

**THE RESPONSES AND INVOLVEMENT OF FATHERS OF PRE-TERM
LOW BIRTH WEIGHT BABIES IN A NEONATAL INTENSIVE CARE UNIT
AT A TERTIARY HOSPITAL IN DURBAN**

BY

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Submitted in partial fulfillment of the requirements of

Master Degree in Maternal and Child Health

at the School of Nursing

University of KwaZulu-Natal

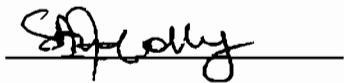
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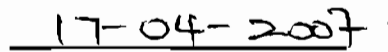
January 2007

DECLARATION

This study represents an original work of the author. Other work referenced in the text has been acknowledged. This work has not been previously submitted for any other degree or examination at any other university. I am solely responsible for the opinions, interpretations and conclusions expressed in the study.



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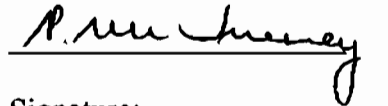
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As the supervisors, we have approved this dissertation for submission



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DEDICATION

This work is dedicated to all fathers of pre-term low birth weight babies whom at the time of the baby's stay in the neonatal intensive care unit offered their full support to the babies and their mothers.

ACKNOWLEDGEMENTS

I thank my almighty God for his precious love, grace and mercy shown to me during the course of my study.

My sincere thanks and appreciation to the following individuals for all their tremendous support and utmost help:

My supervisor, Mrs. R. Cassimjee for her great guidance, high standard of educational support and motivational advice when in despair,

Professor P. A. McInerney, my co-supervisor for her superior contribution, high standard of work and excellent support so as to make this research a master piece,

Mr. C. and Mrs. S. Eke for their valuable time, support and excellent contribution when the research was in its proposal stage,

Professor O. Adejumo, Ms S. Majeke and Mrs. J. Shepherd for their continual encouragement and for being great mentors,

Dr Joshua, Dr H. Mackenjee and Mrs. J. Ngwane for granting me permission to conduct the research study at the Neonatal Intensive Care Unit (NICU); Inkosi Albert Luthuli Central Hospital (IALCH) Durban,

All the nursing staff at neonatal unit, special thanks to Sister R. Govender and Staff Nurse D. Dube for their assistance in administering the questionnaire to the fathers.

My thanks to all the fathers of preterm low birth weight babies (PTLBW) who gave their time to fill the questionnaires.

The prayers of my mother Mrs. C. A. Awonusi, my father, Baba Eletu and my sisters; Mrs. Ola Idowu, Mrs Damola Adegboye and Miss Modupe Awonusi have contributed to the success of this study

Very special thanks to my sweetheart Dr. S.K. Soniyi for being the pillar of support and assistance and my children Abiola, Olusegun and Oladipo for their understandings and sacrifices; without their patience this study would not have been possible.

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ABSTRACT

Premature birth occurs before parents have had time to prepare for the birth of the infant.

This survey was conducted to describe the responses of fathers of preterm low birth weight babies (PTLBW) and their involvement in the care of those babies in a neonatal intensive care unit.

A quantitative descriptive non-experimental study design using purposive sampling (a non –probability method of sampling) was adopted.

Fifty fathers of PTLBW babies of less than 2500grams, who visited and were involved in the care of their babies in NICU, voluntarily participated in the study by completing a self-administered questionnaire. The questionnaire was designed to collect the demographic information of the participants and to address their responses and their involvement in the care of the baby.

Analysis of the findings revealed that fathers reacted positively on the birth of their babies as the majority of the fathers indicated that they were happy despite the fact that their babies were born before time. Fathers in this study experienced varying reactions to the equipment that they saw being used on their babies, 76% mentioned that they were frightened.

Moreover, the research findings revealed that a high percentage of fathers, 88%, in the study mentioned that talking to their wives, partners or spouses as well as talking to nurses and doctors in NICU was the main strategies that they had used to cope with their feelings.

Teaching is part of the support available to fathers as a tool to enhance their psychological well being and increase their interdependence relationship. Fathers in this study indicated they received information about their babies during visits. Thirty

four (68%) of the fathers in the study acknowledged that nurses gave the most teaching about the baby, baby's care, baby's progress and about their overall role while the baby is in NICU.

The fathers also in the same manner demonstrated that the information that they received on the NICU environment has helped them to participate in the care of the baby.

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Annexure

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- Annexure B** Copy of letter from the unit manager granting permission to conduct the survey
- Annexure C** Copy of letter asking permission from the head of department (HOD) to conduct the survey in NICU at Inkosi Albert Luthuli Central Hospital Durban
- Annexure D** Copy of letter granting permission from the HOD to conduct the survey
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LIST OF ABBREVIATIONS

HOD	Head of Department
IALCH	Inkosi Albert Luthuli Central Hospital
LBW	Low Birth Weight
NICU	Neonatal Intensive Care Unit
PTLBW	Pre-term Low Birth Weight
VLBW	Very Low Birth Weight
WHO	World Health Organization
SAQs	Self-Administered Questionnaires

CHAPTER ONE

INTRODUCTION

The birth of a child is a significant event in the life of every parent. However, as is the case with several facets of life, the birth of a child can take different forms. There are principally pre-term, term and post-term births. Sellers (1997: 805), regards pre-term babies as those born before 37 completed weeks of pregnancy. Those delivered between 37-42 completed weeks of pregnancy are regarded as being term babies, while post term babies are those that are born after 42 completed weeks of pregnancy. In the case of a pre-term birth, where the birth occurs before the usual or expected time (Dirckx, 1997: 709), serious ongoing medical and physical complications may require hospitalization in the neonatal intensive care unit (NICU) for days and sometimes for months (Talmi & Harmon 2003:14).

A pre-term birth violates parental expectations about pregnancy, childbirth, parenting, and development, (Macey et al.1987 in Talmi & Harmon, 2003: 15). It was further stressed that, pregnancy in this case ends early and sometimes abruptly and parents of pre-term infants experience disruptions in the normal biological, physical, and psychological changes associated with pregnancy. They miss out on traditional rituals, such as baby showers, naming ceremonies, and the baby's first bath, that mark the transitions into parenthood. There is a massive turn around of routine predictions (Strange 2002:116). Parents of pre-term babies are therefore expected to adjust more quickly than expected in terms of their ability to support the infant physically, psychologically, and socially as well as in financial matters. This is in line with what Talmi and Harmon (2003: 14) described in their article, that parents of preterm babies make extraordinary efforts to maintain relationships with their hospitalized premature

babies. While the baby is in NICU, parents of preterm babies feel guilty, overwhelmed, afraid, angry, confused or jealous of parents with healthy babies. They may also have a fear of becoming attached to a sick child and may worry that the baby will die. Probably this is one of the reasons why Kappel & Kaiser (2001:250) state that the premature birth may influence the parent-child relationship long after birth.

According to Adjibolosoo (1995:54), societies are made up of several institutions that are managed by people. For those institutions to function effectively there is a need for those in charge to demonstrate certain characteristics and qualities that enhance success. Such characteristics and qualities are those that are reflected in what Adjibolosoo (1995:55) referred to as the human factor. Adjibolosoo describes the human factor as a spectrum of personality characteristics and other dimensions of human performance that enable social, emotional, economical and political institutions to function and remain functional over time.

It appears that the prime concern here is the issue of adaptability of the human to change situations as in the delivery of the pre-term babies. Merestein and Gardener (2002:757) described premature birth as a crisis and emergency situation characterized by an increased concern for the survival of the infant. This concern is more of parenthood where the baby is born earlier than expected. Therefore the onset of a premature birth is both physiologically and psychologically taxing on the parent. Basically, there should be some form of adjustment to some extent following the birth of the baby. This adjustment appears to task parents of the child to a great extent. The adjustment pressures on fathers call for attention, as not much is known about how and why they react in certain ways to pre-term infants.

It is against this background that this study attempts to describe the responses and involvement of fathers of pre-term low birth weight infants in neonatal intensive care

unit at Inkosi Albert Luthuli Central Hospital. The intention is to increase understanding of what constitutes fathers responses when they have a pre-term low birth weight baby. The study will identify the factors that contribute to their caring and coping practices and perhaps also identify factors that influence these responses.

1.1 Background to the Study

Pre-term infants are infants, born before 37 completed weeks of gestation (Harrison, Keet & Shore, 2001: 69). It is a major problem as it is associated with significant morbidity and mortality rates and it is often unpreventable. In affluent communities the low birth weight rate is usually less than 7% while the rate in poor communities is often above 30% (Kibel & Wagstaff 1995:64). The incidence, however, ranges from under 6% in affluent populations to over 20% in poverty-stricken groups as documented by Harrison et al. (2001: 69). This was in agreement with the earlier work of (Behrmann, Kliegman, Nelson & Vaughan, 1992: 442), where it was indicated, that a strong correlation exists between both premature birth and low socio economic status.

During 1985, 6.7% of live births in the United States weighed less than 2,500g; the rate for Blacks (12.4%) was more than twice that for Whites (5.6%), (Behrmann, et al 1992: 442). This means that despite improved nursing, technical and medical care of these babies in the NICU, such as the use of continuous positive airway pressure (CPAP) and kangaroo mother care, there has not been considerable change in the incidence over the past six years as revealed by the statistics. Examination of the data provided by seventy-three (73) users of the perinatal problem identification programme in South Africa, reported that about 19.6% of total deliveries, 52668 in

the metropolitan, 16.5% of 117796 of deliveries in city and towns, and 13.0% of 62254 deliveries in rural areas were born with a low birth weight (LBW) (Saving babies 2002, 3rd perinatal care survey of South Africa).

In contrast, Cattaneo et al. (1998, cited by Reddy 2003:4) reported that 98% of 5 million neonatal deaths estimated by the World Health Organization (WHO) for 1995 occurred in low-income countries. Low birth weight was the underlying cause of most of these deaths. Earlier research on developmental issues in low-birth-weight infants by Brooten (1994:17), Low birth weight (LBW) was regarded as a major risk factor associated with infant mortality and is a significant factor in infant morbidity. However, while some of these babies are mature enough to survive without difficulty outside the womb, the majority of them frequently have problems with breathing, feeding, maintaining body temperature and fighting infection ([http://www.fun.go.com/health/child health/ dony/ dony 89 enc-prem](http://www.fun.go.com/health/child%20health/dony/dony%2089%20enc-prem)) The smaller the baby is, the more serious the above problems are likely to be. Babies who weigh less than 1,500 grams at birth are known as very low birth weight babies and are more likely to have complications of prematurity; however, any infant weighing less than 2,500grams definitely needs special care. In a recent study, Jackson et al (2003: 120) reported that the birth of the very low birth weight (VLBW) infant (weight < 1500grams) has a long term impact on the family. Cronin et al (1995:152) had earlier pointed this out in their study.

In another study, Jackson (2003:120) reported that, during the past decade, care of the pre-term infant has improved considerably with better medical, technical and nursing care, which has recorded a great impact on the survival rate. There are still high rates

of mortality and morbidity, which impose an immense burden on health, education, and social services and on the families. It is perhaps the delicate nature of the baby, which does not permit for normal parent- handling and relationships. The high mortality rate associated with preterm birth as identified by Harrison et al (2001:70) tends to create a tense and stressful environment, which some parents are unable to cope with. As a matter of fact, pre-term birth may have different meaning for parents who have struggled for years to conceive a child than it does for parents with a history of perinatal loss. Parents who have had fertility problems may feel great joy at the birth, along with concern for the baby's well being and the NICU environment. Parents with a history of perinatal loss, on the other hand, may experience tremendous fear and anxiety about the baby's survival, coupled with rekindled grief (Talmi and Harmon 2003: 13).

While the circumstances and the demands it makes on parents, is not gender-discriminatory, most mothers have very little option but to remain in hospital for their babies for various reasons unlimited to maternal attachment and feeding concerns. The scenario is remarkably different for fathers. For them, there are no strict requirements and this allows ample room for the impartation of different attitudes, which sprout from personal idiosyncrasies. Perhaps it is this room for maneuverability that elicits many diverse and interesting reactions from the fathers. These reactions whether positive or negative are likely to have far reaching impacts on the life of the baby, the mother, and the father; both severally and jointly. According to Holditch-Davis and Miles (2000:13-21), six different factors can support or weaken the coping ability of parents, of which they made mention of family situation, behaviour of the staff, health status of the baby, parents' concern for the child and loss of normal parenthood. With regards to behaviour of the staff towards parents, nurses must

recognize the important role they play most especially when the newborn requires constant monitoring or prolonged hospitalization. In this case, the nurse needs to spend time with the family to meet their need for information, to promote attachment and to gradually involve the father in care-taking activities as appropriate (Novak and Novak 1990: 25).

Given that the effect of proper adjustment or mal-adjustment can be extensive, the issue has become topical in intellectual and social discourse. The process of adjustment of the parent is very important in the care of the pre-term baby and this was the reason why Palmer et al. (1983 cited by Jackson et al 2003: 121) reported that the behaviour of the staff is highly important. This is in agreement with (Talmi and Harmon 2003: 15) where focus on parents' adjustment was based on ensuring that, there are certain degree of interactions between preterm infants and their parents while the infant is hospitalized in NICU. Emphasis was on infant-family professionals' relationship, which has proof to promote the mental health of preterm babies and their families. Psycho-educational intervention with families, mental health services in NICU with various physical supports that are available have been some of the techniques that paved the way to success. In the same manner, Palmer et al. (1983 by Jackson 2003:121), concluded that when staff attitudes and behaviour are good towards parents of preterm babies, some of the parents leave some of their parenthood with the staff, this is basically through rendering quality and supportive care to the babies in their presence and as well as in their absence. Brown et al. (1996 cited by Talmi and Harmon 2003: 15) emphasized the support that the caregivers have to render that would subsequently contribute to and promote optimal relationship development and infant mental health by being available physically, psychologically, and emotionally to their babies. In the same respect, the caregivers foster mental

health when they are aware of and sensitive to infants' patterns, cues, behaviours, states, emotions and communication efforts, as well as the effect of the environment on the infant. However, there is need to study the experiences of fathers of pre-term babies, pointed out in the study by Jackson et al. (2003: 120) who said that studies on the experiences of fathers are sparse.

1.2 Problem Statement

The presence of the fathers in the home has a significant impact on the family well-being. His dedication, sense of responsibility and commitment to his family are characteristics of the human factor (HF) personality spectrum that are essential to the overall development and well being of the society ([http:// www.uwsp.edu / education / oogunnai / fathers.htm](http://www.uwsp.edu/education/oogunnai/fathers.htm)) 2003: 33). Any incident that threatens to upset the balance in a home, such as in the case of an unexpected premature birth, is generally regarded as an uneasy circumstance and it requires a great deal of effort on the part of the father who has to make himself available almost all the time to give the necessary support to his wife and the pre-term low birth weight infant.

From experience, the researcher has noticed that fathers of preterm babies play a subordinate and secondary role in their interaction with the babies in the NICU; this is a concern because lack of interaction between fathers and their newborn may adversely affect the emerging parent-child relationship. As a consequence, the baby's mental health and the overall development may be affected. This problem may also extend to the mother of the baby who needs utmost support from her husband at this crucial stage.

