

245 PTID: 3

246 Venue: King Edward VIII Hospital, Nursery, Seminar Room

247 Date: 17 August 2011

248 Time: 11h35

249 Duration: 11:56

250

251 **Researcher: Thank you so much for agreeing to participate in this study on the experiences**  
252 **of midwives in implementing Kangaroo Mother Care. I would like to know from you what**  
253 **your understanding of Kangaroo Mother Care is?**

254 Midwife: Kangaroo Mother Care is whereby the mother stays with the child. It is implemented in  
255 premature babies whereby the mother bonds with the child. The child listens to the mother's  
256 heart and it facilitates growth in the child. The mother is doing everything for the child.

257

258 **Researcher: In what way is the mother with the child... do they put the baby on the chest?**

259 Midwife: The mother tucks her baby under her bums next to her heart on the chest and covers the  
260 baby with special blankets in order to facilitate bonding of the mother and the child.

261

262 **Researcher: How long have you been practicing Kangaroo Mother Care?**

263 Midwife: Since I came to this hospital in 2008, it has been implemented before, I was from  
264 another hospital.

265

266 **Researcher: And do you find that when you first came compared to now, is it being**  
267 **practiced more? Is there any change in its practice since back then?**

268 Midwife: It has been facilitated more since it has been proven that it encourages child growth and  
269 weight gain, and the child is with the mother and far away from getting infections.

270

271 **Researcher: What in general have experiences been in Kangaroo Mother Care?**

272 Midwife: Umm... Quick weight gain is a positive thing that has happened... we witnessed. The  
273 child takes the feeds quite well... you know... milk production is improved in the mother. She's  
274 much more relaxed, she's next to the baby!

275

276 **Researcher: Okay, and anything else that comes to mind?**

277 Midwife: Not really.

278

279 **Researcher: Any specific memory you have of when you helped the mother practice**

280 **Kangaroo Mother Care... any specific mother and baby you can remember that stands out?**

281 **That you'd like to share about?**

282 Midwife: With me I can't recall...

283

284 **Researcher: There's too many? But you've seen very good results.**

285 Midwife: Yes... very good response.

286

287 **Researcher: In what way have you seen changes? What changes have you seen compared to**

288 **other babies where it is not practiced?**

289 Midwife: Although we need more improvement in our institution when it comes to that, because

290 there is no ideal structure, when it was implemented in the post-natal ward there were problems,

291 and we still have problems at the moment. But we have had good results with the child. There

292 are changes we'd like to see.

293

294 **Researcher: Oh, so...**

295 Midwife: Mothers will be quite happy with their babies and everything, but they still will have

296 some remarks about other mothers that don't understand what is happening.

297

298 **Researcher: So you're... ?**

299 Midwife: If there was a specific isolation room specific for this purpose it would help... but we

300 have structural problems... but in any case, we have implemented Kangaroo Mother Care due to

301 the results and that it was a requirement.

302

303 **Researcher: So the structural problems are the remarks about...?**

304 Midwife: The mothers are complaining that while they are busy feeding their babies other

305 mothers will be passing by. It is a lying-in ward, so there are all different people passing

306 through... the mothers aren't happy...

307

308 **Researcher: So it's because of the people passing in and out?**

309 Midwife: Yes, it interferes with their relation with the child.

310



311 **Researcher: What factors do you see that help Kangaroo Mother Care to be practiced**  
312 **more?**

313 Midwife: Okay... it has to start from management according to my understanding... they should  
314 actually educate much more... do more in-service training as to the importance of it. We know  
315 very well the importance of it, but if management could inform us so that it is enforced... you  
316 know. Continuous monitoring whether the appropriate principles and guidelines are followed.  
317 So there needs to be a person who can ensure that. There needs to at least be a Kangaroo co-  
318 ordinator... for all the programmes there are co-ordinators. They can make sure Kangaroo  
319 Mother Care is being practiced and monitor implementation. There also need to be guidelines  
320 that are outlined for Kangaroo Mother Care and monitored, so it can be implemented  
321 appropriately. Appropriate supervision should be done day and night. If this is done... things  
322 don't come up.... But now, there is no appropriate person that is dedicated. These are the key  
323 things... managerial issues and there should be a co-ordinator. A person who will be a facilitator  
324 who works on a daily basis to ensure the guidelines are implemented, and ensures continuous  
325 monitoring of whether those guidelines are carried out. We have got files as to how this thing is  
326 followed up. Otherwise there is no way of seeing how this is followed up, as there is no specific  
327 person. All other structural problems can be motivated by this co-ordinator. Do you see what  
328 I'm saying?

329

330 **Researcher: Yes... So you have guidelines to follow for Kangaroo Mother Care?**

331 Midwife: We've got a file... like all other files.

332

333 **Researcher: Okay... is there anything else like staff or resources that makes Kangaroo**  
334 **Mother Care easier to practice?**

335 Midwife: No... I think the government has limited resources. Donations should be invited too  
336 because we have a few things that can juice up the environment. So other organisations or  
337 projects can contribute through donations, an NGO or other businesses. By talking to these people  
338 we can tell them about this project.

339

340 **Researcher: What kind of things do you need to help you implement Kangaroo Mother**  
341 **care more?**

342 Midwife: More heaters... better furniture... comfortable sofas.

343

344 **Researcher: Do you find the staff are very willing to practice Kangaroo Mother Care?**

345 Midwife: We are... we are...

346

347 **Researcher: So what things stop Kangaroo Mother care from being practiced as much as it**

348 **could?**

349 Midwife: As required... In-service... we need more information on the subject... more

350 workshops conducted.

351

352 **Researcher: So have you had any workshops here?**

353 Midwife: Not myself.

354

355 **Researcher: So did you just see it being practiced?**

356 Midwife: Yes.

357 **Researcher: So for you it would help to have workshops?**

358 Midwife: Yes.

359

360 **Research: So, over all, is there anything else that you'd like to share about your**

361 **experiences? Do you find that there are things that can improve Kangaroo Mother Care**

362 **practice?**

363 Midwife: If we're positive improvements can happen... it's that the matrons should

364 communicate... you know. It should be something that should be evaluated at intervals since it

365 was implemented...

366

367 **Researcher: Yes... anything else?**

368 Midwife: Not really.

369

370 **Researcher: Thank you so much for your time and contribution, I really appreciate it.**

371

372 Fieldnotes: This participant was quite forthcoming with her experiences and difficulties in

373 Kangaroo Mother Care implementation. Her body language was open and she demonstrated a

374 willingness to share her opinions and experiences. During the interview a cleaner came into the

375 room to empty the room, but it did not disrupt the flow of the interview.

376

377 PTID: 4

378 Venue: King Edward VIII Hospital, Nursery, Seminar Room

379 Date: 18 August 2011

380 Time: 12h45

381 Duration: 10:16

382

383 **Researcher: Thank you so much for agreeing to participate in this study, I really**  
384 **appreciate your contributions. I would like to start by asking you, what your**  
385 **understanding of Kangaroo Mother Care is?**

386 M: Okay... My understanding is that kind which helps baby as well as the mother. In fact both  
387 of them benefit. While the baby benefits by being nearer to the mother is advantageous, always  
388 there, always warm all the time, at feeding time. At the same time the mother also benefits by  
389 gaining confidence that she is really taking care of her baby. It has been proven that it even  
390 shortens the days of hospitalisation because baby grows fast because... that's how I can describe  
391 it.

392

393 **Researcher: Thank you, and how do you see the mom's confidence? What kind of things**  
394 **have made you see the mom has really gained confidence?**

395 Midwife: Because before they have even started they are being told that she is going to be taking  
396 care of the child... the nurse mostly supervising. So everything she does for the baby, as if she is  
397 at home, so by the time she is discharged she really feels that she knows exactly what to do. The  
398 nurses are only there to consult in case something goes wrong. She's the one who grows to know  
399 her baby, she is the one who knows what her baby needs... my baby is hungry now, my baby  
400 needs to be changed now... something like that. Because she is always with the baby.

401

402 **Researcher: That's wonderful! How is the Kangaroo Mother Care practiced, how do they**  
403 **go about doing Kangaroo Mother Care?**

404 Midwife : How do they?

405

406 **Researcher: Yes what is the position?**

407 Midwife: The position of the infant is important, the infant is naked, except for the nappy and put  
408 between the mother's breasts. Which is helpful for the baby because, whenever she needs to  
409 feed, the baby simply turns to the breast... yes... and the baby is kept warm. And it's skin-to-  
410 skin, the mother and the baby. The temperature is being maintained as well and what else... I  
411 don't know, can you do the question again so that I can know?

412

413 **Researcher: What is the procedure like for the positioning for Kangaroo Mother Care?**

414 Midwife: Oh yes... the baby is naked except for the nappy and placed on the skin, on the chest  
415 between the breasts and is being covered.

416

417 **Researcher: In what situations do you usually practice Kangaroo Mother Care?**

418 Midwife: It's for those babies who are not very sick, but they wanting to gain weight... For low  
419 birth-weight babies, it's to gain weight before they are being discharged. So these are the ideal  
420 ones. And because it's proven that being nearer to the mother makes the baby grow faster. The  
421 growth hormone is produced there... and even breastfeeding on demand helps with that. In our  
422 case we do it because it promotes breastfeeding as such.

423

424 **Researcher: In your experience is there any specific mother and baby that sticks out in  
425 your mind, that you'd like to share about?**

426 Midwife: Umm... I've been through this experience and I'm... ja... I'd say that she was happy.  
427 The baby was tiny and small and she was afraid of taking care but through this experience you  
428 could see the pride and she was not afraid anymore. She had a feeling of belonging (laughs),  
429 that's what I can mention.

430

431 **Researcher: That's wonderful! And is there anything that you see that could help  
432 Kangaroo Mother Care be practiced more? Like enable it to be practiced?**

433 Midwife: I think it is something really to be promoted... it's really one of those wonderful things  
434 which I really want to ask how, whomsoever started this it was a really good idea. Because I  
435 think the baby bond which is one of the best things that need to be promoted. The hospital and  
436 management need to promote it.

437

438 **Researcher: And what else could make it be practiced more, do you need more of  
439 anything?**

440 Midwife: I think as members of a family the mother shouldn't be the only one if she happens to  
441 go home, if the father could do it. They need to do that bonding as well in my opinion.

442

443 **Researcher: So that helps it being practiced?**

444 Midwife: Yes, so that they understand..yes.

445

446 **Researcher: So is there anything else that can help it being practiced more in the hospital?**

447 Midwife: I think the provision of a place where it is done.

448

449 **Researcher: What kind of environment would facilitate Kangaroo Care?**

450 Midwife: Okay... how do I put it... I think a homely environment... wherever they are, they  
451 should be able to... because the mothers now must be able to feel at home... in fact, even making  
452 their tea... it should be there... according to me, it should have that homely atmosphere. Like if  
453 I'm in the room, if I want to relax or watch TV or switch on the radio... something like that. It  
454 should be something can continue even at home.

455

456 **Researcher: That's really good. Do you think there are any barriers to practicing**  
457 **Kangaroo Mother Care?**

458 Midwife: Umm... so far I think, so far not as such... it's a matter of just putting it into  
459 practice.... maybe.

460

461 **Researcher: So you don't think there is anything in your experience that has stopped it**  
462 **from being practiced?**

463 Midwife: No because as I said though... No, I don't think so... because the target is for babies  
464 that are healthy... waiting to grow up. But like I said it should be checked by somebody, just the  
465 wellbeing. Because the mother is quite good, if she feels her baby is becoming hot... she will say  
466 I think this baby feels hot... so I don't think there is any barriers as such.

467

468 **Researcher: So, over all, is there anything else you'd like to share about Kangaroo Mother**  
469 **Care and your experience?**

470 Midwife: Umm... like what? What I can maybe add on is, to me, it's one of the safest kind of...  
471 ja... care... For example, if mother is with the baby all the time... the chance of someone taking  
472 her because baby is down there is not likely. And the baby grows up knowing the mother's voice  
473 as early as possible, I think... that is what I want to share.

474

475 **Researcher: Thank you so much for your contribution and time... I really appreciate it.**

476 Midwife: Okay, thanks.

477

478 TRANSCRIPTS-22 August 2011

479

480 PTID: 5

481 Venue: King Edward VIII Hospital, Nursery, Mother's Room.

482 Time: 12h45

483 Duration: 15:54

484

485 **Researcher: Thank you so much for your time and agreeing to be a part of this research**  
486 **study. What I would like to ask you first, is what your understanding of Kangaroo Mother**  
487 **Care is?**

488 Midwife: Kangaroo Mother Care is the care that is mostly given to preterm babies or those  
489 babies that benefit from bonding with their mothers and for prevention of hypothermia and  
490 hospital infections. They are isolated with their mothers.

491

492 **Researcher: Thank you! How do you go about doing Kangaroo Care, is there a certain**  
493 **way that you do it? In what situations is it done?**

494 Midwife: It is mostly done to preterm babies who are mostly less than 2 kgs at birth, and it is  
495 done in one of the post-natal wards which is 03. The mother is encouraged to put the baby in  
496 skin-to-skin contact between her breasts. The situations are where babies are not ready to be  
497 discharged who still need to be under nursing supervision and medical care.

498

499 **Researcher: And what are your experiences you've had of Kangaroo Mother Care?**

500 Midwife: I think Kangaroo Mother Care is helping us a lot in the ward, as those babies who are  
501 meant to be kept in the nursery for the doctors to regularly assess them. But now we used to have  
502 the problem of the ward being full, but now we don't have many babies in our big neonatal ward,  
503 the old premature nursery where we used to keep bigger prems, now we keep them in the post-  
504 natal ward in the kangaroo mother care cubicle. There is less work for us. We used to have more  
505 than 40 patients mostly, now with the KMC in our institution we have less now. Because in the  
506 KMC ward we have a ten-bedded ward. So at least about ten prems are being transferred there,  
507 leaving ten less patients in our pre-term nursery. So it is helping us a lot.

508

509 **Researcher: So it is no longer as overcrowded as it used to be?**

510 Midwife: It is no longer overcrowded. There is less cross-infection, we can give a lot of care, we  
511 can supervise those mothers easily. We get in contact with our mothers, we teach them a lot, we  
512 show them how to get involved. They learn patient care in preparation for when they leave the  
513 hospital and look after the baby at home. Yes.

514

515 **Researcher: In what way have you seen KMC prevent cross-infection?**

516 Midwife: If the baby is with the mother it is safer because it is just the baby and the mother. If  
517 the baby is in the nursery where there are many babies, the nurse is going to touch this baby and  
518 that baby. In KMC the mother and baby are isolated, it is just like in isolation ward or isolation  
519 bay to keep the mother and baby together. No one is going to touch the baby except the hands of  
520 the mother.

521

522 **Researcher: Okay, that's wonderful. Can you share any specific experience of a mother**  
523 **and baby that stands out in your mind? So how you have seen KMC working in your**  
524 **experience?**

525 Midwife: In the institution?

526

527 **Researcher: Yes, in your experience!**

528 Midwife: You mean how is it working?

529

530 **Researcher: Yes, maybe one mother and baby that really impacted on you?**

531 Midwife: Yes, we had a baby that was about 500g, it couldn't be bigger than that. That baby  
532 stayed with us for a long time. He was sent to KMC. Though the baby was discharged blind, due  
533 to too much oxygen, that baby never had any infection. The baby was with the mother all the  
534 time, no hypothermia, no infections. That baby was safe except that it was born distressed with  
535 premature lungs, so that one was just unavoidable as we had to give the baby oxygen. It has a  
536 very good impact in most of the cases where we see the baby and mother staying together. In our  
537 institution we do get cases of overcrowding sometimes so that helps a lot. We don't get many  
538 cases of Klebsiella or other infections. We tell the mother "Wash your hands before touching  
539 your baby, keep your baby with you and don't give it to strangers". The mother and baby just  
540 bond up to discharge and at home we never have problems. When we see the mother coming to  
541 the clinics we just enjoy seeing the mothers coming, putting the babies on the chest. We know  
542 we have done a lot of teaching and they are just doing it, they are doing great Those babies grow  
543 bigger and bigger and, within a month, those babies grow so big and they come smiling with their  
544 mother when they come for follow-up, so it is very nice.