Based on the reports from previous studies (Miles and Holditch-Davis 1995:250, Board and Ryan Wenger 2000, and Jackson et al, 2003:128), where it has been

identified that the experiences of fathers of pre-term infants are sparse, this study therefore, wants to establish, how fathers of pre-term infants respond to the birth of their pre-term babies and how they are involved in the care of those babies in NICU.

1.3 Purpose of the Study

The purpose of the study is to describe the responses of fathers of pre-term low birth weight babies and their involvement in the care of that baby in NICU.

1.4 Objectives of the Study

The objectives of this study are to:

1. To describe the responses of fathers of pre-term low birth weight babies in a neonatal intensive care unit and,
2. To identify the factors which contribute to those responses.
3. To describe the involvement of fathers of pre-term low birth weight babies in a NICU.
4. To develop guidelines if necessary for inclusion of fathers in the care of pre-term low birth weight babies in NICU.

1.5 Research Questions

In pursuit of the objectives stated, the study proposes the following research questions:

1. How do fathers respond to the birth of pre-term low birth weight babies?
2. What are the activities of fathers when they visit their pre-term low birth weight babies in an NICU?
3. Are there any factors underlying the responses of fathers of pre-term low birth weight babies?

4. What can be done to improve fathers' involvement in the care of pre-term low birth weight babies in NICU?

1.6 Significance of the Study

The care of pre-term babies within an NICU is usually the responsibility of the health professional and the mother of the baby. This study will bring forth the responses of the fathers of the pre-term baby in the NICU as a basis for understanding how fathers react when they have a pre-term low birth weight infant. Knowledge of these responses would unravel factors that influence their caring and coping practices for the purpose of determining their involvement.

Although several studies have identified the importance of paternal factors such as education, occupation, care-giving involvement and presence in the home (Ogunnaiké, 1995; Poresky & Henderson, 1982; Yogman et al., 1995), most of these studies do not describe the responses of fathers of pre-term low birth weight infants in relation to their involvement.

This study, however, seeks to establish the extent to which fathers of pre-term infants are involved in the care and nursing of their babies. Factors that are identified would be used to develop necessary guidelines to assist the neonatal staff to orientate and involve fathers early in the care of their infants. In the process, fathers of the pre-term infants will be assisted in overcoming some of the fears and difficulties that they may have. This essentially will bring about a situation where both parents fully participate in the upbringing of the child.

1.7 Theoretical Framework

1.7.1 Introduction

Roy's adaptation model forms an appropriate basis for the study as it is centred on adaptation (Roy 1995:252). Roy credits the works of Von Bertalanffy's (1968), general system theory and theory as forming the basis of the scientific assumptions underlying the model.

Helson is a physiologic psychologist who developed an Adaptation Theory. His adaptation theory impressed Roy who started working on a conceptual framework that could be used in many spheres of nursing practice, research and education.

1.7.2 Explanation of the theory

Roy identifies four essential elements of her theory as follows:

- The person who is the recipient of nursing care
- The concept of environment
- The concept of health and
- The concept "Nursing" (Roy and Andrews, 1991: 5-6)

Roy integrates these concepts in her model, clarifies each and also defines their relationships. Roy's first area of concern, is the identification of the recipient of nursing care who could either be a person, a family, a group, a community, or a society (Roy 1995:253). Each is considered by the nurse as a holistic adaptive system. So Roy sees a person as recipient of nursing through nursing interventions, the goal of which is "to maintain and enhance adaptive behaviour to change" (Roy 1995:261). The person is thus a biophysical system that continually interacts with the changing environment in order to adapt.

To adapt the person uses his adaptive system, which consists of inputs of stimuli and adaptation level, outputs as behavioural responses that serve as feedback, and control processes known as coping mechanisms (Roy & Andrews, 1991 cited by Roy 1995: 254). The adaptive system has input coming from the external environment as well as from the person.

According to Roy (1995:254), inputs are identified as stimuli that are conceptualized as falling into three classifications of focal, contextual, and residual.

The focal stimulus is the greatest degree of change or stimulus most immediately confronting the person to which a person must make an adaptive response, for instance a father's response to the birth of a pre-term low birth weight baby.

Contextual stimuli are all other stimuli of the person's internal and external world that can be identified as having a positive or negative influence on the situation such as the neonatal intensive care environment.

Residual stimuli are those internal or external factors whose impact on the system cannot be validated. Significant stimuli that comprise the focal, contextual, and residual stimuli include the degree of change, past experiences, knowledge level, strengths, and / or limitations.

Outputs of the person as a system are the responses of the person's behaviours, which can be both external and internal. They can be observed, intuitively perceived by the nurse, measured and subjectively reported by the person. Output responses become feedback to the person and to the environment.

In the case of this study, the reactions of fathers to pre-term low birth weight infants will be determined so as to be able to identify their responses that can either be

described as adaptive or ineffective responses. In the case of ineffective responses, fathers will be assisted to adaptive responses, which are those activities that promote the integrity of the person or wholeness in terms of their ability to meet the goals of survival, growth, reproduction and mastery (Roy & Andrews, 1991 cited by Roy 1995:255).

Coping mechanisms were also used by Roy to describe the control processes of the person as an adaptive system. Two subsystem mechanisms of the person, “the Regulator and the Cognator” coping mechanisms were considered by Roy’s Model.

Roy describes these as “Central processes” (1995:255). The regulator responds automatically and therefore is related to physiological responses while the Cognator responds through the processes of perception, information processing, learning judgment and feelings.

In conclusion, the regulator and cognator manifest through adaptive modes such as physiological function, self-concept, role function and interdependence modes. Roy termed these effectors, which are postulated as frequently acting together, in maintaining the integrity of the person. The adaptive modes will be explained as follows:

1.7.2.1 Physiological function

The physiological mode represents the physical response to environmental stimuli and primarily involves the regulator subsystem. The basic need of this mode is physiologic integrity (Roy 1995:258).

1.7.2.2 Self- concept mode

The self-concept mode relates to the basic need for psychic integrity. Its focus is on the psychological and spiritual aspects of the person. For the purpose of this study, focus will be on self- consistency and the moral ethical spiritual self, which represents the person's effort to maintain self-organization and avoid disequilibrium. Moral-ethical-spiritual self represents the person's belief system and self-evaluator (Andrews 1991b cited by Roy 1995:260).

1.7.2.3 Role function mode

The function mode identifies the patterns of social interaction of the person in relation to others reflected by primary, secondary, and tertiary roles. The basic need met is social integrity (Andrews, 1991a cited by Roy 1995:256). The primary role determines the majority of fathers' behaviours and is defined by the fathers' sex, age, and developmental stage. The applicability of this statement in this study is to determine the effects of these factors and the involvement of fathers in the care of pre-term low birth weight babies.

Secondary roles are assumed to carry out tasks required by the stage of development and primary role. Specifically, focus will be put on expressive behaviors that represent feelings or attitudes that seek immediate response.

1.7.2.4 Interdependence mode:

The interdependence mode is where affectional needs are met. Strongly reflective of the humanistic values held by Roy, the interdependence mode identifies patterns of human values, affection, love, and affirmation. These processes occur through interpersonal relationships on both individual and group levels (Ted row, 1991 cited

by Roy 1995: 260). In this instance, fathers of pre-term low birth weight babies will be observed to see to what extent they are able to display interpersonal relationship with their wife's / partners / spouses, their children and to the nursing personnel during their involvement in the care of the babies in NICU.

The adaptation level on the other hand, as an adaptive system is influenced by the individuals' development and the use of these coping mechanisms. It was stated that maximal use of coping mechanisms broadens the adaptation level of the person and increases the range of stimuli to which the person can positively respond (Roy 1995:260).

Figure 1 Framework used for the study

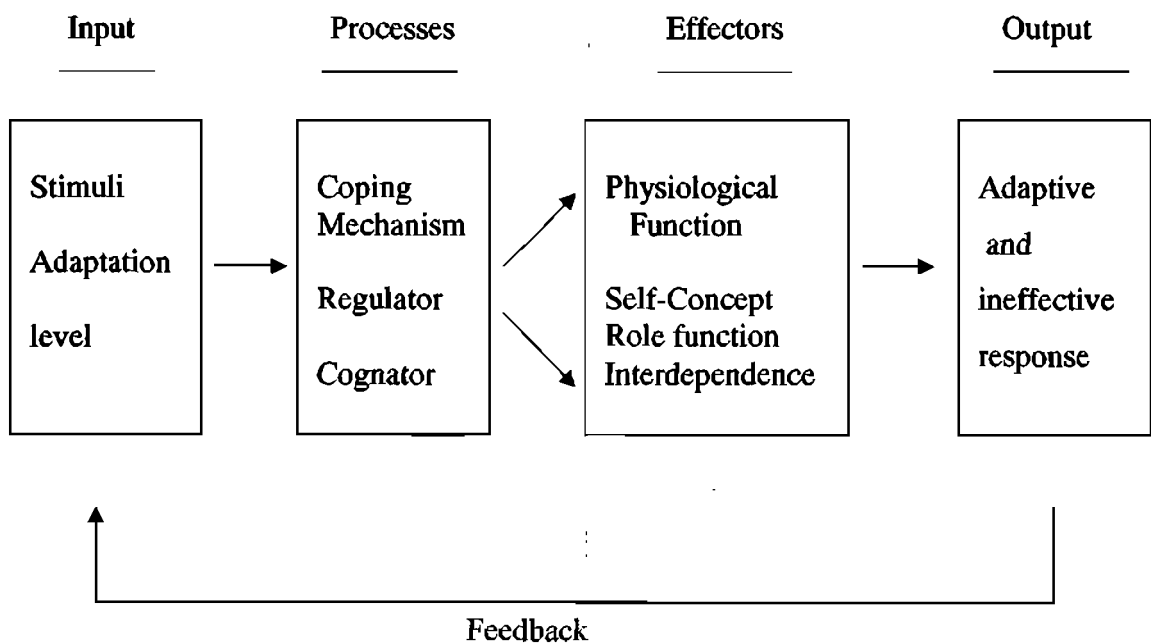


Figure 1: The person as an adaptive system (From Roy. Sr. C. Introduction to Nursing: An Adaptation model, (2nd ed.), Englewood Cliffs, N.J.: Prentice-Hal, 1984, p. 30.)

1.8 Definition of Terms

1.8.1 Low birth weight infant: A Low birth weight infant is an infant whose birth weight is lower than 2500g (Kibel & Wagstaff (1995:64), Gennaro & Striger (1997), Brooten (1998), Beischer, Mackay & Colditz (1997).

1.8.2 Pre-term baby: A pre-term baby refers to babies born before 37 weeks of gestation regardless of the birth weight (Beischer, Mackay & Colditz (1997).

Pre-term low birth weight babies in this study refer to babies born before 37 weeks and whose weight are less than 2500grams (<2500grams).

1.8.3 Involvement: Involvement in this study refers to the activities that fathers of pre-term low birth weight perform with their babies while they are hospitalized in NICU e.g. feeding of babies and changing of diapers.

1.8.4 Responses: Responses in this study refer to how fathers of pre-term low birth weight babies describe their feelings with regard to preterm birth.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the available literature, including previous research studies on the responses and involvement of the fathers of pre-term low birth weight infants in a neonatal intensive care unit.

This review was done using books, journals, the Internet and database searches. A search of the literature was conducted using the Medline and “Google” advanced search at <http://www.google.com>, the search terms were, pre-term infants and fathers, experiences and the involvements of fathers of preterm infants. Due to the limited literature on responses of fathers of pre-term low birth weight infants, a survey of literature including mothers will be presented so as to extract some similar issues that surround fathers. To date the literature reviewed has evidenced that reports on the experience of fathers of pre-term infants is sparse, Miles and Holditch- Davis (1997); Board and Ryan wenger (2000) and Jackson et al. (2003:120).

2.2 Preterm Infants and Their Parents:

Pre-term low birth weight infants are those infants whose weights at birth are less than 2500g (Brooten 1994:17). They are born too soon and have characteristics that put them at risk: (a) an immature respiratory system, making breathing difficult; (b) an immature gastrointestinal system, making feeding and nutrition difficult; (c) an immature neurologic system, making responses uncoordinated and the infant less able to respond protectively to noxious stimuli; (d) thin skin, thus prone to breaks in the protective barrier; (e) lack of varying degrees of muscle tone, making moving away

from heat or other dangerous situations difficult; and (f) an immature immunologic system, making infection more of a problem (Brooten 1994:18).

In a study by Jackson et al (2003:120), it was stated that the birth of a preterm infant has a long –term impact on both parents. Mothers report more stress and poor adjustment compared with fathers. From the study, Jackson et al, (2003), found that mothers felt alienated as they described difficulties in seeing their babies. There were concerns about the baby’s condition coupled with staying longer in the hospital, in order to be there for the baby. The stress of these events can be detrimental to any parent’s special and psychological adjustment (Klaus and Kennel, 1982 cited by Tosh 2001:11).

Other factors parents report as stressful include being unable to protect their babies from harm (Redshaw, 1997), powerlessness (Bass, 1991), the intensive care environment (Raeside, 1997), change in expected parental role, and appearance and behaviour of the infant (Miles, 1989: Miles et al 1991; Zeneah and Jones, 1982 cited by Tosh 2001:11).

Historically, neonatal units where pre-term infants are cared for excluded parents and family because of the risk of infection (Morris 1994 cited by Spencer and Edwards 2001:130). This was graphically illustrated by Richards (1992) when he described the parents as spectators, with restricted visiting times and the need for gowns and masks. However, since the seminal works of Bowlby (1971) followed by Klaus and Kennel (1976), who all highlighted the social and emotional needs of parents, there has been a

gradual progression from encouraging family visiting, to parental participation and family centered care.

Parents of preemies often experience guilt, anxiety, and depression (Gennaro, 1988; Maloni, Kane, Suen, & Wang, (2002) in Talmi and Harmon 2003:15). Most parents struggling with feelings of inadequacy and guilt are likely to search for answers to the causes of their infants being born before term. The mother may focus on concrete things such as not eating well or the flu she had prior to delivery. The father may also be concerned about his role in not helping his wife enough, placing too many demands on her or an argument he provoked that precipitated premature birth (Merenstein and Gardner 2002:736).

Normal adaptations to pregnancy are abruptly terminated by the birth of a premature infant (Merenstein and Gardner 2002:736). Prenatal fantasies about the infant and the new roles of mother and father are interrupted by a premature birth. This incidence imposes premature parenting on individuals not yet ready for the experience.

The delivery of an infant who is premature, sick and abnormal is particularly stressful for parents (Aradine and Ferketich 1990:75). Not producing a healthy newborn at term may be viewed by parents as failure.

Parents have recalled hospital visits to their preterm infants as being filled with anxiety, related largely to their fear of losing the infant Phillip (1983) in Aradine and Ferketich (1990:76). Separation of infant and parents and the highly technological environment of the neonatal intensive care unit have been implicated for altering relationships between parents and the infants (Kennel and Klaus 1983 in Aradine and Ferketich 1990:76).