545

546 **Researcher: So you find that the mothers are happy about it?**

547 Midwife: They are very happy, when the mother has got the baby in the nursery and is staying in  
548 the ward, the mother has to walk up and down between the nursery and the ward every three

549 hours. And now for them to stay together, they don't mind, they can stay for long, as long as  
550 they're with the baby they just feel comfortable. They stay together and eat together, and if they  
551 want to go to the shop with the baby inside the breast just looking and kissing him, so sweet.

552

553 **Researcher: Are there any factors that you think help Kangaroo Mother Care being**  
554 **practiced? Anything you can think of?**

555 Midwife: That are helping?

556

557 **Researcher: Yes.**

558 Midwife: Ja, it is helping a lot.

559 **Researcher: Like factors that make it easier, any type of thing which helps?**

560 Midwife: It is helping us nurses as well as cases like I said in the prevention of infection and  
561 bonding. The mother does not have to walk up and down, but us, with the baby in the ward, there  
562 is just, it gives us less work. We don't get too involved, we let the mother do what she wants as if  
563 she is at home. To feel free if she has any problems or suspects anything, it might be that the  
564 baby is sick, she will come and tell us, "The baby is not wanting to feed today". So it helps us as  
565 she is with the baby all the time and she can notice anything wrong with the baby. "No sister this  
566 baby is not okay today she is refusing to suck." You know I'm not there all the time and I'm not  
567 as observant as the mother who stays with the baby all the time. I change the napkin and then go  
568 to another baby. I don't give love, I don't have time to do that and yet, I'm not the mother. I  
569 don't need to bond with the baby cause I'm not their mother. I am worried about the nursing  
570 management for about 14 babies at a time.

571

572 **Researcher: And is there anything that you see as factors that stop Kangaroo Care from**  
573 **being practiced?**

574 Midwife: Eish... the nursing staff attitude. The problem with the post-natal ward staff is that  
575 they don't think the KMC belongs to them. They usually think KMC has something to do with  
576 babies so the nursery staff have to take care of those babies. And another thing is our institution  
577 does not have enough facilities... in fact, enough equipment to take care of those mothers. Like it  
578 was very cold in winter so we did not have enough heaters. They don't have TV's in the KMC  
579 ward, they don't have a fridge, oh they do, they don't have a washing machine. In fact it should  
580 be like an environment at home, in fact it's not like that. Have you been there?

581

582 **Researcher: Yes.**



583 Midwife: Do you see any homely feel? No curtains like this. No couches for resting... They just  
584 use hospital linen, they're supposed to use linen from home. So those are the concerns we have.  
585 Especially the attitude of staff. If the baby has a problem in the KMC ward they'll tell the  
586 mothers just to go to nursery. They are not interested, which is bad!

587

588 **Researcher: So has it always been like that? There hasn't been any change?**

589 Midwife: Since it has just started there I think that is why they have a bit of an attitude. If there  
590 is a change this is usual. I'm sure as time goes on they are going to be okay. We have meetings  
591 now and again to discuss the issues of KMC.

592

593 **Researcher: What kind of things do you think will help this situation, what kind of things?**

594 Midwife: Just motivating them and having some in-service sessions maybe is going to help.  
595 Maybe getting them involved with the whole thing. Maybe bench-marking with other hospitals  
596 like RK Khan, I understand it is doing nicely. Now here they believe the babies belong to nursery  
597 and not the post-natal ward, so I think bench-marking with other hospitals will help the situation.  
598 Maybe that will change their attitude.

599

600 **Researcher: And do you know if anything is being done to get more equipment for that**  
601 **ward to make it more homely?**

602 Midwife: We do have a washing-machine here that is supposed to be taken to the KMC ward  
603 but, unfortunately, the plumbing system, as well as the toilets which are too close... sometimes  
604 there's a smell coming from the toilets. *Carte Blanche* donated a washing machine. We do have  
605 a TV for the KMC ward... so the guys from the workshop are meant to come mount it so it  
606 doesn't get taken by some people working here. But I don't know... Curtains, I don't know...  
607 because the whole situation there has to be changed as that ward is really not convenient for  
608 those, it's next to the toilet, so you just cannot change the ward. We will just have to use it as is.  
609 So we are waiting for the workshop to fix the TV and put the washing-machine in, to do the  
610 plumbing for the washing machine. It's a lot of work. This institution has no money.

611

612 **Researcher: So, over all is there anything else that you would like to share about KMC?**

613 Midwife: Well I don't think there is anything more I can share, we need to motivate the nursing  
614 staff that it really helps... we don't get a lot of sick babies, those babies that do KMC they hardly  
615 get sick unless there is a problem with the baby. There is less work-load for the nurses and less  
616 cross-infection. So it's just that we need to motivate them and work hand-in-hand and have

regular... as well as bench-marking with other hospitals to know how they do it. Fortunately I went to a maternity hospital in Cape Town, in fact that hospital is just a maternity ward, all of it. They do have a KMC ward, a ward that is not affiliated with the post-natal ward; nurses are allocated there. The mothers have got their own kitchen, they've got everything, they sit nicely, they talk, if they had problems they discuss, if they have they encourage one another to continue breastfeeding. Putting a baby between the breasts you have to breastfeed. It's difficult to find a mother doing KMC that doesn't breastfeed and give formula... uhuh. If we could have that in our institution, the ward standing on it's own, with the beds, the kitchen, the small lounge with couches and TV, and their own private toilet, it would be nice. But unfortunately we don't have funds. That's all I can say.

**Researcher: Thank you so much, it's been really helpful the things you've shared and contributed.**

Midwife: Thanks so much. Hope you come and visit us again and that you try and organise some donations for us.

Fieldnotes: The participant was very open and spoke freely throughout the interview, little probing was required.

PTID: 6

Venue: King Edward VIII Hospital, Nursery, Mother's room.

Time: 13h00

Duration 11:26

**Researcher: Thank you so much for agreeing to be part of this study, I really appreciate it. I would like to start by asking what your understanding of Kangaroo Mother Care is?**

Midwife: KMC is where you take the baby and put it on the mother's chest here, to promote growth and bonding. The mother and the child to bond.

**Researcher: In what situations is it practiced?**

Midwife: What situations is it practiced... the mother it's easy to work with them as mothers want to be with the child. They want to see the child growing. Others are difficult if they don't like it, they don't trust themselves that they can look after their babies well. They want us, nurses to keep the babies and come every two to three hours to check their babies.

651 **Researcher: So is this the reason that they don't like it, is there any other reason they don't**  
652 **like it?**

653 Midwife: Uh... yes... I think the other reason is the place where they stay with their babies. It is  
654 so uncomfortable for them they said so... It's not comfortable for them. So if they can make a  
655 new room for them, the mother and the child.... nice and warm, not in the ward that is carrying  
656 all the patients and is so small... they don't like it.

657

658 **Researcher: Do you get quite a few mothers complaining or are there mothers who are**  
659 **happy?**

660 Midwife: Okay... um... the people who are complaining are the Indian mothers and Coloureds.  
661 They don't want to sleep with their babies in the ward. Most of the Blacks/Africans they don't  
662 have any problems staying with their children and they don't give us any trouble.

663

664 **Researcher: What are your experiences with KMC, what are the things that you can share?**

665 Midwife: Sorry!

666

667 **Researcher: What kind of experiences have you had with KMC, positive or any kind, the**  
668 **effects you have seen on the baby?**

669 Midwife: Oh... the effect it has. The baby is growing fast, what I've noted. Growing so fast and  
670 active because they are taking the breastmilk most of them. I think those babies are smooth and  
671 fresh that are staying with their mothers.

672

673 **Researcher: And anything else you've noted with the babies who practice KMC?**

674 Midwife: KMC... what I've... um... nothing more...

675

676 **Researcher: So you've mainly found that they grow fast?**

677 Midwife: Mmm... that's what I've noticed.

678

679 **Researcher: And with it's practice has it changed the ward, is it different in any way?**

680 Midwife: What about changing the ward?

681

682 **Researcher: What kind of impact does it have on the ward?**

683 Midwife: Which ward...here in nursery or post-natal?... In the nursery it is easier for us, the  
684 mothers experience how to look after their babies, they spend a lot of time and after they go home

685 they know what to do with their babies rather than when we discharge the babies and the mother  
686 asks: “What must I do at home?” If the baby won’t fall down they have many questions if the  
687 baby was staying in nursery all the time. The KMC is promoting the experience of the mothers.  
688 They give the supplements they don’t have a problem with that, we teach them how to give their  
689 supplements. And those who are taking NVP’s they know exactly how to take it, and they don’t  
690 forget. They practice so at home they won’t get a problem. That makes it easy for us as there is  
691 no baby coming back with a problem. Like aspiration, they know how to do things.

692

693 **Researcher: So before KMC was practiced they didn’t feel as confident?**

694 Midwife: Ja, before that the babies were coming back, baby has aspirated, others they die  
695 because they don’t know how to feed or bath the baby. They feed the baby and put it down.  
696 Most of them that do KMC are prems, so when the mother sees the baby is blue, the baby has  
697 aspirated, but now we no longer have those problems, the number has been reduced.

698

699 **Researcher: That’s wonderful! And then is there any specific mother and baby that stands**  
700 **out in your mind that did KMC?**

701 Midwife: Umm!!

702

703 **Researcher: Like a memory of one mother and baby, that you have seen the effect KMC**  
704 **had on their lives?**

705 Midwife: Mm!

706

707 **Researcher: There’s too many?**

708 Midwife: Yes (laughs).

709

710 **Researcher: Okay, so what do you see as factors that help KMC to be practiced in the**  
711 **hospital?**

712 Midwife: Yes, it helps a lot and even us, so because we don’t have to keep most of the babies  
713 unnecessarily, instead we teach the mothers how to keep the baby, how to give the baby  
714 supplements and NVP. So it just reduces the work-load for us and promotes experience for the  
715 mothers.

716

717 **Researcher: I see. Is there anything that helps make it easier to practice KMC in the**  
718 **ward? For the mothers. Anything?**

719 Midwife: We, you mean equipment?  
720  
721 **Researcher: Anything that can help make it easier?**  
722 Midwife: So even the blankets, and those receivers... we have a shortage of it. So we do make  
723 them practice and give them what we have, according to the material it is not good.  
724  
725 **Researcher: So you feel you need more?**  
726 Midwife: Yes!  
727  
728 **Researcher: Besides blankets is there anything else you would need to help it be practiced?**  
729 Midwife: If we can get the proper place, like if we could make like a park-home here, where the  
730 mothers could be cared for and given everything they need. That is warm and hygienic, that has  
731 windows and blankets to cover and carry them. Something like that we are short of that.  
732  
733 **Researcher: Thank you. What do you find makes it difficult to practice KMC, anything**  
734 **you can think of?**  
735 Midwife: What is?  
736  
737 **Researcher: That makes it difficult for you to practice KMC?**  
738 Midwife: No.  
739  
740 **Researcher: So everyone wants to practice it?**  
741 Midwife: You mean the staff and mothers?  
742  
743 **Researcher: Anything that is a barrier to practice?**  
744 Midwife: Like I said if we can get a place and practice it properly. But there in the ward other  
745 mothers are there that are waiting to get their babies, or that are waiting to go for C/Section, they  
746 do KMC. Sometimes it makes it difficult, as the other nurses in the lying-in ward. So, if we can  
747 get a better place, we can get a lot of staff to help the mothers.  
748  
749 **Researcher: Over all is there anything else that you would like to share about KMC?**  
750 Midwife: Okay, anything more?  
751  
752 **Researcher: Anything you want to add?**

753 Midwife: To add... mmm... I can suggest that if we can be helped and given a separate room,  
754 yes, that's what we were asking our unit manager. If we can have that place separated from that  
755 place where all the mothers are kept. Yes, that will be written for KMC... so we can know only  
756 mothers that are doing KMC there must stay there.

757

758 **Researcher: That's a good idea. So they haven't... they haven't done anything about your**  
759 **suggestion?**

760 Midwife: No what I've heard is that we are still waiting for the government to give the money,  
761 but there's no money, so that's why they've parked here.

762

763 **Researcher: Thank you so much for your time and contribution, it has been very helpful.**

764 Midwife: Thank you so much.

765

766 **Fieldnotes :** This interview was difficult at times as the participant did not seem to understand the  
767 questions clearly, and further probing had to be done as it seems she misunderstood some  
768 questions. Over all, she was able to share her experiences, although not as in depth as could be  
769 expected due to this. Her body language was open and she was willing to share openly of her  
770 experiences with KMC. There were no distractions throughout the interview. On this day the  
771 unit was short of staff as, three staff members were absent on sick leave, so the ward was busy  
772 and short-staffed.

773

774 PTID: 7

775 Venue: King Edward VIII Hospital, Nursery, Mother's Room.

776 Time: 13h25

777 Duration: 08:10

778

779 **Researcher: Thank you so much for agreeing to be part of this research study. I just want**  
780 **to start by asking you what your understanding of KMC is?**

781 Midwife: What I understand is that babies should bond with their mothers, most of them are  
782 premature babies so they need to be kept close to their mothers and bond.

783

784 **Researcher: And how do you practice KMC in your ward?**

785 Midwife: Okay, what we do, how can I say, we have shirts that were donated... so we take the  
786 babies and put them against the chest. So they wear the shirts which cross over and they stay

787 with the babies for about two hours. We give them rest while the baby is sleeping, and if they  
788 want they can take out the baby, feed the baby and put the baby back.

789

790 **Researcher: What kind of babies do you do KMC with?**

791 Midwife: Low birth-weight and premature babies.

792

793 **Researcher: And then what has your experience been of KMC in your practice? What**  
794 **have you found? Share some of your experience?**

795 Midwife: You know, it's a good practice, because really the baby does bond with the mother, so  
796 far it's good.

797

798 **Researcher: What kind of results have you seen in your experience?**

799 Midwife: That the babies are growing well... faster. Yes!

800

801 **Researcher: Okay, and anything else?**

802 Midwife: I don't know.

803

804 **Researcher: What makes you think that they grow faster, how do you think KMC works to**  
805 **cause growth?**

806 Midwife: (Laughs) Umm... Okay, it's not the same as you feed the baby and put the baby back to  
807 the bed. It's not the same. There's that warmth and the heartbeat of the mother because the baby  
808 is still supposed to be inside the mother. It feels like it is inside... so that makes it grow. If you  
809 just feed the baby and put it in the bed, it feels nothing, it's just cold.

810

811 **Researcher: That's wonderful. Is there any mother and baby in your experience that**  
812 **stands out in your mind, any memory that you can think of?**

813 Midwife: No (Laughs).

814

815 **Researcher: There's too many?**

816 Midwife: Yes (laughs).

817

818 **Researcher: And what do you see as factors that help you to practice more in the ward,**  
819 **what helps?**

820 Midwife: More KMC clothes I can say. Because sometimes we are short of linen and we don't  
821 have enough to support the baby. So if we can get more of those shirts they have introduced.

822

823 **Researcher: Is there anything else? Do you find everyone is happy with practicing it?**

824 Midwife: Yes, some are happy, but some are not due to the environment they are in, in this  
825 hospital but other than that they are happy to practice it. Because some of the mothers want to go  
826 home early due to the environment as they say it's not healthy. It's gynae, so those mothers just  
827 pass through them... their place is sort of like a passage, so they pass blood going through to the  
828 toilets and they say it smells infectious.