2.3 Fathers and Preterm Infants

Some studies have shown that reports on the experiences of fathers of pre-term infants are sparse (Miles and Holditch-Davis 1997:250, Board and Ryan Wenger (2000) and Jackson et al., 2003:120). Earlier studies by Harrison (1990) and Miles et al (1996) have documented that fathers of healthy pre-term infants participated more in the care of their infants at 3 months of age compared with those of full-term infants of the same age.

Similarly, a longitudinal study of 985 low birth-weight pre-term infants revealed the importance of father's presence in the home and involvement on the cognitive performance at three years of age (Yogman et al., 1995). The authors reported that in 14% of homes, fathers maintained a stable presence in the home and also engaged in play and other child - care activities with their children, such as changing of nappies and feeding the babies. Children of these highly involved fathers scored significantly higher on the Stanford- Binet- Intelligence Test at three (3) years of age compared to their counterparts from homes with less stable paternal presence and involvement.

With regard to paternal- infant attachment, it appears that early interaction between a father and his infant aids in the infants' development (Greenberg and Morris, 1974; Klaus and kernel, 1976; Parke and Tinsley, 1981 cited by Novak and Novak 1990: 20). They stressed the idea that little evidence exists to support the notion that fathers are biologically constrained from developing strong attachment to their infants (Krunst- Wilson and Cronenwett (1981), cited by Novak and Novak 1990: 20). It was concluded that responses of fathers to their infants were similar to those of mothers (Taubenheim (1981) in Novak and Novak (1990). This idea was reinforced by

Cranley and Weaver (1983) in Novak and Novak (1990), where they state that, the attachment process begins during pregnancy as a result of psychological and physiological events. Expectant fathers demonstrate attachment behaviours toward their unborn infants, however, with pre-term birth, these expectations are turned into concerns, fear and anxiety that are associated with the well being of the premature baby.

Sullivan (1999:33-39), in the same manner demonstrated the importance of participation of fathers in the care of pre-term infants in order to form attachment to the child. Pre-term infants whose fathers interacted with them in the hospital are more likely to gain weight, leave the hospital faster and adjust to their environment (Levy-shift, Hoffman, Mogliner, Levinger, & Mogliner, 1990: 292).

Contrarily, Harrison and Magill-Evans (1996), report that fathers of pre-term low birth weight infants had less interaction with their babies than mothers as at the time that the infant was hospitalized. This is in agreement with earlier work of Novak's (1990:21) where he stated that in the United States of America, mothers were frequently awarded custody in divorce cases based on the belief that mothers were the biologically superior parent. However, the less frequent interaction of fathers of pre-term low birth weight infants could be attributed to the findings which were reported by Jackson et al., (2003: 127), where several of the fathers expressed their difficulty in getting leave from work which resulted in fewer visits to see the baby. Based on this, fathers felt inadequate, as they could not be with their families as much as they would have liked, although some tried to give high priority to their family life. The fathers left the care of their pre-term babies to the staff and they felt confident in doing so.

Based on this factor, Jackson's study stressed the importance of supporting fathers so that they can participate more.

The above is contrary to the work of Jones (1981 cited by Novak and Novak 1990: 21), who found that fathers were more involved with care-taking activities and demonstrated more attachment behaviours when infants were born by caesarian section or were born prematurely, most especially when the mother is still recuperating in the post-natal ward. Meyers (1982) in Novak and Novak (1990:21), found a significant difference in knowledge and care taking at four weeks between fathers who had been taught the infant's behavioural characteristics through the Brazelton Neonatal Behavioural assessment Scale (BNBAS) and fathers who were not. It was proposed that increased knowledge regarding behavioural states of the infant allowed fathers to receive positive reinforcement for their care taking efforts (Novak and Novak 1990:21).

2.4 Benefits of Close Father Interaction at Different Age of Child

Throughout the world today, many cultures and societies are focusing on fathers' roles and responsibilities. Many men want to be more involved fathers than their fathers were. World says that "by divine design, fathers are to preside over their families in love and righteousness and are responsible to provide the necessities of life and protection for their families". Mothers are primarily responsible for the nurture of their children. In these sacred responsibilities, "fathers and mothers are obligated to help one another as equal partners".

(<http://wwwforever/families.net/xml/articles/sacred/responfathers>)

Some current literature supports the contention that fathers make unique contributions to the development of their children beginning at birth such as in the areas of sex role identification, cognitive development, and general psychological and social adjustment (Marton et al., 1981 cited by Novak and Novak 1990: 19).

According to Krunst- Wilson and Cronenwett (1981) in Novak and Novak (1990: 19), it is clearly emphasized that the amount and the quality of social interaction that an infant receives from the father is recognized as a critical factor in overall social, emotional, and physical development.

Recent studies have found that children whose fathers are involved in their lives benefit in many ways such as better ability to form relationships with others (Gottfried, Barthurst, & Gottfried, 1994: 59), their likelihood to explore the world around them (Pruett, 2001:5), and the fact that they are likely to experience feelings of sympathy or compassion as adults (Koestner et al., 1990:713).

Involved fathering is good not only for children but also for fathers. Glen Palm (1993:443), a professor of child and family studies, believes fatherhood helps men learn social skills that in turn help them understand the value of relationships and emotional intimacy. Involved fathers learn quickly that their children look to them as an example of how to show anger, disappointment, sadness, happiness, and excitement. This tends to make fathers take a closer look at how they show – or don't show their- own emotions (Palm1993:143). Children help fathers become more caring and nurturing. When a father is involved, he learns new ways of caring, nurturing, listening and expressing affection.

Children help fathers gain empathy. Every father who spends time with his young children finds out he has to deal with their intense and changing emotions. As he learns to interpret his children's feelings, he gains empathy (Palm 1993:143-144). In a comparison between Japan and the United States, Ishi-Kuntz (1994) of the University of California found that fathers whose children report frequent child interaction are more likely to view themselves as understanding and emotionally close parents.

2.5 Mothers and Preterm Infants

When the mother hears her baby cry for the first time, when she is told of the baby's gender, when she hugs the baby closely against her body and when she looks at and touches her baby, her maternal bond is strengthened. The initiation of breast milk in the labour room further reinforces the attachment, which according to Kermode (1987 cited by Spencer and Edwards 2001:130), these early events could have a long lasting effect on the attachment process, which is beneficial for the parents and the child.

The birth of a very low birth weight (VLBW) infant who needs immediate transportation to the neonatal intensive care unit (NICU) for stabilization deprives the mother of this experience. The attachment that she would have developed is weakened by experiences such as the size of her baby, inability of her baby to cry effectively, the instant resuscitation that is required, coupled with the immediate transportation to the NICU. The mother does not enjoy the immediate contact, hugging, and massage of her baby as it could have been in the case of mothers of well healthy term babies.

When the mother visits her baby for the first time, the physical environment of the NICU with all the life support equipment often attached to her baby may further

discourage her. This is in agreement with a study by Bennett (1990 cited by Spencer and Edwards 2001:128), on the neonatal environment and the impact on parents. Of 33 mothers of pre-term infants that were interviewed, ten (10) of the group, expressed the fear, shock and apprehension that they felt on seeing the technology and the equipment. In another study by Jackson et al (2003:124), it was reported that, the physical environment in the neonatal ward and the very sick infants being cared for, affected the mothers. Out of seven mothers that were interviewed, one said she was unable to handle the situation, which reduced her possibilities of participating in the care of the infant. The mothers in that study wanted privacy and wished to be with the baby in a private area.

Another study by Affonso (1992:65) supported the reactions of the parents that NICU is extremely stressful. The mother of the baby feels reluctant to touch her delicate baby (Raphael-Leff, 1991 cited by Gwala 1994:11). Her attention is “fixed on the equipment and the threatened loss it symbolizes” rather than on the baby (Lancaster in Korones, 1986: 410). Apart from the baby serving as, what Roy (1991:254) calls the focal stimulus, the environment with all the frightening sophisticated equipment serves as a contextual stimulus (Roy 1995:254).

The mother must, however be assisted to adapt to her baby. According to Roy (1995:261), both the focal and contextual stimuli help maintain adaptation and prevent the loss of maternal self-image so that adaptive responses are improved. As a result of this, all nursing interventions should aim at facilitating the adaptation level of the mother in the face of focal, contextual and residual stimuli so that her coping mechanisms, the regulator are maximized, with a resultant fall in the adaptation stress.

Without adaptation, bonding could be a concern with regard to early attachment and involvement of mothers of pre-term mothers. Bonding behaviours, which include, touching, stroking, kissing and gazing eye contact, is a pathway to early attachment, which parents of pre-term infants need to develop (Gusson 1993 cited by Spencer and Edwards 2001:130). Bonding is a very important concept and therefore the nursing profession has an obligation to discover useful ways of enhancing the early attachment that is beneficial to family and the infant (Spencer and Edwards 2001:130). Women who have had previous low birth weight babies, particularly where there were profound complications leading to neonatal death may also be very anxious because of residual stimuli. Because of the size of the baby, mothers expressed great fear that the baby would die, and this anxiety resulted in lack of sleep and constant fatigue, especially in those with the smallest infants. The situation was described as a continued feeling of unreality, with difficulty in becoming attached to the baby (Gwala 1994:11).

Other studies explored the impact of very premature birth on the psychological health of mothers (Davis et al, 2003; Aradine and Ferketich, 1990). Findings from these studies revealed that the birth of a very premature infant is a critical event in the life of a family and that mothers of these infants are at greater risk of psychological distress than mothers of full- term babies.

2.6 Reasons for Preterm Deliveries

There are many reasons why an infant might be born with a weight less than 2500g (WHO 1961 cited by Kibel and Wagstaff 1995:64). The Low Birth Weight infants in this study are those infants born before 37 weeks of gestation.

According to Kibel and Wagstaff (1995:64), prolonged intra-uterine growth retardation affects weight, length and head circumference and this has been implicated as one of the reasons for pre-term birth. Other common causes of low birth weight deliveries on the part of the mother are pre-term labour. According to Merenstein and Gardner (2002: 757) every woman expects to deliver a normal, healthy infant at term. Therefore the onset of premature labour is both physiologically and psychologically unexpected. Premature birth is a crisis and an emergency situation characterized by an increased concern for the survival of the infant. This is in agreement with Siegel et al., (1993 cited by Tosh 2001:11), who said that the process of having a baby is widely regarded as a life crisis, so much more so, if born prematurely, requiring intensive care and essentially isolated from the parents. Premature labour and birth are accompanied by feelings of helplessness, isolation, failure, emptiness, and no control. The negative and dangerous atmosphere surrounding the premature birth experience may influence the relationship with the premature infant, who may also be perceived as dangerous and negative.

Low maternal weight according to Harrison et al., (2001:70) is associated with prematurity. Poor calorie intake during pregnancy, excessive physical labour during pregnancy, and maternal illnesses such as hypertension are other reasons for pre-term deliveries (Kibel and Wagstaff 1995: 64). With hypertension, the nutritional status of

the baby is compromised as a result of degenerative changes in the placenta, which then becomes inadequate in nurturing the baby.

Maternal lifestyles such as excessive cigarette smoking, substance abuse and excessive alcohol consumption have been implicated in causing low birth weight infants (Merenstein and Gardner 2002; Harrison et al, 2001; Kibel and Wagstaff 1995). Previous history of pre-term labour is another factor, which predisposes the mother to the delivery of a LBW infant (Merenstein and Gardner 2002:19). Urinary tract infection according to (Harrison et al 2001:70) is also a factor associated with pre-term delivery and it is due to the release of toxins that stimulate labour.

The foetal causes of low birth weight deliveries are multiple pregnancy, congenital abnormalities, chromosomal defects and chronic uterine infections among others (Kibel and Wagstaff (1995); Merenstein and Gardner (2002); Harrison et al 2001).

2.7 Conclusion of Review

In conclusion, the majority of the findings revealed that the birth of a pre-term infant is unexpected and literature confirmed that its occurrence violates parental expectations (Macey et al. 1987 cited by Talmi & Harmon, 2003:15).

The review on the effects of pre-term labour on the parents revealed that the birth of a pre-term infant has a long –term impact on both parents (Jackson et al, 2003; Davis et al, 2003; Aradine and Ferketch 1990; and Brooten et al, 1998).

The review on fathers suggests that involvement of fathers in the care of pre-term infants is very important because early interaction between a father and his infant aids

in the infant's development. The review of studies on mothers, however, showed that the birth of pre-term babies is unexpected and of concern. Most mothers expressed their concern regarding their inability to hug, kiss, and probably massage their babies immediately after confinement, due to immediate transportation of their babies to the neonatal intensive care unit for stabilization.

Moreover, studies on mothers further revealed that mothers expressed fear, shock and apprehension regarding the physical environment of the neonatal intensive care unit where their babies are being nursed. Other studies such as Jackson et al., (2003) and Merenstein and Gardener (2002) on mothers regarding effects of pre-term babies on their health revealed that the birth of a very premature infant is a critical event and that the mothers of these infants are at greater risk of psychological distress than mothers of full-term baby. This is the reason why mothers of pre-term babies must be assisted to adapt to their babies. Roy (1995:255) stressed the fact that nursing interventions should aim at facilitating the adaptation level of individuals in the face of focal, contextual, and residual stimuli so that the coping mechanisms, the regulator are maximized with a resultant fall in the adaptation distress.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focused on the research design that was employed by the researcher in this study. The natures of the population, the sample size, sampling method, procedure of data collection, as well as the ethical considerations were discussed.

3.2 Research Design

This study was a quantitative non-experimental survey. Polit and Beck (2004:234) state that a survey is designed to obtain information about the prevalence, distribution and interrelationship of variables within a population.

Polit and Beck (2004:234), stress that surveys are also useful in collecting information on people's knowledge, opinions, attitudes and values.

For the purpose of this study, fathers of pre-term low birth weight (PTLBW) babies were requested to describe their responses and their involvement in the care of their pre-term low birth weight babies in a Neonatal Intensive Care Unit through a self administered questionnaire (SAQS).

3.3 Study Population

The target population was fathers of PTLBW babies whose weight was below 2500 grams; who visited and were involved in the care of their pre-term babies in the Neonatal Intensive Care Unit (NICU) at a tertiary hospital in Durban. Population is the "entire aggregation of cases in which the researcher is interested" (Polit and Beck 2004: 289).

At the study site of a tertiary hospital, an average number of 50 premature babies are admitted per month, and their average length of stay is two (2) weeks. The unit is a Level four (4) tertiary hospital where babies are mostly referred for ventilation. Once they were extubated and stable, they are usually referred back to a Level 2 or 3 hospital for continuation of their care or for weight gain before their final hospital discharge.

3.4 Sample Size

Fifty consenting participants who met the inclusive criteria were asked to participate in the study. Data were collected over a period of six (6) months, from January to June 2006.

3.5 Sampling Method

A purposive sampling (a non – probability method of sampling) was adopted for this study. According to Polit and Beck (2004: 729), a non – probability sampling method is a method in which the researcher selects participants based on personal judgment about which ones will be most representative or informative. They also refer to this kind of sampling as judgmental sampling. It basically involves the deliberate choice of a person who meets the inclusion criteria for the study.