829

830 **Researcher: And what other things make them unhappy about their environment?**

831 Midwife: It's cold, it's smelly, windows, other windows are unable to close, so really, even the  
832 blankets they give them, small blankets, so they feel the babies are getting cold.

833

834 **Researcher: So a lot of mothers want to leave early because of that?**

835 Midwife: Yes.

836

837 **Researcher: So you'd say those types of things are barriers to practicing KMC? Is there**  
838 **anything else that acts as a barrier other than the environment?**

839 Midwife: No, not here in nursery, most of the complaints are in O3, some say the milk  
840 sometimes is short, so it's stressful for them. But we can't complain and they ask us for milk, but  
841 we can't give them as now they're in O3, which is another department, so we can't involve  
842 ourselves.

843

844 **Researcher: Is there anything else you'd like to add about your experiences of KMC?**

845 Midwife: No.

846

847 **Researcher: So do you think that there can be more done to practice KMC?**

848 Midwife: Yes because it's helping.

849

850 **Researcher: What kind of thing would help?**

851 Midwife: (Shrugs)

852

853 **Researcher: Would that be the environment?**



854 Midwife: Yes, the environment.

855

856 **Researcher:** Thank you so much for your time and your contributions.

857 Midwife: Thank you

858

859 Fieldnotes: This participant was very nervous and it was difficult to get her to share her  
860 experiences freely, she often gave short answers and did not expand, and even after probing was  
861 not forthcoming. Her body language showed that she was nervous and in a hurry.

862

863 PTID: 8

864 Venue: King Edward VIII Hospital, Nursery, Mother's Room

865 Time: 13h40

866 Duration: 12:41

867

868 **Researcher: Thank you so much for agreeing to be part of this study. I would like to start**  
869 **by asking what your understanding of KMC is?**

870 Midwife: What I understand about KMC is that the mother and child are getting close, at a close,  
871 what is that thing? They do bond with their babies and what I've seen when I transfer babies to  
872 other wards. It's a lot of time for babies to accommodate the mothers when it's cold, and they're  
873 getting to enjoy to do it, from speaking to the mothers. What I can say is that it's an original  
874 engineer because the mother is doing everything for the baby. Bonding, temperature is already  
875 accommodation and time of taking care of the baby. They didn't go to prepare the food,  
876 everything is with mum.

877

878 **Researcher: In what type of situations do you practice KMC?**

879 Midwife: Especially when the mother is coming for feed time, every three hours x 8... after  
880 feeding they put the baby against the breast... they can hold and keep the baby warm.

881

882 **Researcher: What are your experiences of KMC?**

883 Midwife: What I have experienced is that babies grow faster, more especially they don't get  
884 hypothermia and they get love. I think the baby thinks she is still in the mother's womb when  
885 they're doing KMC.

886

887 **Researcher: Is there anything else you've noticed with KMC; you said it helps with**  
888 **growth?**

889 Midwife: Umm, I think just that, just the growth.

890

891 **Researcher: How do you think it helps with growth?**

892 Midwife: I think it's just the effect, to grow.

893

894 **Researcher: So what do you think makes the baby gain weight?**

895 Midwife: What I can understand is that when the baby is always the time in KMC, the mother  
896 also has time to take care of the baby, when he is passing urine, the baby doesn't get sore bums.  
897 It's easy to see if the baby has done a number one or a number two.

898

899 **Researcher: Is there any specific mother and baby that you've seen in your experience**  
900 **where KMC has changed their lives in any way?**

901 Midwife: I can say, it does help. Because when it was past 11 o'clock I see a lot of mothers and  
902 one said: "Hello, how are you? I used to be in the nursery, I had a very thin... I think it was a  
903 650g baby" then she told me her baby is so big and she thanked me for teaching her KMC, taught  
904 her everything. She said her baby is so big and she is so happy.

905

906 **Researcher: So you've also noted the bond between the baby and the mother?**

907 Midwife: Bond between the baby and the mother, and also the other thing if the mother said, "I  
908 don't want this baby", I tell her to put the baby in skin-to-skin, even if the mother complains ...  
909 she gets a bond, because if she says she doesn't want the baby when she does the skin-to-skin  
910 there's a bond and she says, "Oh my love how could I have left it there." That's what I find.

911

912 **Researcher: So you find when they do that, they become more accepting?**

913 Midwife: Yes they do.

914

915 **Researcher: That's amazing! Is there anything you see as factors that help KMC be**  
916 **practiced in the hospital?**

917 Midwife: Yes we do practice in the hospital, but the problem is there is not enough space for the  
918 mothers to do KMC for 24 hours. But what I've seen is that we have only 8 beds for our mothers.

919

920 **Researcher: So you find that...?**

921 Midwife: It is difficult for others because we don't have the space to spend 24 hours with the  
922 mothers.  
923

924 **Researcher: So you think it would be easier if you had more space?**  
925 Midwife: This would be highly effective for KMC to be practiced.  
926

927 **Researcher: And is there anything else that would make KMC easier?**  
928 Midwife: Umm I didn't get your point.  
929

930 **Researcher: Is there anything else that could help KMC be practiced, anything that stops it**  
931 **from being practiced that is a barrier?**  
932 Midwife: No nothing.  
933

934 **Researcher: Everyone is happy?**  
935 Midwife: They are mainly happy that they don't have to keep coming because they had to come  
936 at 21h00, 24h00 and 03h00 during the night. So they're happy to have the babies with them.  
937

938 **Researcher: So even the staff are happy?**  
939 Midwife: Yes they do, as we do, encourage staff to do KMC, as well as the babies they can get  
940 all the care from the mothers.  
941

942 **Researcher: So are you finding any changes in the ward since starting KMC?**  
943 Midwife: Ja, the mothers do practice and even the staff do encourage. Even the breastfeeding it  
944 helps.  
945

946 **Researcher: In what way do you see it help with breastfeeding?**  
947 Midwife: Both.  
948

949 **Researcher: Is there anything else that you'd like to add about your experiences?**  
950 Midwife: What I did experience is if the mother is sick in the ward, the baby doesn't get a chance  
951 to practice KMC, that's what I experience.  
952

953 **Researcher: So in these cases is there anyone else that can practice?**  
954 Midwife: I don't think so, I think the community is not well educated about that I think.

955     **Researcher: So they don't know much about that?**

956     Midwife: Yes, I don't know if they're willing to do that?

957

958     **Researcher: Is there anything else?**

959     Midwife: No

960

961     **Researcher: Thank you so much for your contributions and time.**

962     Midwife: Thank you very much.

963

964     Fieldnotes: I found this interview quite difficult as the participant struggled to express her  
965     thoughts in words and sometimes didn't make sense. She was otherwise open and willing to  
966     share her experiences.

967

## APPENDIX 6.1

**Table 2: Significant Statements and their locations in the text**

SIGNIFICANT STATEMENTS	LOCATION
<i>It's when we take the baby and keep the baby with the mother.</i>	Transcript 1: Line 16-17
<i>Mother places the baby directly on the skin.</i>	Transcript 1: Line 20
<i>Also just to prevent hypothermia of the babies, so with the mother's temperature it helps to prevent hypothermia of the baby.</i>	Transcript 1: Line 23-24
<i>Kangaroo Mother Care is when the baby is put in skin-to-skin between the mother's chest to keep them warm.</i>	Transcript 2: Line 152-153
<i>When they are warm they grow fast.</i>	Transcript 2; Line 153
<i>Kangaroo Mother Care is whereby the mother stays with the child</i>	Transcript 3; Line 257
<i>It is implemented in premature babies whereby the mother bonds with the child.</i>	Transcript 3: Line 257-258
<i>The child listens to the mother's heart and it facilitates growth.</i>	Transcript 3: Line 258-259
<i>My understanding is that kind which helps baby as well as the mother. In fact both of them benefit.</i>	Transcript 4: Line 397-399
<i>The position of the infant is important, the infant is naked, except for the nappy and put between the mother's breasts... And it's skin-to-skin, the mother and the baby.</i>	Transcript 4: Line 419-422
<i>It's for those babies who are not very sick but they wanting to gain weight. For low birth-weight babies, it's to gain weight before they are being discharged.</i>	Transcript 4" Line 431-432
<i>Kangaroo Mother Care is the care that is mostly given to preterm babies or those babies that benefit from bonding with their mothers</i>	Transcript 5: Line 505-507

<i>and for prevention of hypothermia and hospital infections.</i>	
<i>The mother is encouraged to put the baby in skin-to-skin contact between her breasts</i>	Transcript 5: Line 512-513
<i>The situations are where babies are not ready to be discharged who still need to be under nursing supervision and medical care.</i>	Transcript 5: Line 513-515
<i>KMC is where you take the baby and put it on the mother's chest here, to promote growth and bonding.</i>	Transcript 6: Line 671-672
<i>What I understand is that babies should bond with their mothers, most of them are premature babies so they need to be kept close to their mothers and bond.</i>	Transcript 7: Lin 819-820
<i>We have shirts that were donated... so we take the babies and put them against the chest. So they wear the shirts which cross over and they stay with the babies for about two hours.</i>	Transcript 7: Line 823-825
<i>What I understand about KMC is that the mother and child are getting close.</i>	Transcript 8: Line 913
<i>The baby was tiny and small and she was afraid of taking care but through this experience (i.e. KMC) you could see the pride and she was not afraid anymore. She had a feeling of belonging.</i>	Transcript 4: Lines 440-442
<i>What I can say is that it's an original engineer because the mother is doing everything for the baby.</i>	Transcript 8: Line 916-918
<i>Especially when the mother is coming for feed time, every three hours x 8... after feeding they put the baby against the breast... they can hold and keep the baby warm.</i>	Transcript 8: Line 922-924
<b>Experiences</b>	

<i>It reduces the time of keeping them... instead of keeping them for two weeks here, maybe they stay for one week when they are with the mother.</i>	Transcript 1: Line 33-34
<i>They grow fast with the mother.</i>	Transcript 1: Line 34-35
<i>It also promotes bonding.</i>	Transcript 1: Line 39
<i>It reduces the risk of infection.</i>	Transcript 1: Line 45-46
<i>If they are together it is easier for the mother to see if there is something wrong with the baby.</i>	Transcript 1: Line 123-124
<i>The babies are growing faster.</i>	Transcript 2: Line 153
<i>They are kept warm.</i>	Transcript 2: Line 160
<i>Quick weight gain is a positive thing that has happened.</i>	Transcript 3: Line 279
<i>Milk production is improved in the mother.</i>	Transcript 3: Line 280-281
<i>She is much more relaxed.</i>	Transcript 3: Line 281
<i>The mother also benefits by gaining confidence that she is really taking care of her baby.</i>	Transcript 4: Line 399-400
<i>It has been proven that it even shortens the days of hospitalisation because baby grows fast.</i>	Transcript 4: Line 401-402
<i>And because it's proven that being nearer to the mother makes the baby grow faster. The growth hormone is produced there... and even breastfeeding on demand helps with that.</i>	Transcript 4: Line 433-435
<i>It's really one of those wonderful things which I really want to ask how, whomsoever started this was a really good idea. Because I think the baby bond which is one of the best things that need to be promoted.</i>	Transcript 4: Line 446-448
<i>To me it's one of the safest kinds of care, for example, if mother is with the baby all the time... the chance of someone taking her because baby is down there is not likely. And</i>	Transcript 4: Line 486-489

<i>the baby grows up knowing the mother's voice as early as possible.</i>	
<i>I think Kangaroo Mother Care is helping us a lot in the ward... we used to have the problem of the ward being full, but now we don't have many babies in our big neonatal ward... There is less work for us.</i>	Transcript 5: Line 518-523
<i>It is no longer overcrowded. There is less cross-infection, we can give a lot of care, we can supervise those mothers easily.</i>	Transcript 5: Line 529-530
<i>They learn patient care in preparation for when they leave the hospital and look after the baby at home.</i>	Transcript 5: Line 531-532
<i>If the baby is with the mother it is safer because it is just the baby and the mother. If the baby is in the nursery where there are many babies, the nurse is going to touch this baby and that baby. In KMC the mother and baby are isolated, it is just like in isolation ward or isolation bay to keep the mother and baby together. No one is going to touch the baby except the hands of the mother.</i>	Transcript 5: Line 535-539
<i>They are very happy, when the mother has got the baby in the nursery and is staying in the ward the mother has to walk up and down between the nursery and the ward every three hours. And now for them to stay together they don't mind, they can stay for long, as long as they're with the baby they just feel comfortable.</i>	Transcript 5: Line 567-570
<i>The baby is growing fast, what I've noted. Growing so fast and active because they are taking the breast-milk most of them.</i>	Transcript 6: Line 700-701
<i>In the nursery it is easier for us, the mothers</i>	Transcript 6: Line 715-718



<i>experience how to look after their babies, they spend a lot of time and after they go home they know what to do with their babies.</i>	
<i>The KMC is promoting the experience to the mothers.</i>	Transcript 6: Line 719-720
<i>That makes it easy for us as there no baby coming back with a problem.</i>	Transcript 6: Line 723-724
<i>You know, it's a good practice, because really the baby does bond with the mother...</i>	Transcript 7: Line 833-834
<i>That the babies are growing well... faster</i>	Transcript 7: Line 837
<i>It's not the same as you feed the baby and put the baby back to the bed. It's not the same. There's that warmth and the heartbeat of the mother because the baby is still supposed to be inside the mother. It feels like it is inside... so that makes it grow.</i>	Transcript 7: Line 844-848
<i>What I have experienced is that babies grow faster more especially doesn't get hypothermia and they get love.</i>	Transcript 8: Line 927-928
<i>I think the baby thinks she is still in the mother's womb when they're doing KMC.</i>	Transcript 8: Line 928-929
<i>Bond between the baby and the mother, and also the other thing if the mother said, "I don't want this baby", I tell her to put the baby in skin to skin, even if the mother complains ... she gets a bond, because is she says she doesn't want the baby when she does the skin to skin there's a bond ...</i>	Transcript 8: Line 951-955
<i>Even the breastfeeding it helps.</i>	Transcript 8: Line 990-991
<i>That makes it easy for us as there no baby coming back with a problem.</i>	Transcript 6: Lines 723-724
<i>Most of them that do KMC are prems so when the mother sees the baby is blue, the baby has</i>	Transcript 6: Lines 729-731

<i>aspirated, but now we no longer have those problems, the number has been reduced.</i>	
<i>The baby was tiny and small and she was afraid of taking care but through this experience (i.e. KMC) you could see the pride and she was not afraid anymore. She had a feeling of belonging.</i>	Transcript 4: Lines 440-442
<b>Hindering Factors</b>	
<i>When there is a need for Kangaroo Mother Care we take the patient out from their ward to the KMC... and some of them are not happy about it.</i>	Transcript 1: Line 76-78
<i>I think it is more work for them.</i>	Transcript 1: Line 85
<i>They are next to the toilet, so they can hear everything you are doing in the toilet. And they say the other patients, those that have got wounds... C/Section... they pass through there... they are not happy to be there... and the ladies say it is cold...</i>	Transcript 2: Line 196-199
<i>The mothers are complaining that while they are busy feeding their babies other mothers are passing by. It is a lying-in ward so there are all different people passing through.</i>	Transcript 3: Line 311-313
<i>They should educate much more... do more in-service training as to the importance of it.</i>	Transcript 3: Line 320-321
<i>Matrons should communicate.</i>	Transcript 3: Line 372-373
<i>The nursing staff attitude. The problem with the postnatal ward staff is that they don't think the KMC belongs to them. They usually think KMC has something to do with babies so the nursery staff has to take care of those babies.</i>	Transcript 5: Line 596-598
<i>Our institution does not have enough</i>	Transcript 5: Line 598-601