3.6 Data Collection Procedure

The collection of data was done in the NICU at a tertiary hospital in Durban from January to June 2006. Data were collected by means of a structured questionnaire with open and close-ended questions. The questionnaire was given to the NICU ward clerk and two registered nurses who administered it to the fathers of the pre-term low

birth weight babies whose babies had stayed for one week in the NICU. The fathers completed the questionnaires and returned them to the NICU ward clerk who gave the completed questionnaires back to the researcher.

A brief explanation about the purpose of the study, the content of the study and how the questionnaires were to be completed was stated on the first page of the questionnaire. Any concerns about the study and questionnaire were also addressed.

Participation was anonymous and voluntary; there were some fathers who requested to take the questionnaire home because of their busy schedule. Those who did not complete the questionnaire within two days were excluded from the study as well as those fathers who expressed anxiety on the day the questionnaires were administered. The reason for this was to avoid the unexpected interference of their responses during the completion of the questionnaires in the unfamiliar environment.

3.7 Nature of the Questionnaires/Instrument

A sample survey research with structured and semi-structured questions was used to obtain information from fathers of preterm low birth weight (PTLBW) babies in NICU (see annexure H). Polit and Beck (2004: 234), state that sample surveys are used to obtain information from a sample of people by means of self – report. Self – report is a situation where study participants respond to a series of questions posed by investigators. The participants were however, requested to complete the questionnaire in a private area of the NICU where there were no disturbances either from the staff or from the alarms of various monitors that were attached to babies in the unit.

In this study, the questionnaire included two main sections: Section A, consisted of structured questions to determine the socio-demographic data. It covered questions from number 1 to number 7 of the Self Administered Questionnaires (SAQs) whereas Section B consisted of open and close-ended questions encompassing the responses and involvement of fathers of pre-term low birth weight (PTLBW) babies. Questions that were related to these issues were discussed from number 8 to 25 of the SAQs (Annexure H: 105-131).

Polit and Beck (2004: 235), stress that questionnaires differ from interviews in that they are self – administered questionnaires, respondents read the questions on a written form and give their answers in writing. The covering letter of the questionnaire highlighted the purpose of the study, which was to determine the responses of fathers of PTLBW babies and their involvement in the care of the babies in NICU. It was also stressed that, it was not a test; therefore there were no right or wrong answers. The questionnaire was available in both English and Zulu.

3.8 Pilot study

Pilot testing is an important stage in the development of a new survey instrument. According to Polit and Hungler (1997:464), a pilot study is a small-scale study or trial run, done in preparation for a major study. It is used to examine whether there are any problems, like ambiguous questions, misspelled words and whether the vocabulary is appropriate for the respondents. It predicts possible problems a researcher may encounter in using the instrument.

In the case of this study, five fathers of preterm low birth weight (PTLBW) babies were asked to take part in the pilot study. It was conducted with both the Zulu

speaking and English speaking fathers in the same unit within one week to refine the instrument wording and assess whether intended results were obtained. This was done and the results were favourable.

3.9 Reliability

Reliability refers to the accuracy and consistency of information obtained in a study. It is a major criterion for assessing its quality (Polit and Hungler 2004:295). The term is most often associated with the methods used to measure research variables.

The data collection tool was reliable in that, the questionnaire was used for all the respondents. The study research questions and Roy's adaptation model guided the research questions.

3.10 Validity

Polit and Hungler (1997:299) define validity as "the degree to which an instrument measures what it is supposed to measure", in the same sense Polit and Beck (2004:370) refer it as "the degree to which an instrument measures what it is intended to measure.

For the purpose of this study all respondents were given the same tool within the same environment, that is the completion of the questionnaire in a private room of the site study at the tertiary hospital in Durban.

The instruments were developed from the literature and validated using expert opinions. The IsiZulu translation was done by an IsiZulu linguistic and was checked by the clinical nurse specialists and members of the neonatal team.

Different levels of validity exist. Face validity refers to whether the instrument looks as though it is measuring the appropriate construct (Polit and Hungler 1997:300). Content validity (Polit and Hungler 1997:300) is concerned with the sampling adequacy of the content area being measured. It is of particular relevance to people designing tests of knowledge in a specific content area.

In this study, face and content validity were established to validate the research instrument. To ensure the face and content validity of the instrument, the instrument was given to the senior medical personnel and the clinical facilitator in the neonatal intensive care unit (NICU) to review it. These experts had experience in research and they also have contact with fathers of preterm low birth weight babies on a daily basis in the NICU. They made comments and suggestions, with regard to stress and coping mechanisms at this crucial time of the situation as well as the support, the psychological and the interdependence modes available to fathers to enhance their involvement.

3.11 Data analysis

The quantitative data collected from the open and close ended questions were edited, coded, categorized and analysed using SPSS version 13.0 Windows. The analysis of data in this study was mostly based on the frequencies.

3.12 Ethical Considerations

- A research proposal was submitted to the University of KwaZulu-Natal for approval and the ethical clearance was obtained.

- Written permission was obtained from the hospital manager, the sister in-charge of the site study and the head of the department neonatal intensive care (see Annexure B, and D)
- The research instrument was reviewed and approved by the Medical Research Department prior to administration to ensure ethically acceptability (see Annexure E)
- Permission to conduct research was obtained from Faculty of Health Sciences (see Annexure E).
- Participation was anonymous. An individual consent was obtained from each of the participants-fathers of preterm low birth weight babies. The informed written consent was in English and IsiZulu language to cater for the needs of the population represented in the study. A consent form was attached to each covering sheet of the questionnaires. This was completed and signed prior to answering of the questions (see Annexure G).
- Participation was voluntary and fathers of preterm low birth weight babies were informed that they could withdraw from the study at any time or refuse to participate, and that their refusal to participate would involve no penalty. They were also told that if there were any questions that they did not want to answer, they could refuse to do so and this would not influence the care given to their babies.

- Confidentiality was maintained. The data and results were held unavailable to unauthorized persons outside of the study. Raw data were held inaccessible to all except the researcher and the research supervisors.

3.13 Limitation of the study

Limitations associated with this study refer to the small scale of the study and to the use of purposive sample when selecting the participants to take part in the study.

This means that the researcher could not generalize of the findings to the general larger population particularly all Neonatal Intensive Care Units.

The questionnaire for this study was also available in a Zulu language interpretation. As the researcher does not speak isiZulu she was unable to check and edit the instruments that were translated from English to Zulu. Thus language correctness may to some extent be a limitation to the study.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF FINDINGS

4.1 Introduction

The aim of this research was to determine the responses and involvement of fathers in the care of their pre-term babies in the neonatal intensive care unit. This chapter therefore seeks to present the findings derived from analysis of the self administered Questionnaires (SAQs) used as an instrument for data collected during the study. Opened ended questions were analysed looking for the most common responses given by the participants and these were interpreted, coded and arranged according to their responses.

The data were organized and analyzed through the use of SPSS 13.0 and the findings are presented in a graphical form, using tables and pie charts. Section A of the questionnaire, presents findings on the socio-demographic data of the sample and Section B deals with five specific areas of the study:

- (1) findings on the responses and involvement of fathers of preterm babies in the NICU, (2) the residual and contextual stimuli of the NICU environment,
- (3) stress and coping mechanisms (regulator and cognator),
- (4) support, psychological and interdependence modes
- (5) the self concept of the fathers.

Analysis of any history of previous children in relation to preterm birth was made in the final section of the instrument.

SECTION A:

4.2 Demographic Data of the Respondents

4.2.1 Age of Fathers

The participants in this study were all fathers of preterm babies admitted to the Neonatal Intensive Care Unit. Their ages ranged from 18 - 45 years and above. Twenty-two of them (44%) were within the age group 26-35 and 14 (28%) were within the age range of 36 -45 years respectively. Only three of the fathers (6%) were over 45 years of age.

Table 1: Age of Fathers (N = 50)

Age range	Frequency	Percentage (%)
18 – 25 years	11	22
26 – 35 years	22	44
36 – 45 years	14	28
>45 years	3	6
Total	50	100.0

4.2.2 Educational Level of Respondents

On analysis of the data, 38 % (19) of the fathers in this study said that they had 11-12 years of formal education, 26% (13) of the fathers indicated that they had 6-10 years of formal education. Only eight (16%) of the fathers said that they had attended tertiary institutions.

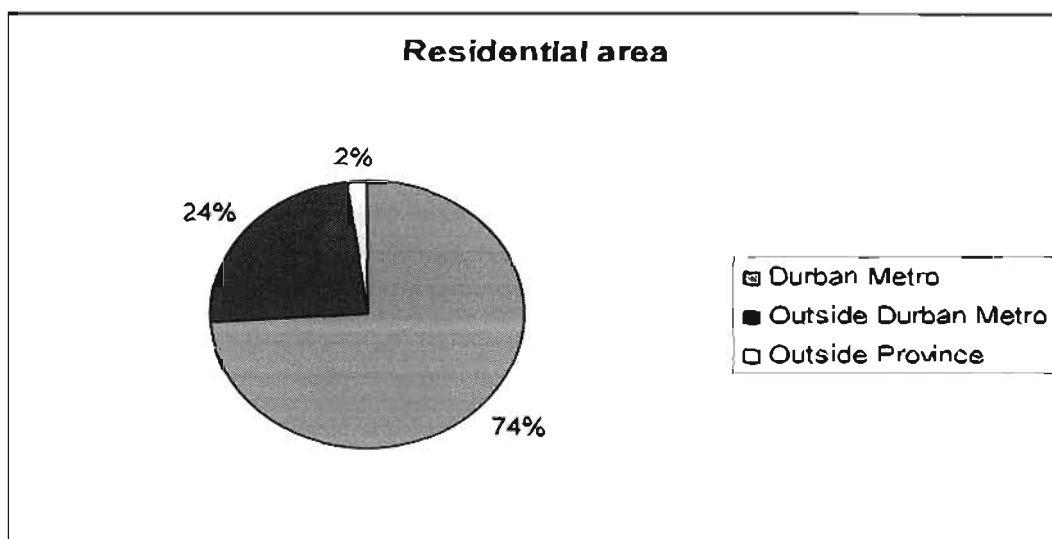
Table 2: Years of Formal Education (N=50)

Years of education	Frequency	Percentage (%)
0-5	10	20
6-10	13	26
11-12	19	38
Tertiary	8	16
Total	50	100

4.2.3 Residential Area

Figure 2 shows that the majority of the fathers 37 (74%) included in this study reside in the Durban Metropolitan area. A small number of the participants 12 (24%) reside outside the Durban Metropolitan area and only one (2%) of the fathers lived outside of the province.

Figure 2 Residential Area (N=50)



4.2.4 Home Language

Thirty two of the fathers (64%) participating in this study were Zulu speaking, 14 (28%) of the fathers indicated English as their home language, whereas three of the fathers (6%) said that they speak Xhosa which was different from the majority of the other fathers. Only one father (2%) recorded his home language as Afrikaans.

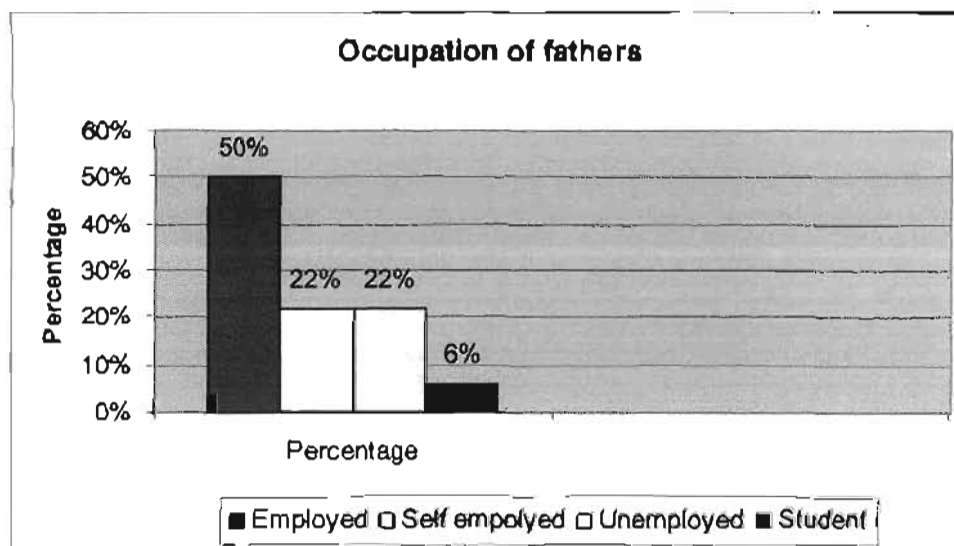
4.2.5 Marital Status

Out of the total number of 50 participants, 20 (40%) of them were married, whilst 16 (32%) were single fathers and 14 of them (26%) said that they were living with their partners.

4.2.6 Occupation of the Fathers

Half of the fathers, 25 (50%) were employed. Eleven (22%) were self employed; another group of 11 (22%) fathers were unemployed, whereas only three of them (6%) were students.

Figure 3: Occupation of fathers (N=50)



4.2.7 Religious Affiliation

The majority of the participants, 35 (70%), were Christians. Six fathers (12%) were Muslims, five (10%) were of the Hindu faith, whereas four (8%) of the fathers recorded traditional beliefs as their religion.

SECTION B:

4.3 The Responses and Involvement of Fathers of Pre-Term Low Birth Weight Babies in the Neonatal Intensive Care Unit.

4.3.1 Antenatal Clinic Attendance with Spouse and Frequency of Visits

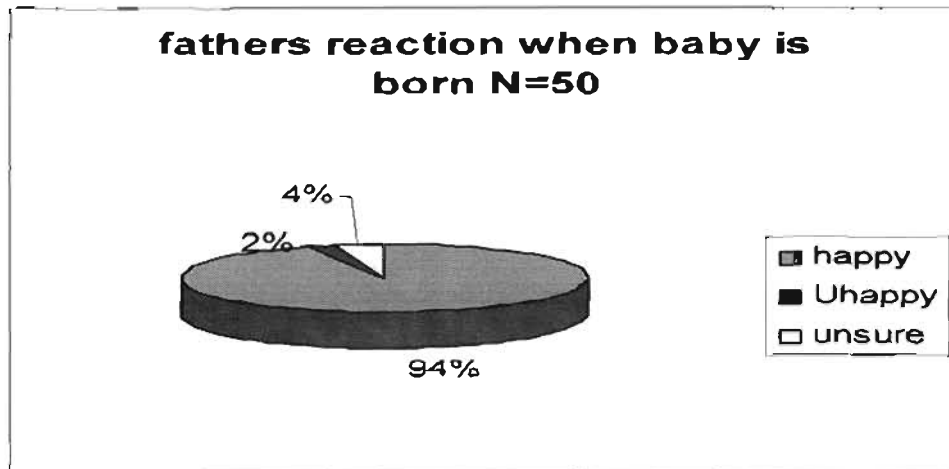
In response to the question as to whether the participants attended antenatal clinic with their spouse, wife, or partner during pregnancy, 19 of the participants (38%) said that they accompanied their wives or spouses to the antenatal clinic during pregnancy. The majority of them, 31 (62%), replied that they did not accompany their wife or spouse to the clinic. Those who did accompany their spouses, 19 of the fathers, varied in the number of visits made with the mother. Eleven (57.9%) of the fathers said that they always accompanied their wives to the antenatal clinic. Eight of nineteen (42.1%) of the fathers accompanied their wives more than once, but not on all occasions.