<i>facilities... in fact enough equipment to take care of those mothers. Like it was very cold in winter so we did not have enough heaters.</i>	
<i>Others are difficult if they don't like it, they don't trust themselves that they can look after their babies well.</i>	Transcript 6: Line 675-677
<i>I think the other reason is the place where they stay with their babies. It is so uncomfortable for them they said so.</i>	Transcript 6: Line 682-683
<i>We are still waiting for the government to give the money, but there's no money.</i>	Transcript 6: Line 697-698
<i>Happy, but some are not due to the environment they are in, in this hospital, but other than that they are happy to practice it. Because some of the mothers want to go home early due to the environment as they say it's not healthy.</i>	Transcript 7: Line 865-867
<i>It's cold, it's smelly, windows, other windows are unable to close, so really, even the blankets they give them are small blankets so they feel the babies are getting cold.</i>	Transcript 7: Line 872-873
<i>The problem is there is not enough space for the mothers to do KMC 24 hours a day.</i>	Transcript 8: Line 962-963
<i>What I did experience is if the mother is sick in the ward, the baby doesn't get a chance to practice KMC, that's what I experience.</i>	Transcript 8: Line 997-998
<b>Facilitating factors</b>	
<i>I think more training will help so that we can know and better understand how it is going to help us.</i>	Transcript 1: Line 56-57
<i>If we can have that specific room for the Kangaroo Mother Care, it will be fine.</i>	Transcript 1: Line 110-111
<i>.I think we the nurses also encourage them...</i>	Transcript 2: Line 179-180

<i>they are relaxed when they are talking to us about their problems.</i>	
<i>I think something like a carrier would help so that they can hold their babies... something like imbeleko... in Zulu it is imbeleko... a baby carrier.</i>	Transcript 2: Line 223-224
<i>Continuous monitoring whether the appropriate principles and guidelines are followed... so there needs to be a person who can ensure that. There needs to be at least a Kangaroo co-ordinator.</i>	Transcript 3: Line 323-325
<i>More heaters... better furniture... comfortable sofas.</i>	Transcript 3: Line 350
<i>I think as members of a family the mother shouldn't be the only one if she happens to go home, if the father could do it.</i>	Transcript 4: Line 453-454
<i>I think a homely environment... wherever they are, they should be able to... because the mothers now must be able to feel at home... in fact, even making their tea... it should be there... according to me, it should have that homely atmosphere.</i>	Transcript 4: Line 465-468
<i>Just motivating them and having some in-service sessions maybe is going to help.</i>	Transcript 5: Line 618-619
<i>Maybe getting them involved with the whole thing. Maybe bench-marking with other hospitals.</i>	Transcript 5: Line 619-620
<i>We need to motivate the nursing staff that it really helps.</i>	Transcript 5: Line 639-640
<i>It reduces the work-load for us and promotes experience for the mothers.</i>	Transcript 6: Line 748-749
<i>If we can get the proper place, like if we could make like a park-home here, where the mothers</i>	Transcript 7: Line 764-766

<i>could be cared for and given everything they need. That is warm and hygienic, that has windows and blankets to cover and carry them.</i>	
<i>More KMC clothes I can say. Because sometimes we are short of linen and we don't have enough to support the baby.</i>	Transcripts 7: Line 859-860

## APPENDIX 6.2

**Table 3: Themes and associated significant meanings**

Themes	Associated Significant meanings
Concept/Experiences	
Emotive Concept	<ol style="list-style-type: none"> <li>1. It's when we take the baby and keep the baby with the mother. (Transcript 1: Lines 16-17)</li> <li>2. Mother places the baby directly on the skin (Transcript 1: Line 20)</li> <li>3. Kangaroo Mother Care is whereby the mother stays with the child (Transcript 3: Lines 257)</li> <li>4. It is implemented in premature babies whereby the mother bonds with the child (Transcript 3: Lines 257-258).</li> <li>5. Kangaroo Mother Care is the care that is mostly given to preterm babies or those babies that benefit from bonding with their mothers (Transcript 5: Lines 505-507)</li> <li>6. KMC is where you take the baby and put it on the mother's chest here, to promote growth and bonding (Transcript 6: .671-672)</li> <li>7. What I understand is that babies should bond with their mothers, most of them are premature babies so they need to be kept close to their mothers and bond (Transcript 7: Lines 819-820).</li> <li>8. What I understand about KMC is that the mother and child are getting close (Transcript 8: Line 893).</li> </ol>
	<ol style="list-style-type: none"> <li>1. Also just to prevent hypothermia of the</li> </ol>

<p>Physiological concept</p>	<p>babies, so with the mother's temperature it helps to prevent hypothermia of the baby (Transcript 1: Line 23-24).</p> <ol style="list-style-type: none"> <li>2. It reduces the time of keeping them... instead of keeping them for two weeks here, maybe they stay for one week when they are with the mother (Transcript 1: Lines 33-34).</li> <li>3. The child listens to the mother's heart and it facilitates growth (Transcript 3: Lines 258-259).</li> <li>4. Quick weight gain is a positive thing that has happened (Transcript 3: Line 279).</li> <li>5. And because it's proven that being nearer to the mother makes the baby grow faster. The growth hormone is produced there... and even breastfeeding on demand helps with that (Transcript 4: Lines 433-435).</li> <li>6. It is no longer overcrowded. There is less cross-infection, we can give a lot of care, we can supervise those mothers easily (Transcript 5: Lines 529-530).</li> <li>7. If the baby is with the mother it is safer because it is just the baby and the mother. If the baby is in the nursery where there are many babies, the nurse is going to touch this baby and that baby. In KMC the mother and baby are isolated, it is just like in isolation ward or isolation bay to keep the</li> </ol>
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	<p>mother and baby together. No one is going to touch the baby except the hands of the mother (Transcript 5: Lines 535-539).</p> <p>8. It's not the same as you feed the baby and put the baby back to the bed. It's not the same. There's that warmth and the heartbeat of the mother because the baby is still supposed to be inside the mother. It feels like it is inside... so that makes it grow (Transcript 7: Lines 844-848).</p> <p>9. Those babies that do KMC they hardly get sick unless there is a problem with the baby. There is less work load for the nurses and less cross-infection (Transcript 5: 640-642).</p>
Maternal Instinct and Capability	<p>1. If they are together it is easier for the mother to see if there is something wrong with the baby (Transcript 1: Line 123-124).</p> <p>2. The mother also benefits by gaining confidence that she is really taking care of her baby (Transcript 4: Lines 399-400).</p> <p>3. They learn patient care in preparation for when they leave the hospital and look after the baby at home (Transcript 5: Lines 531-532).</p> <p>4. In the nursery it is easier for us, the mothers experience how to look after their babies, they spend a lot of time and after they go home they know what to do with their babies (Transcript 6:</p>



	<p>Lines 715-718)</p> <ol style="list-style-type: none"> <li>5. That makes it easy for us as there are no babies coming back with a problem (Transcript 6; Lines 723-724)</li> <li>6. Most of them that do KMC are prems, so when the mother sees the baby is blue, the baby has aspirated, but now we no longer have those problems, the number has been reduced (Transcript 6: Line 729-731).</li> </ol>
Maternal concerns	<ol style="list-style-type: none"> <li>1. When there is a need for Kangaroo Mother Care we take the patient out from their ward to the KMC... and some of them are not happy about it (Transcript 1: Lines 76-78).</li> <li>2. They are next to the toilet, so they can hear everything you are doing in the toilet. And they say the other patients, those that have got wounds... C/Section... they pass through there... they are not happy to be there... and the ladies say it is cold (Transcript 2: Lines 196-199).</li> <li>3. The mothers are complaining that while they are busy feeding their babies other mothers are passing by. It is a lying-in ward so there are all different people passing through (Transcript 3: Lines 311-313).</li> <li>4. Others are difficult if they don't like it, they don't trust themselves to look</li> </ol>

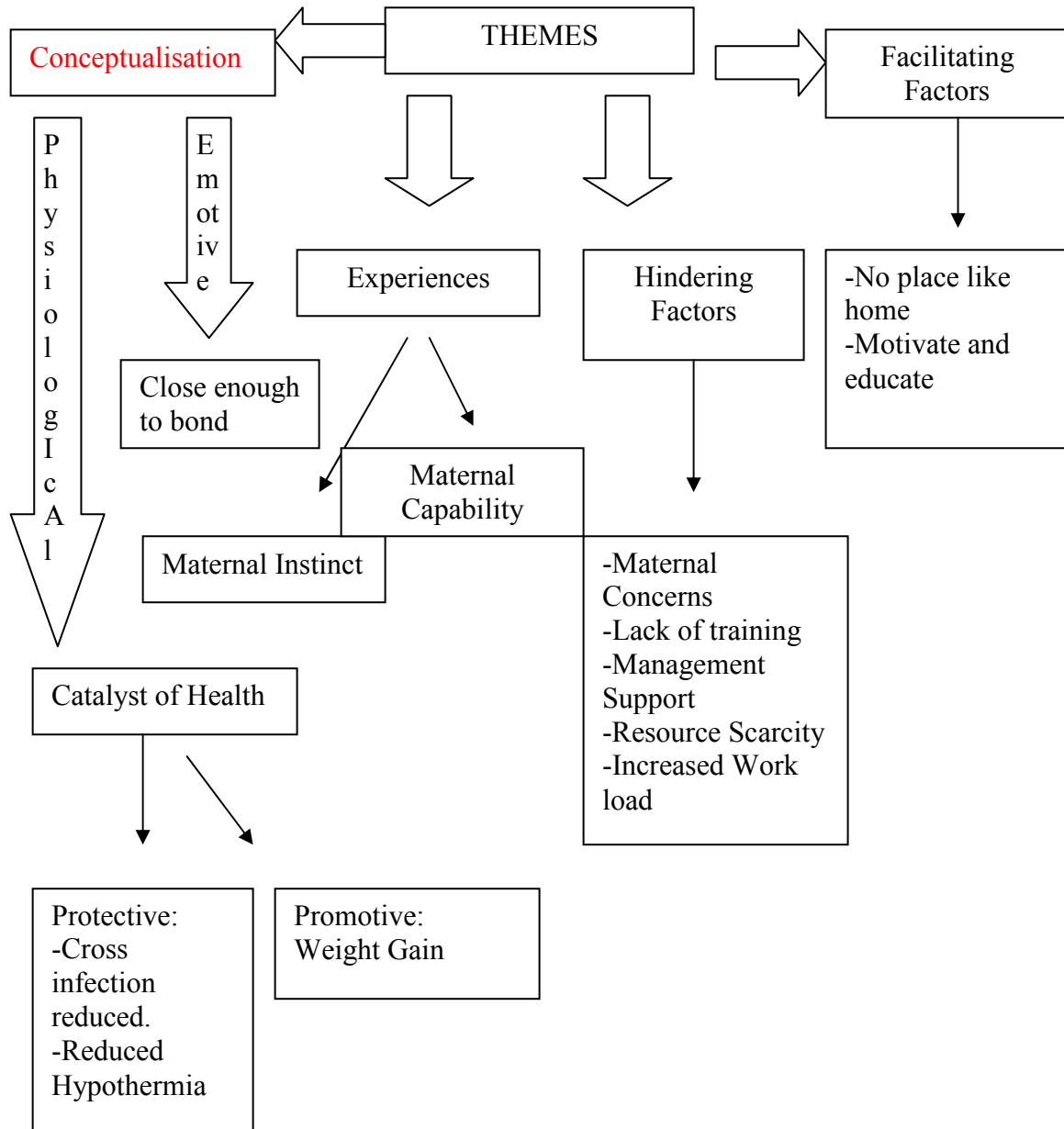
	<p>after their babies well (Transcript 6: Lines 675-677).</p> <ol style="list-style-type: none"> <li>Happy, but some are not due to the environment they are in, in this hospital, but other than that they are happy to practice it. Because some of the mothers want to go home early due to the environment as they say it's not healthy (Transcript 5: Lines 865-867).</li> <li>What I did experience is if the mother is sick in the ward, the baby doesn't get a chance to practice KMC, that's what I experience (Transcript 8: Lines 997-998).</li> </ol>
Staff Concerns (Increased work load, lack of training, management support)	<ol style="list-style-type: none"> <li>I think it is more work for them (Transcript 1: Line 85)</li> <li>They should educate much more... do more in-service training as to the importance of it (Transcript 3: Line 320-321).</li> <li>Matrons should communicate (Transcript 3: Lines 372-373).</li> <li>The nursing staff attitude. The problem with the postnatal ward staff is that they don't think the KMC belongs to them. They usually think KMC has something to do with babies so the nursery staff have to take care of those babies (Transcript 6: Line 596-598).</li> </ol>
Resources Scarcity	<ol style="list-style-type: none"> <li>Our institution does not have enough facilities... in fact enough equipment</li> </ol>

	<p>to take care of those mothers. Like it was very cold in winter so we did not have enough heaters (Transcript 5: Lines 598-601).</p> <ol style="list-style-type: none"> <li>2. We are still waiting for the government to give the money, but there's no money (Transcript 6: Lines 697-698).</li> <li>3. The problem is there is not enough space for the mothers to do KMC 24 hours a day (Transcript 8: Lines 962-963).</li> </ol>
<b>Facilitating Factors</b>	
Motivate and Educate	<ol style="list-style-type: none"> <li>1. I think more training will help so that we can know and better understand how it is going to help us (Transcript 1: Lines 56-57)</li> <li>2. Continuous monitoring whether the appropriate principles and guidelines are followed... so there needs to be a person who can ensure that. There needs to be at least a Kangaroo co-ordinator (Transcript 3: Line 323-325).</li> <li>3. Maybe getting them involved with the whole thing. Maybe bench-marking with other hospitals (Transcript 5: Line 619-620).</li> <li>4. We need to motivate the nursing staff that it really helps (Transcript 5: Lines 639-640)</li> </ol>
	<ol style="list-style-type: none"> <li>1. If we can have that specific room for the Kangaroo Mother Care, it will be fine... (Transcript 1: Line 110-111)</li> </ol>

<p>No place like home</p>	<ol style="list-style-type: none"> <li>2. I think something like a carrier would help so that they can hold their babies... something like <i>imbeleko</i>... in Zulu it is <i>imbeleko</i>... a baby-carrier (Transcript 2: Lines 223-224).</li> <li>3. More heaters... better furniture... comfortable sofas (Transcripts 3: Line 350).</li> <li>5. I think a homely environment... wherever they are, they should be able to... because the mothers now must be able to feel at home... in fact, even making their tea... it should be there... according to me it should have that homely atmosphere (Transcript 4: Lines 465-468).</li> <li>6. More KMC clothes I can say. Because sometimes we are short of linen and we don't have enough to support the baby (Transcript 7: Lines 859-860).</li> </ol>
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## APPENDIX 7

### DIAGRAM OF EMERGENT THEMES



## APPENDIX 8



Reg. No. 2006/156780/23

18 November 2011

Dear Sir/Madam

### **EDITING AND PROOF-READING OF DISSERTATION OF ROBYN CURRAN:**

#### **WORDWEAVERS CC**

I hereby confirm that the above student's research dissertation was submitted to me for editing and proof-reading, and that these tasks were carried out and that errors and anomalies were amended accordingly. Items corrected include grammar, punctuation, spelling and syntax.

Please note that an Error Report was submitted to the student and her Supervisor with suggestions, recommendations and notations of errors which it was not possible for the editor to rectify and which required attention by the student. Once these corrections have been implemented the document can be regarded as complete.

I trust that this service will prove satisfactory

Yours faithfully

**Catherine P. Eberle (MA)**  
**WordWeavers cc**

**7 woodlands Rd  
Glenwood  
DURBAN  
4001**