4.3.2 Father's Reaction When the Baby Was Born

The fathers in the study described their reaction after the birth of their baby as happy or unhappy. An overwhelming majority of the father in the study reacted positively on the birth of their babies. The reaction of the majority of the fathers, 47 (94%), after the

birth of the baby was positive as they reported they were happy. Two of the fathers (4%) were unsure of their reaction (see figure 4).

Figure 4: Fathers reaction when baby is born (N=50)



4.3.3 Time Interval after Delivery and Seeing Baby for the First Time

The time interval between delivery and seeing the baby for the first time in the NICU, varied from less than one hour to over 12 hours. Twenty four percent of the fathers (12) saw their babies less than 1 hour after birth, 15 of them (30%) said that they saw their babies around 3-6 hours after delivery. Another group of fathers, nine (18%) saw their babies between 7-12 hours after the birth. Nine of the fathers (18%) indicated a period of more than 12 hours time lapse before seeing their babies.

4.3.3.1 Reason for Seeing Baby 12 Hours after Delivery

Those fathers 9 (18%) who indicated that they saw their babies for the first time at a time lapse of more than 12 hours gave various reasons for doing so. Reasons given for this, was the nature of their work, and other circumstances. Out of this group of nine fathers, five of them (56%), said that they were busy at work. They were unable to leave at an earlier time; amongst them was a policeman who said that his wife was

transferred to the present hospital whilst he was busy at work. Three out of nine fathers (33%) said that they lived far away and needed a car to visit; only one of the fathers (11%) said he was sick.

4.3.4 First Reaction on Physical Appearance of Baby

Mixed responses were reported by the fathers at the sight of the physical appearance of their pre-term babies. This ranged from being happy, terrified, apprehensive, shocked, and depressed as shown in Table 3. A high percentage, 84% (42), of the fathers reported negative feelings of being terrified, apprehensive, shocked and depressed. Seventeen of the fathers (34%) said that they were apprehensive at the physical appearance of their babies. On further analysis of the data, 14 (28%), of the fathers in the study described their reactions as one of shock. A small number of the fathers, three (6%), however, said that they could not interpret their reactions in any given way that they could describe.

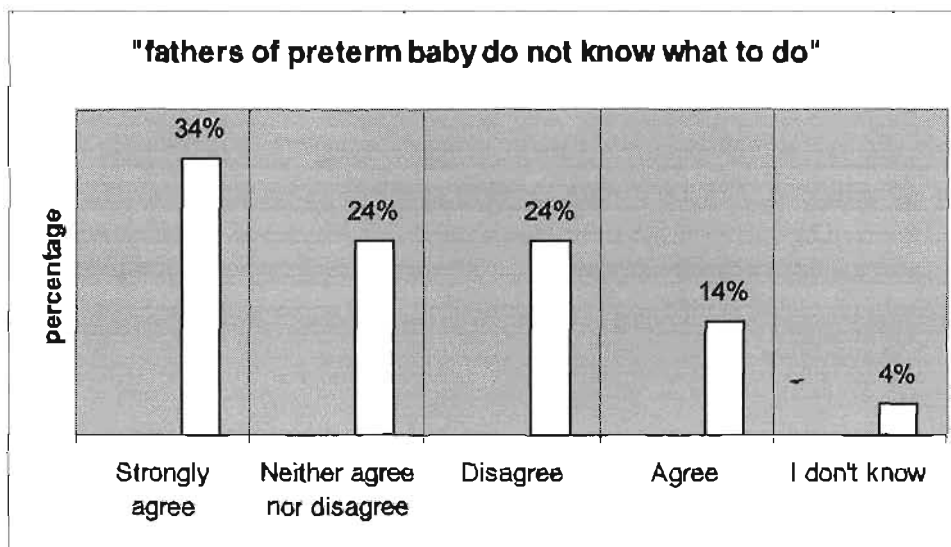
Table 3: First Reaction on Physical Appearance of Baby(N=50)

Reaction at physical appearance of baby	Frequency	Percentage (%)
Happy	5	10
Terrified	5	10
Apprehensive	17	34
Shocked	14	28
Depressed	6	12
I do not know	3	6
Total	50	100.0

4.3.5 “Fathers usually don’t know what to do at the birth of a pre-term baby”.

The fathers in the study were asked whether they agree with the statement “Fathers usually don’t know what to do at the birth of pre-term babies”. On analysis of the data, almost half of the fathers 24 (48%) agreed or strongly agreed that fathers don’t know what to do at the birth of pre-term baby. A group of 12 fathers (24%) however disagreed with the above statement and another group of 12 (24%) neither disagreed nor agreed with the statement. Only two (4%) of them said that they did not know.

Figure 5: “Fathers of Preterm Baby do not know what to do” (N=50)



4.3.6 Person Accompanying Father to Baby’s Bedside in NICU

The majority of the fathers who participated in the study, 30 (60%), indicated that their wives, partner or spouse led them to their baby’s bedside. Eighteen (36%) of the fathers said that neonatal intensive care unit (NICU) nurses accompanied them to their baby’s bedside during their visit. Only two (4%) of the fathers however, said that they had no one to accompany them to the baby’s bedside.

Table 4: Person Accompanying Father to Baby's Bedside in NICU (N=50)

Person who accompanied father to the baby's bedside	Frequency	Percentage (%)
NICU nurses	18	36
Wife/spouse/partner	30	60
No companion	2	4
Total	50	100.0

4.3.7 Information Given About Baby during Visit to NICU

Fathers were asked whether they were given information about the baby during their visits to the neonatal intensive care unit (NICU). On analysis of the data, findings indicated that information was given to the majority of fathers, 45 (90%), about their baby during visits to NICU, whereas a small number of the fathers, 5 (10%), said that they were not given any information about their baby during visit.

Table 5: Information Given by Nurses about Baby during Visit (N = 50)

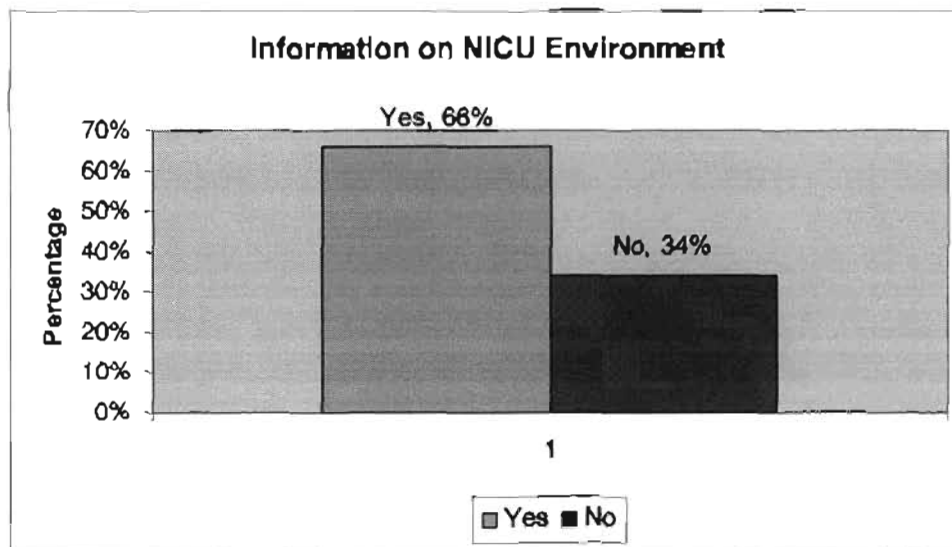
Given information	Frequency	Percentage (%)
Yes	45	90
No	5	10
Total	50	100.0

4.3.8 Information given by Nurses on NICU Environment

With regards to receiving information on the NICU environment by nurses during their visit, a high percentage of the fathers in this study, 33 (66%) reported that nurses gave them information on the NICU environment. The rest of the fathers, 17 (34%) however said they did not receive any information on the NICU environment.

Information on the neonatal intensive care unit is very important as it will reduce stress on the fathers (Heermann, Wilson & Wilhelm 2005:176).

Figure 6: Information on NICU environment (N=50)



4.3.9 Father's Actions during First Visit to Baby

Different actions to maintain physical and emotional contacts with their babies were expressed by the fathers during their first visit. The majority of the fathers, 33 (66%), mentioned that they stood by the babies' bedside and looked at the babies, whilst 14 (28%) said that they maintained physical contact by touching the hand and body of their baby (see Table 6).

The findings of the high percentage of the fathers (66%) who indicated that they stood by the babies bedside and looked at the baby is consistent with the work of Harrison

and Magill-Evans (1996) who reported that fathers of pre-term infants had less interaction with their babies than mothers whilst the infant was hospitalized.

Moreover, the findings showed that 14 (28%) of the fathers maintained physical contact by touching the hand and body of their baby.

Table 6: Father’s Action during First Visit to Baby (N=50)

Action of fathers	Frequency	Percentage (%)
Touched the baby's body	14	28.0
Carried baby	1	2.0
Involved in the feeding	1	2.0
Talked to baby	1	2.0
Stood by bedside and looked	33	66.0
Total	50	100.0

4.3.9.1 Best Visiting Times and Time Frequency for Fathers

When asked the question, “What are the best visiting times”? The hours between 13.00 -16.00 were most suitable for 18 (36%) of the fathers. The hours, 17.00 – 20.00 were best for 16(32%) of the fathers, whilst five of the fathers (10%) indicated the hours between 08:00 –12:00. Eight of the fathers (16%) however did not specify any suitable time for visiting their babies.

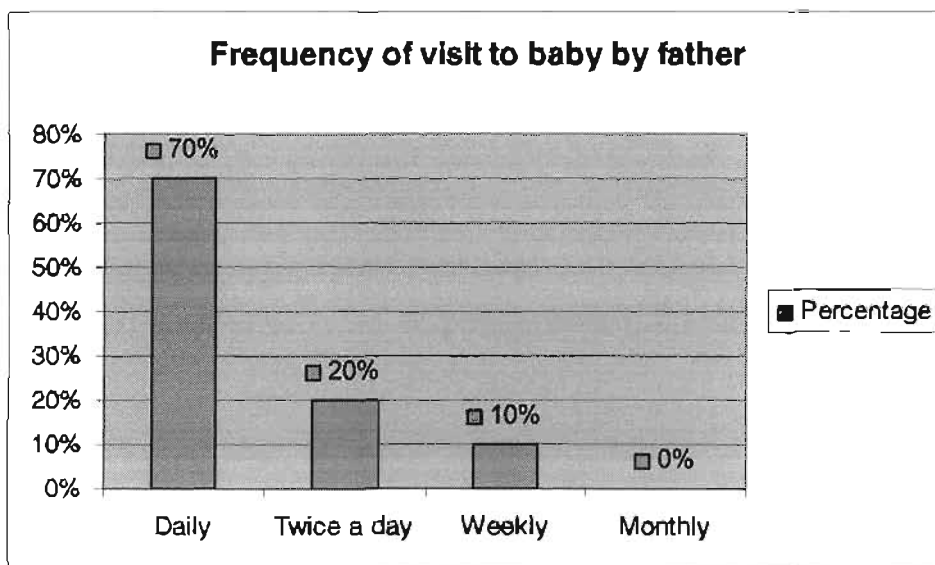
With the regards to the frequency at which fathers visited their babies, the following responses were given by the fathers as shown in Figure 6. Thirty five (70%) of the fathers indicated that they visited their babies on a daily basis. Another group of

fathers, 10 (20%), stated that they paid a visit twice a day to see their babies, whilst five (10%) indicated that they paid a visit to their babies on a weekly basis.

The findings on visits by the fathers to the NICU was very interesting as this negated the initial assumption of the researcher whose main concern before starting the study was that fathers of preterm babies did not always visit their babies whilst they are in the NICU.

Jackson et al, (2003:127) reported that several fathers also had difficulty in getting leave from work, which resulted in fewer visits to see baby. Thus, they left the care of their baby to staff and felt confident in doing so.

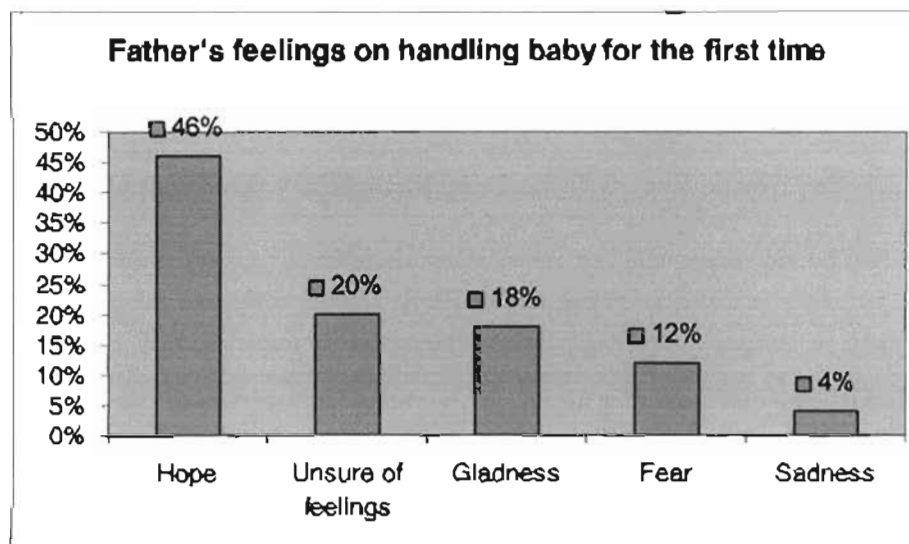
Figure 7: Frequency of Visit to Baby by Father (N=50)



4.3.10 Father's Feeling on Handling Baby for the First Time

Five categories of feelings as experienced by the fathers when handling their pre-term babies was listed in the instrument provided for this study. Feelings of hope, fear, sadness, gladness, and uncertainty were experienced by the fathers in the study as shown in Figure 8

Figure 8: Father's Feelings on Handling Baby for the First Time (N=50)



4.3.10.1 Change in Feelings during Subsequent Visits

In response to the question as to whether a change of feeling was experienced during subsequent visits to the baby, a fifty-fifty response was derived on analysis of the data. Fifty percent (25) of the fathers in the study replied "yes" to the above question, indicating that their feelings towards their babies remained unchanged.

4.4 Residual and Contextual Stimuli

4.4.1 Father's Observation of Equipment, Type of Equipment used on Baby and their Reactions on the Sight of the Equipment

Various neonatal equipment is used by doctors and nurses in the NICU setting to assist pre-term babies with breathing or respiratory difficulties. When asked the question whether they had noticed any of the equipment that was used on their babies, 37 (74%), of the fathers said that they did notice the equipment used on their babies,

on the other hand, 13 (26%) of the fathers stated that they did not notice the equipment used.

Among those fathers (37) who indicated that they noticed the equipment that was used, the list of specific neonatal equipment which includes: Ventilator/respirator, Nasal prongs oxygen, Continuous Positive Airway Pressure machine, and Oxyhood was analyzed. Table 7 provides a break down of the various equipment as noticed by the fathers. Twenty six of 37 (70%) of the fathers made mention of the ventilator/respirator, 20 (54%) of the fathers in the study were able to name the nasal prongs oxygen and continuous positive airway pressure machines (CPAP) accounted for eight (21%) of the responses given by the fathers. A small number of the fathers, six (16.2%), however said that they did not know the name of the equipment. This was consistent with the study of Heermann et al (2005:177), where they indicated that many mothers appeared to be totally overwhelmed by the technology of the unit whereby some of the participants spoke the jargon of the unit.

Table 7: Name of Equipment (N=37)

Name of equipment	Frequency of responses	Percentage (%)
Nasal prongs oxygen	20	54
Ventilator or a respirator	26	70
Continuous Positive airway pressure machine	8	21
I don't know the name	6	16.2

NB: Some of the fathers were able to name more than one item of the equipment; therefore the frequency of the responses column is derived from analysis of multiple answers given in response to the question.

4.4.2 Father's Reaction on the Sight of Equipment used on Baby

The sight of neonatal equipment used on sick babies is associated with varied reactions especially to non-nursing personnel. A description of the reactions of the fathers in the study varied from one of fright, anxious, confused, to one of being surprised. Eighteen (36%) of the fathers said they were frightened at the sight of the equipment used on the baby, whilst 15 (30%) said they were anxious. Twelve (24%) of the fathers on the other hand indicated they did not know how to describe their reaction.

Table 8: Father's Reaction on the Sight of Equipment used on Baby (N=50)

Reaction on the sight of equipment	Frequency	Percentage (%)
Frightened	18	36
Anxious	15	30
Confused	4	8
Surprised	1	20
I don't know	12	24
Total	50	100.0

4.4.3 General feeling about NICU environment

The NICU environment is usually an unfamiliar environment for parents of sick babies (Heermann, Wilson, & Wilhelm 2005:176). With regards to their feelings

generally about the NICU environment, the fathers described their feelings as one of concern, anxiety, apprehension as shown in Table 9. Thirteen (26%) of the fathers were concerned about the NICU environment, 17 (34%) said they were anxious, whilst seven (14%) of them expressed that they were apprehensive about the NICU environment. A group of 13 (26%) fathers, however, said they did not know about their feelings in relation to the NICU environment.

Table 9: General Feeling about NICU Environment (N=50)

General feelings about NICU	Frequency	Percentage (%)
Concerned	13	26
Anxious	17	34
Apprehensive	7	14
Do not know	13	26
Total	50	100.0

4.4.4 Information with Regard to Very Small Babies prior Birth of own Baby

With regards to the question whether the fathers had any information on very small babies before the birth of their babies, the majority of the fathers, 37 (74%), said that they did not have any prior information on very small babies. Only 13 (26%) of the fathers said that they had prior information on very small babies.

The same group of 37 (74%) fathers also reported that they did not have any information before regarding NICU, whilst the group of 13 (26%) fathers stated that they had some information regarding NICU. The high percentage of fathers (74%) with no information with regard to very small babies prior to the birth of their baby may be attributed to long-held practices about neonatal care where parents were

excluded from neonatal units because of the risk of infection (Morris 1994 cited by Spenser and Edwards 2001:130).

Table 10: Fathers Information Regarding Very Small Babies before Birth and Information on NICU. (N=50)

Information on small babies before birth	No of fathers	(%)	Information on NICU	No of fathers	(%)
Yes	13	26	Yes	13	26
No	37	74	No	37	74
Total	50	100.0	Total	50	100.0

4.4.5 Information on Small babies after the Birth of the Baby

The responses derived from the data indicated that there is an increase in the information given to fathers on small babies after the birth. The majority of the fathers, 41 (82%) said that they had information on small babies, whilst 9 (18%), reported that they never had any information on small babies after birth. The possible reasons for not having any information may be attributed to some of the care givers who are yet to embrace the family-focused, developmentally supported care philosophy. Heermann et al (2005:176) quoted Lawhon (2002), and emphasized that a developmentally supportive environment where parents are involved in care-giving, promotes parent-infant-interactions and their development.

4.4.6 Source of Information

Various information sources such as nurses, doctors, friends, the internet, and other sources were among the list cited in the tool. Forty six percent of the fathers (23) indicated that they got information from more than one source. Seventeen (34%) of the fathers got information from the nurses, whilst seven (14%) of the fathers got their information from friends. Only three (7%) said that they got their information from doctors.

4.5 Stress and coping mechanisms – regulator and cognator

4.5.1 Feelings about baby’s chances of survival

Pre-term low birth weight babies have problems with breathing, feeding, maintaining body temperature and fighting infection

(<http://www.fun.go.com/health/childhealth/dony/dony 89 enc-prem>). Talmi and Harmon (2003: 13) reported that when a baby is born prematurely, serious ongoing medical and physical complications may require hospitalization in the NICU for days and sometimes for months. Based on this information, fathers were asked about their feelings with regard to their baby’s chances of survival. Twenty (40%) of the fathers said that their babies chances of survival was good, however more than half of the fathers, 28 (56%), stated that they were concerned and worried, whilst two (4%) indicated they did not know (see Table 11).

Table 11: Fathers Feelings about baby’s chances of survival (N=50)

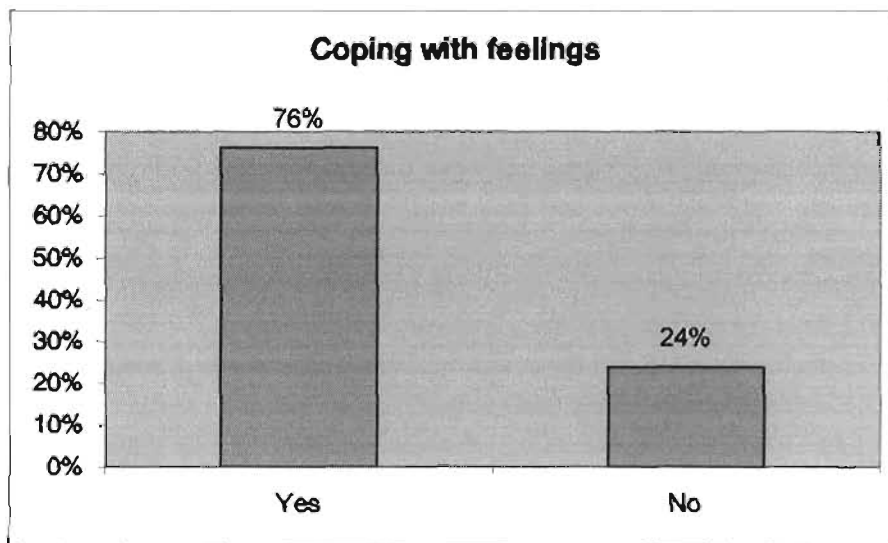
Feeling about baby’s chances of survival	Frequency	Percentage %
Good	20	40
Concerned	15	30
Worried	13	26

Do not know	2	4
Total	50	100

4.5.2 Coping with feelings and ways of coping

The fathers in the study were asked about how they coped with the feelings mentioned in Figure 9. In the instrument, two options were given to the fathers to choose from, a “yes” or “no” response. On analysis of data, 38 (76%) of the fathers indicated yes, and 12 (24%) fathers stated that they did not cope with the feelings. This is in keeping with the findings of Shellabarger & Thompson (1993) in Lubbe and Borman (2005:73), where it was stated that parents must cope with intense and confusing emotions during the crisis of premature parenthood.

Figure 9: Coping with Feelings (N=50)



4.5.2.1 Strategies to Cope

The fathers were asked to choose among nurses, doctors, wife/partner or spouse, friends and reading books about premature babies as strategies to coping. In relation to the findings, a high percentage (88%) of the fathers mentioned that talking to wife/partner/ or spouse as well as talking to nurses and doctors in NICU were strategies that they used to cope with their feelings.

Table 12: Strategies to Cope (N=50)

Various coping strategies	Frequency	Percentage %
Reading books about premature baby	1	2
Talking to friends at work	5	10
Talking to wife /partner or spouse	30	60
Talking to nurses and doctors in NICU	14	28
Total	50	100

4.5.2.2 Help to Cope

Fathers who had not identified a coping strategy were asked to identify whether nurses, doctors, friends and the presence of their wife, partner or spouse, may be sources of help in coping. Twelve fathers felt that one of these may be of help to them (see Table 13).

Table 13: Someone to help Fathers to Cope Better (N=12)

Someone to help fathers to cope	Frequency	Percentage %
Nurses	8	66
Doctors	3	25

Presence of wife/partner or spouse	5	42
Friends	1	8

NB: some of the fathers chose more than one person in response to the question of whom they think will help them to cope better if they were not coping. Therefore the frequency of the responses column is derived from the multiple answers given to the question.

4.6 Specific Requirements for Coping

The fathers were asked the question as to which coping requirements they would need whilst their babies were in NICU. The question was asked based on the fact that parents experience different needs at different stages of their babies stay. According to Lubbe and Bornman (2005:73) the needs of parents with neonates in NICU's play an important role in aspects such as ability to cope with changing parental roles and expectations and emotions, the relationship between parent and infant and the managing of the parents' own needs.

The requirements suggested ranged from specific guidance in the neonatal intensive care, the presence of a spouse/wife/partner, daily explanation about baby's condition and other requirements they felt were needed for coping. As shown in Table 14, more than half of the fathers 28 (56%) indicated that an explanation about the baby's condition on a daily basis would enable them to cope with the feelings of the baby's chances of survival. Another group of fathers, 12 (24%), preferred specific guidance to neonatal intensive care and only three (6%) of the fathers said that they did not know any specific requirements that they needed for coping.

Table 14: Specific Requirements that Fathers Need for Coping (N=50)

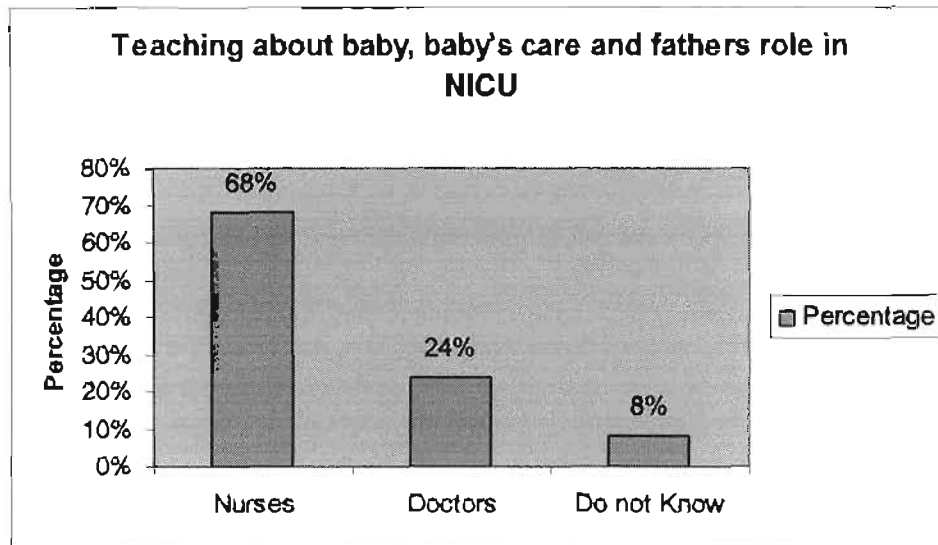
Specific requirements for coping	Frequency	Percentage %
Specific guidance to neonatal intensive care	7	14
Presence of spouse/wife/partner	12	24
Explanation about conditions of the baby on daily basis	28	56
Do not know	3	6
Total	50	100

4.7 Support, Psychological, and Interdependence Modes

Teaching parents of newborn babies in the NICU is also part of the role of the health care providers responsible for caring for pre-term babies. In the same manner, psycho-educational intervention with families and mental health services in the NICU with various physical supports that are available, have been some of the techniques that have paved the way to success with regard to the support given to fathers when their babies are admitted to the NICU (Palmer et al (1993), Jackson et al 2003:121). In order to achieve this objective, fathers were asked whom they thought gave the most teaching about the baby, the baby's care in the nursery as well as their role in the NICU. The majority of the fathers, 34 (68%), said that nurses gave the most teaching about the baby; about a quarter of the fathers, 12 (24%), however reported that the doctors gave the most teaching and a few of the fathers, 4 (8%), stated that they did not know.

Figure 10: Teaching About the Baby, Baby's care and fathers Role in NICU

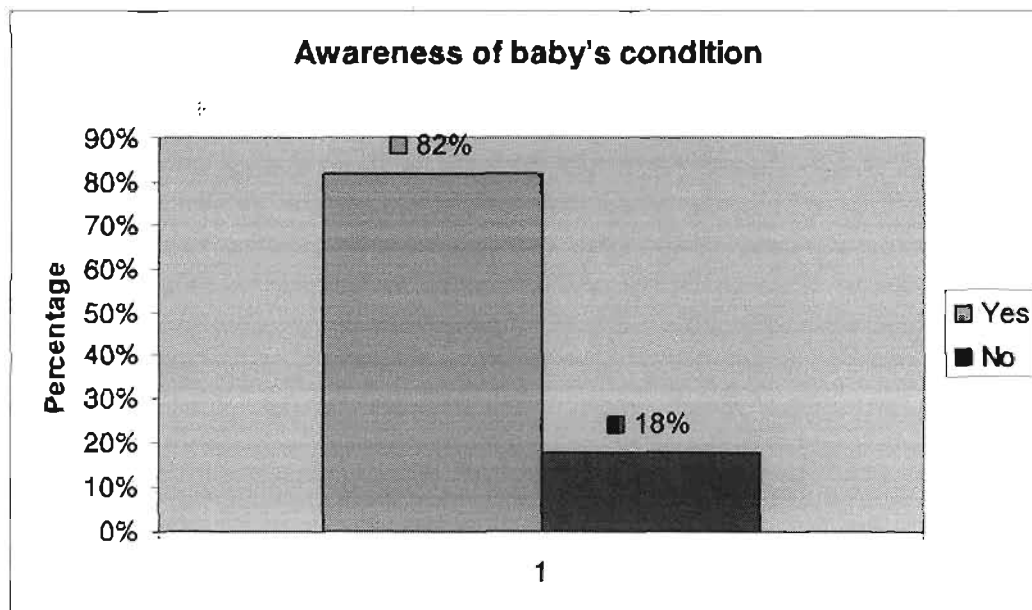
(N=50)



4.8 Awareness of Baby's Condition

The fathers in the study were asked whether they were aware of their baby's condition to which they replied yes or no.

Figure 11: Awareness of baby's condition (N=50)



4.8.1 Fathers response on whether aware of baby's condition and aspect of condition they observed

The 41 fathers who stated that they were aware of their babies conditions were asked to identify the aspects which they noted. The most common responses were grouped into problems with breathing, feeding, the size and general condition of the baby. Fifteen (36.5%) of fathers were aware that their babies had respiratory problems.

Participants can be quoted as

“My baby was having difficulty in breathing and was having assisted breathing through the use of oxygen”

Seven (17%) of the fathers indicated their concerns over the size of the baby as follows:

“My baby looks small, and he weighed less and did not look like a normal baby”

Ten (24%) of the fathers, however, identified problems related to feeding in their babies, they stated:

“Baby was unable to tolerate feeds, was given intravenous drips and was given milk via the tube and pipes”

In relation to the general condition of the baby, one (2.4%), of the fathers stated “I can see that my baby is suffering because he looks sick and unwell”

Seventeen fathers (41.5%) observed more than one of the above conditions present in their babies.

4.8.2 Preparation of Fathers by Medical Staff for the Birth of a Pre-term Baby

Fathers were asked “how do you think the medical staff can prepare fathers for the birth of a pre-term baby?” Several responses and answers were given and these

answers were coded into the three most common responses as follows: educational preparation by medical staff, psychological preparation and emotional preparation. On analysis of the data, half of the fathers 25 (50%) in the study indicated that fathers can be prepared psychologically. This included encouragement, counseling, honest feedback on the baby’s welfare and talking to them on how to cope. Another group of 20 (40%) of the fathers stated that it should be through educational preparation, which should involve lectures, explanation of the problem beforehand and ongoing explanations of the procedures and equipment that would be used. There was a further emphasis that the information and education should be in the language that they understand and should include everything they need to know about prematurity and caring for a premature baby. Five (10%) fathers however, said that they did not know how fathers of pre-term low birth weight babies could be prepared.

Table 15: Preparation of fathers by medical staff for birth of pre-term baby (N=50)

Suggestions of how fathers can be prepared by medical staff	Frequency	Percentage %
1.Educational preparation – <i>“ Preparation through lectures”</i> <i>“Explanation of the problem beforehand and ongoing”</i> <i>“Explanations on procedures and equipments use”</i> <i>“Information and education in an understandable form”</i> <i>“In preparing for the varieties of the experience for the upcoming decisions regarding what to expect at</i>	20	40

<i>birth</i>		
2. Psychological preparation – <i>“Encouragement, counseling, support and honest feedback on baby’s welfare</i> <i>“Talking to them and coping”</i>	25	50
3.Emotional preparation		
Don’t know	5	10
Total	50	100

4.8.3 Support to Partner

In relation to the question on how they could support their partners, almost half of the fathers, 23 (46%), indicated that visiting baby and the mother regularly is very important. Ten (20%) of the fathers said that their physical presence is of utmost importance to their partner at this crucial time of the baby’s life. Another group of fathers, 12 (24%), indicated that by being positive, assisting her and being helpful is the way to go and only 5 (10%) of the participants said that the support could be in the form of listening and showing love to their partner. Seideman (1997:170) reported that the spouse is the greatest source of support; other sources include NICU nurses, physicians, and grandparents. One of the fathers in Jackson et al’s study (2003:124) remarked “I’m simply at my wife’s side because she’s come through all this”.

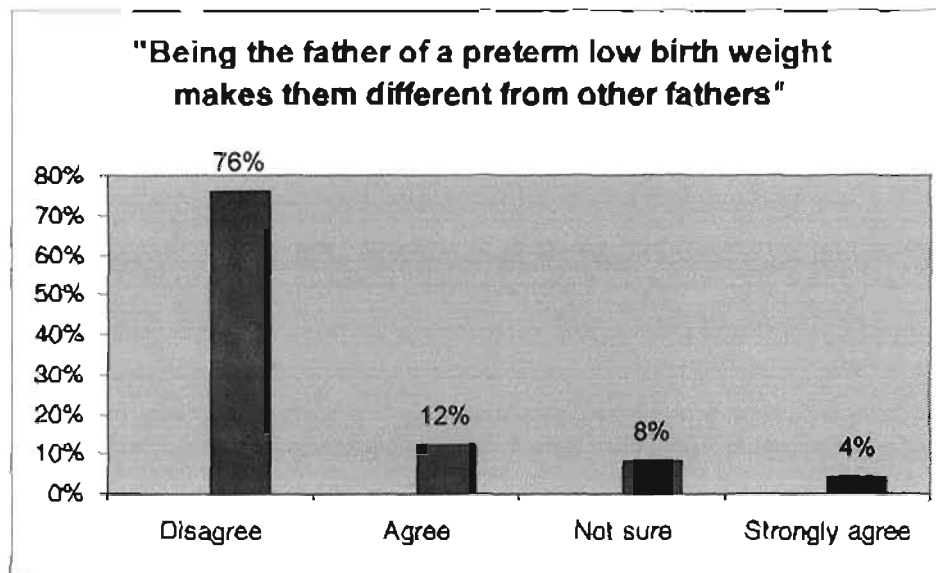
Table 16: Different ways fathers use to show support to partners (N=50)

Different ways to support partners	Frequency	Percentage (%)
Visit baby and mother regularly	23	46
Physical presence	10	20
Giving supportive care	12	24
Listening to and loving partners	5	10
Total	50	100

4.9 Responses to the statement: Being the father of a preterm low birth weight baby makes them different from other fathers

A vast majority, 38 (76%), of the fathers disagreed with the statement, whilst eight (16%) agreed or strongly agreed that being the father of preterm low birth weight babies made them different from other fathers. Only four (8%) of the fathers were not sure. The high percentage, 76% (38) of the fathers, who indicated that being the father of preterm baby did not make them different from other fathers is a similar finding to the response of one of the fathers in Jackson et al's study 2003:123) where the father described how he felt good about being a father to a preterm baby.

Figure 12: Responses of fathers to the statement “Being the father of a preterm low birth weight babies makes them different from other fathers” (N=50)



4.9.1 Effect of baby's appearance on fathers

Thirty six (72%) of the fathers, in response to what effect the baby's appearance had on them, reported that they were affected positively, while 14 (28%) indicated that their babies appearance affected them in a negative way.

4.9.2 Reasons for negative feelings

In response to the question, fourteen (28%) of the fathers mentioned that the appearance of their babies affected them negatively. The most frequent reasons mentioned were lack of confidence to tell members of the family and close friends because of the small size of the baby, eight of 14 fathers (57.1%), baby arrived too soon and before time, not giving them enough time to plan their life appropriately and fathers feeling lonely, fathers said that they were alone at home to the extent that they did not have enough sleep four (28.5%), and two of the fathers (14.2%) indicated that

it was the first time having a preterm baby, seeing babies with all tubes, pipes, needles, machines, ventilators and seeing the baby in that condition was not pleasing to them. One of the fathers said that he was affected in a negative way and could be quoted as “my baby’s nostrils are so tiny and I was thinking of the appearance when the baby grows up” shown in Table 17.

The findings for the reasons for the negative feelings are consistent with the findings in Jackson et al’s (2003:121) study where one of the fathers was ambivalent and described how he felt strange to be a father initially, but that he would become attached to the baby the first time he took him out of incubator and held him against his chest. He emphasized that after the baby was out of the incubator; he would feel a little bit more comfortable, but now he couldn’t do anything for the baby the way he was looking forward to do. There was a sense of unreality regarding being a father.

Table 17: Reasons for the negative feelings (N=14)

Reasons for negative feelings	Frequency	Percentage (%)
Lack of confidence <i>“size of the baby”</i> <i>“ Baby very small”</i> <i>“Baby is ill for too long, worried as to when he will be better”</i> <i>“Inability to tell family members and close friends”</i>	8	57.1
Unexpected time of birth: <i>“Baby arrived too soon and before time”</i> <i>“Inability to plan for the baby”</i>	2	14.2
Loneliness because of wife’s absence:	2	14.2

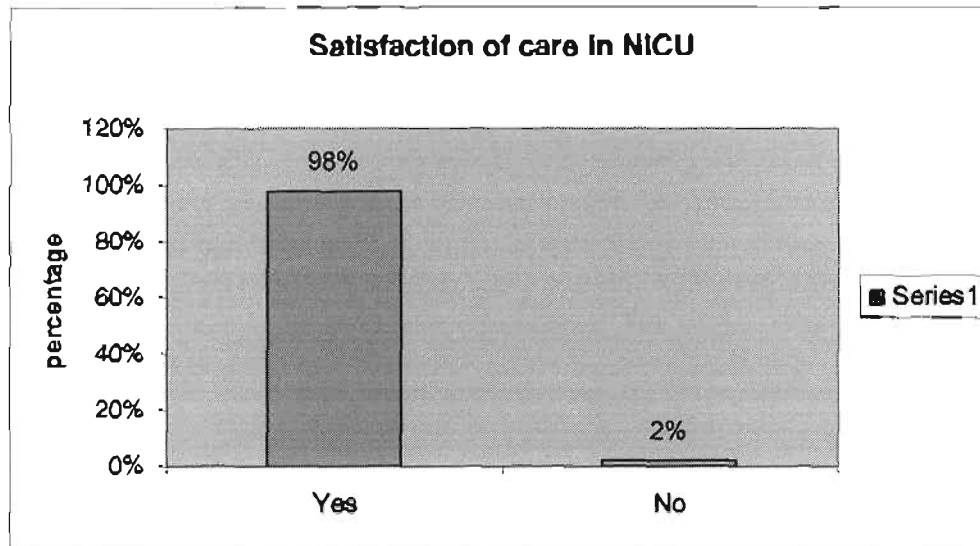
<i>“fathers feeling lonely at home, baby stayed too long in the hospital, sleep affected”</i>		
<i>“Seeing babies with tubes, pipes needles, machines and ventilators did not make them feel good”</i>	2	14.2
Size of the nose observed by one of the fathers: <i>“The nostrils are so tiny and thinking of the appearance when the baby’s grows”</i>	1	7.1

4.10 Satisfaction with Care of Baby in NICU

To establish the extent of support given to fathers by the neonatal staff in NICU, and in order for the researcher to measure the degree of fathers self concept in the involvement of their babies care, fathers were asked if they were satisfied with the care that was rendered to their babies in NICU. Almost all of the fathers, 49 (98%), stated that they were satisfied with the care given to their baby in the NICU, except for one of the fathers (2%) who indicated that he was dissatisfied with the care of his baby in the NICU. The reason given by the father for his dissatisfaction was that “he sometimes come and leaves without getting any feedback on the progress of his child and he leaves hurt”. Furthermore, he explained that he understood he visited at a time when shifts are changing and handing over is being done and this is the only suitable time for him to visit because of the nature of his work and access to transport.

Jackson et al (2003:124) reported that all fathers who participated in the study expressed confidence in the competence of the staff. They believed babies were safe in NICU and were well cared for.

Figure 13: Satisfaction with care in NICU (N=50)



4.10.1 Things that would make them comfortable during visit to baby

In relation to the question on the things that will make them comfortable during visits to their babies, responses such as the caring role of nurses, talking to them, explaining the baby's condition and progress made by baby were given by the fathers of pre-term babies. The role of the nurse in care giving was seen as comforting by some of the fathers. More than half of the fathers, 26 (52%), mentioned that the presence of nurses around their babies was comforting and this also gave them the opportunity to ask questions regarding the welfare of their baby. Talking to fathers, giving information about the baby in detail, showing care, concern and explaining what to expect as well as telling them about the baby's condition was also mentioned by 19 (38%) fathers as comforting during visits to their babies. Almost all the fathers indicated that they would like to see improvement in their babies' condition.

Table 18: Type of care to make fathers comfortable (N=50)

Care that would make fathers comfortable during visit	Frequency	Percentage (%)
<p>Information about baby progress:</p> <p><i>“Nurses to talk to us about condition of baby”</i></p> <p><i>‘I want more information in detail”</i></p>	19	38
<p>Improvement in baby’s condition:</p> <p><i>“To see baby getting better”</i></p> <p><i>“I am waiting to take my baby home once the oxygen is removed”</i></p> <p><i>“To see that each and everyday there is a change in my baby’s condition”</i></p> <p><i>“I want the baby to look at me, to move any parts of his body and to show me that he has power”</i></p>	40	80
<p>Presence of nurses around baby and giving emotional support</p> <p><i>“to show care and be concerned”</i></p> <p><i>“ I will like to see one or two nurses taking care of my baby, those who will be easy to talk to and those nurses not taking more than three babies so that they may have more time on individual baby’s and parents”</i></p> <p><i>“To give fathers attention”</i></p>	26	52

NB: Some of the fathers mentioned more than one area of care that they would like to see to make them comfortable when they visit their babies; therefore the frequency column is derived from multiple answers given to the question.

4.11 Presence of Previous Children and Number of Children.

In relation to previous children and its significance to the current study, the researcher wanted to find out if there are facilities available for other siblings that would allow fathers to stay with their neonates should he so desire, since the mother was also not at home to look after other siblings. Fathers were therefore asked whether they had any other children. The majority, 35 (70%), fathers indicated that they have other children and 15 (30%) of the fathers answered “no” to the question. Table 19 shows the frequency and percentage of the fathers who responded yes; with the number of children that they have.

Table 19: Number of previous children (N=35)

Number of children	Frequency	Percentage (%)
1	9	25.7
2	11	31.4
3	7	20
4	3	8.5
>4	5	14.2

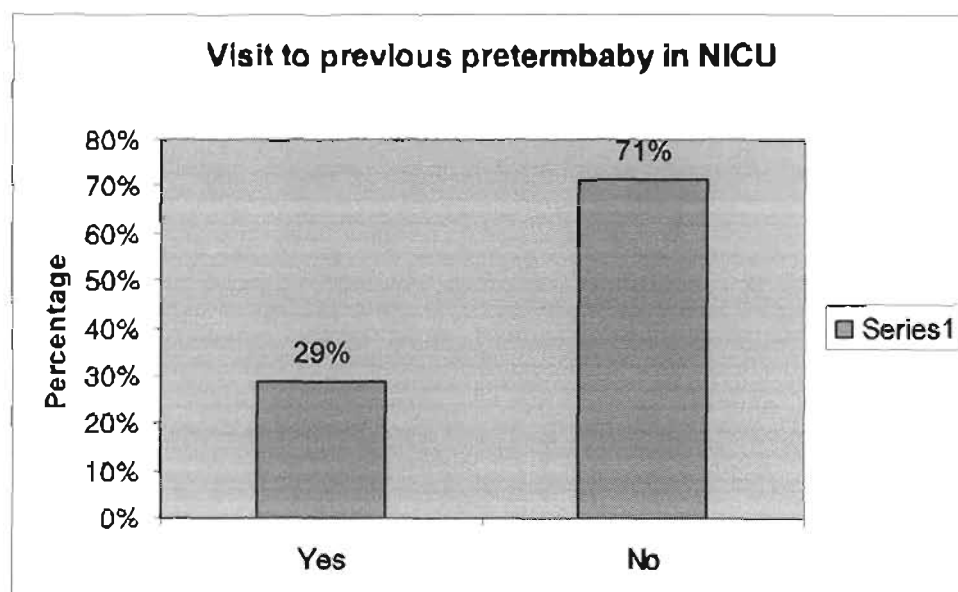
4.11.1 Any other children pre-term with low birth weight

The 35 fathers, who indicated that they have had children previously, were asked whether any of those children were pre-term with low birth weight. Seven (20%) of these fathers responded yes, whilst a vast majority 28 (80%), of the fathers said no to the question.

4.11.2 Visit to Previous Pre-term Baby in NICU/ Number of Times Visited/Action

Figure 14 shows the number of fathers who had had preterm babies delivered by their wife or spouse. Of those fathers, 7 (20%), who responded that they had had previous preterm babies, two of seven (28.6%) indicated that they had visited their babies in the NICU, whilst the other five said that they had not paid a visit to their babies. One of the two fathers, who had a previous preterm baby born to him, said he opened the incubator and touched the baby. The other father said he assisted with the feeding of the baby. The findings were positive as one of the fathers indicated he opened the incubator and touched the baby. These actions according to Sullivan (1999:35) facilitate attachment.

Figure 14: Visit to previous pre-term baby in NICU (N=7)



Concluding remarks

In the analysis of the study, it was observed that fathers responded positively to the birth of their babies despite the fact that the babies were delivered before time. The majority of the fathers, (94%) described their reactions after the birth of the baby as happy.

Fathers also reported negative feelings at the sight of the physical appearance of their babies. A high percentage (84%) indicated they were terrified, apprehensive, shocked and depressed.

Despite the negative feelings reported by the fathers, about their babies' physical appearance, high percentage, 76%, however, indicated that, being the father of preterm baby did not make them different from the other fathers.

CHAPTER FIVE

DISCUSSION, RECOMMENDATION AND CONCLUSIONS

5.1 Introduction

This study was conducted within the neonatal intensive care unit (NICU) setting where preterm babies are admitted. This study was undertaken in order to describe the responses of fathers of pre-term low birth weight infants and their involvement in the care of that baby in the NICU at a tertiary hospital in Durban. It was a descriptive quantitative non-experimental survey and a self administered questionnaire (SAQs) was used as a research instrument. A purposive non-probability method of sampling was adopted for the study, where fifty (50) fathers of preterm low birth weight babies, who visited and were involved, in the care of preterm babies were recruited.

Discussion in this chapter focuses on the responses of fathers of preterm babies during admission of their pre-term babies to the NICU. The chapter further discusses their involvement in the care of their babies as well as their residual and contextual stimuli of the NICU environment, coping mechanisms and support systems available to the fathers as well as psychological and interdependence modes.

Roy's Adaptation Model and pertinent literature reviewed on the topic formed a framework for the discussions on the key findings of the study.

5.2 Demographics of the Participant

A total of 50 fathers, whose partners had delivered preterm babies were recruited for this study within the NICU environment at a tertiary hospital in Durban. The ages of the fathers in the study ranged from 18 years to 45 years and above. Less than half, 22 (44%), of the fathers in this study fell between the ages of 26 to 35 years. Nineteen

(38%) of the participants had secondary education; and those with primary education constituted 26% of the fathers. Only 8 (16%) had tertiary education.

The fathers in the study were from different language / ethnic groups-Zulus, Xhosas, Indians, as well as Afrikaans. Thirty two (64%) of the fathers were Zulu speaking, and just over 25% were English speaking.

5.3 Discussion

5.3.1 Input: Stimuli Adaptation level

5.3.1.1 Responses and Reactions of Fathers after Pre-Term Birth.

It was very interesting to see that the majority of the fathers in this study, 47 (94%), described their reaction after the birth of their babies as happy. Fathers reacted positively despite the fact that their babies were born too soon, before the 37th week of pregnancy.

This study also found that fathers of preterm babies within the NICU setting experienced emotional reactions when they saw their babies for the first time and on subsequent occasions, during their visits to the NICU (Refer Table 6 in (chapter 4). A high percentage (84%) of the fathers reported negative feelings such as being terrified, apprehensive, shocked and depressed.

This finding is consistent with the literature. Lubbe and Bornman (2005:74) cited Dreyer (2000) who stated that parents were initially shocked by the appearance of their neonate. They were then confronted with feelings of fear, and worries about the neonates' survival and lifelong physical outcome. Parents of premature babies may experience strong, conflicting emotions after the birth of the child. Feelings of fear

about the baby's condition or about their ability to care for the child are alternatively replaced by feelings of hope and pride.

“Disappointment may occur when anticipation of a chubby, cuddly baby is dashed by a small and skinny premature one, whose head may appear too big for his body”

(<http://www.healthier you.com / preterm.html>).

Similarly Gennaro (1988), Maloni, Kane, Suen, & Wang (2002) in Talmi and Harmon (2003:15), reported that parents of preemies often experience guilt, anxiety and depression. Some other emotional feelings mentioned are anger, helplessness, hopelensness, terror, and ambivalence about baby's the survival (Easterbrooks, (1988), Hyman, (2001); Tracy, (2000) in Talmi and Harmon (2003: 15).

The same emotions are described in Miles (1991), Miles et al (1991), Zeneah & Jones (1982 cited by Tosh 2001:11); and Jackson et al (2003:122).

5.3.1.2 Information Given To Fathers about Baby during Visits to NICU

As part of stimuli adaptation level and to develop parent-infant relationships in the care of preterm babies in NICU, information needs to be given to fathers when they visit their babies. In this study, findings revealed that a high percentage (90%) of fathers indicated that they were given information about their babies during their visits to NICU.

Talmi and Harmon (2003:17) reported that parents often receive conflicting messages from professionals; hence they advocated that parents of fragile infants need accurate information and clear open communication with hospital staff.

Parents need information frequently and repeatedly - this should be in, simple language that they can understand (Lubbe and Bornman 2005:78 cited Reichman,

Miller, Gordon and Hendricks Munoz, (2000:290), Mckim, as cited by Yssel (1998:18); and Shellabarger and Thompson (1993:42); and Martinelli (1999:5).

5.3.1.3 Information Given By Nurses on NICU Environment

The Neonatal Intensive Care Unit (NICU) environment is considered an unfamiliar and intimidating one for the fathers of preterm low birth weight babies (Mile, (1989); Martinelli (1999:3); Affonso (1992:65); Raeside, (1997); Talmi and Harmon (2003:15); Jackson et al (2003:124), Lubbe and Bormman (2005:74); Heerman, Wilson and Wilhelm (2005:176).

In this study, the majority of the fathers (66%), acknowledged that information was given to them about the NICU environment. This enabled them to be involved in the care of their baby.

Seideman (1997:172) states that both positive and negative events in the NICU, influence parents' subsequent behaviours as they learned more about the NICU norms and the influence of earlier held beliefs decrease.

5.3.1.4 Fathers Actions during the First Visit to their Babies

In this study, fathers stated that they were not involved in the care of their babies during the first visit. The majority of the fathers (66%) mentioned that they stood by the babies' bed-side and looked at them whilst 34% remarked that they talked, carried and fed the baby. To involve fathers in the care of their babies, Novak and Novak (1990:25) state that nurses need to spend time with the family to promote attachment and to gradually involve the father in caretaking activities such as touching, stroking, talking to the baby and that nurses need to involve them in the feeding of the baby.

It was also emphasized in the literature (<http://www.l.org/EdChicago.htm>), that although nurses are providing total care during the infants' critical periods, they must consciously work to empower parents to begin to attach to and care for their infant. Every effort is made to lessen the parents' sense of isolation from their infant by having them hold the infant as soon as possible and take pictures of the infant, and by letting them know about the infants response to touch and verbal stimuli (<http://www.Premie.l.org/edChicago.htm>).

Talmi and Harmon (2003:15) report that fathers of pre-term babies may be more involved in their infants care than are fathers' of full-term babies. They may be the first to see and touch them, particularly if mothers are still recovering from the delivery.

Lubbe and Bornman (2005:79) report that parents should spend as much time as possible with their neonates and participate in the neonates' bathing, feeding and changing as soon as it is medically safe. They emphasize that the early introduction of positive touch lays the foundation for continued, positive interaction with the neonate.

Reichman et al, (2000:291), report that parents should be encouraged from the beginning, to touch, stroke and speak to their neonate.

With regard to paternal infant attachment, early interaction between a father and his infant aids in the infant's development (Greenberg and Morris, 1974; Klaus and Kernel 1976; Parke and Tinsley, 1981 cited by Novak and Novak 1990:20).

Sullivan (1999:33-39) in the same manner demonstrated the importance of participation of fathers in the care of pre-term infants in order to form attachment to the child.

Levy-shift, Hoffman, Mogliner, Levinger and Mogliner (1990:292), emphasize that pre-term infants whose fathers interacted with them in the hospital are more likely to gain weight, leave the hospital faster and adjust to their environment.

5.4 Residual and Contextual Stimuli

5.4.1 Father's Observation of Equipment Used on Baby and Their Reactions on the Sight of Equipment

In the current study, 74% of the fathers recognized the type of equipment that was used on their babies. They also had some knowledge on the use of equipment, whilst 26% of the fathers did not take notice of the type of equipment that was used for their babies.

Fathers experienced varying reactions to the equipment that they saw being used on their babies - 76% of fathers described their reactions as that of fright, feeling anxious, confused and surprised whilst 24% of the fathers did not know how to describe their reaction.

Bennett (1990 cited Spencer and Edwards 2001:128) reported that participants expressed fear, shock and apprehension on seeing the technology and the equipment.

Heermann, Wilson and Wilhelm (2005:177) indicated that mothers appeared to be totally overwhelmed by the technology of the unit.

Spencer & Edwards (2001:128) cited Curry (1995), who states that although the highly technical environment cannot be avoided, the family should be prepared before entering it to give them an idea of the general equipment, thereby reducing their level of fear.

5.4.2 Fathers' General Feelings about the NICU Environment

In this study, 74% of fathers indicated that they were anxious, apprehensive and concerned about the NICU environment.

McGrath (1996) in Spencer & Edwards (2001:128) states that, the NICU is a sensory overwhelming environment and as such parents may feel unwelcome and out of place, adding to the guilt they may already be experiencing about their premature and sick baby.

Wiebley (1989) in Spencer & Edwards (2001:128) has described the NICU as intimidating, forbidding and crowded.

5.5 Stress and Coping mechanisms –Regulator and Cognator

The birth of a preterm baby has been linked to different reactions and coping skills by parents of such babies. Pre-term birth is potentially traumatic because of the suddenness, and the difference from the experiences that are expected upon finding out about the pregnancy, and the planning for the eventual arrival (Fleischman, 1986; Miller & Sollie, 1980 in Martinelli 1999:3).

In this study, 70% of fathers had had previous experiences with the birth of a pre-term baby. Twenty (40%) of the fathers said that their babies chances of survival were good, more than half (56%) of the fathers indicated that they were concerned and worried about their babies' chances of survival whilst 4% said that they did not know. Jackson et al (2003:124) reported that fathers were concerned about the baby and they were afraid of losing the baby. There was a considerable fear that the baby would die and several of the participants described how difficult it was to leave the baby because they were so worried.

According to Lubbe and Bornman (2005: 74), parents are confronted with feelings of fear and worries about neonates' survival or lifelong physical outcome. Dealing with the loss of the expected healthy neonate is an overwhelming psychological adjustment for the parent (Lubbe and Bornman 2005 cited Shellebarger and Thompson, 1993:39) Similarly, the emotions associated with wondering if, or becoming certain that, your child will die or be subjected to painful or discomfoting procedures may need to be expressed over and over. Parents may need validations support to do so (<file:///f:imagine.htm>).

5.5.1 Fathers' Coping Abilities and Strategies for Coping

Parents must cope with intense and confusing emotions during the crisis of premature parenthood (Lubbe and Bornman 2005:74 cited Shellabarger & Thompson 1993). To adapt to the threatening event of a sick infant, parents restructure their lives through a process of searching for meaning and trying to regain control in their lives (<http://www.premie.l.org.edchicago.htm>).

In the current study, 76% of fathers indicated they were coping with their feelings whilst 24% stated that they did not cope with their feelings. A high percentage of fathers (88%) in this study mentioned that talking to their wife, partner or spouse as well as talking to nurses and doctors in NICU were the main strategies they had used to cope with their feelings, followed by talking to friends (10%); and reading books about premature babies being the least mentioned strategy (2%).

According to Martinelli (1999:5), emotional support, which has been defined as access to or receipt of trust, affect, or some other intimate connection and understanding is essential. He reported that this may be important to parents of preemies because of the emotional taxing that is experienced through repeated brushes

with death, surgeries, loss of control, and the other feelings delineated in the parental reaction literature.

Moreover, from the findings of this study, it was evident that fathers of preterm babies could cope better when adequately prepared and educated about what to expect in such a birth situation and the health risks linked to premature babies. More than half of the fathers, 28 (56%), indicated that an explanation about the baby's condition on a daily basis would help them to cope with their feeling.

Talmi and Harmon (2003:17) reported that parents of fragile infants need accurate information and clear, open communication with hospital staff.

5.6 Support, Psychological and Interdependent Modes

A developmentally supportive environment includes helping parents become competent in understanding their infant's capabilities and behavioural functioning (Lawhon 2002 in Heermann, Wilson, & Wilhelm 2005:176).

The majority of the fathers, 34 (68%), in this study acknowledged that neonatal nurses gave the most teaching about the baby, baby's care, baby's progress and their overall role while the baby is in NICU. Twelve (24%) of the fathers, however, reported that doctors gave the most education with the remaining 4 (8%) of them indicating that they did not know who gave the most teaching and support.

The fathers were able to observe that their babies looked smaller as well as having various medical problems associated with preterm babies. Due to the immature status of their organs, preterm babies suffer from difficulties with breathing, feeding, fighting infections among other conditions. The fathers in this study were able to identify that something was wrong with the way in which their babies were breathing,

feeding and so on. A high percentage of fathers (82%) admitted that they knew something was wrong with their baby.

According to the fathers of babies admitted to the NICU, support for their partners could be demonstrated through acts of love, by their physical presence, being there for the baby and the mother as well as visiting her and the baby regularly. The findings also indicated that the fathers of preterm babies need early preparation that is before the birth of the baby in order for them to better handle the situation. The presence of their spouses was also critical to them.

Fathers reported that nurses and doctors played a vital role in the care of their babies and they stated that they were satisfied with the care that was rendered to their babies in the NICU.

Almost all (98%) of the fathers indicated that they were satisfied with the care of their babies. Jackson et al (2003:124) reported that all fathers who participated in their study expressed confidence in the competence of the neonatal staff.

The experiences of fathers having preterm babies could be negative, positive or a mixture of both positive and negative feelings as shown in this study. Nurses working in NICU need to take cognizance of these facts, such as the emotional states of parents.

This study clearly shows that the NICU environment, from the fathers' perspective, is a totally different environment, with constraints as to whether to touch or hold baby, due to the equipment, such as support machines used on babies.

Interactions, information sharing, and a developmentally supportive environment are all that are needed by the fathers of preterm babies as this will support parents'

participation in care giving and promote positive parent-infant interaction (Lawhon 2002 cited by Heerman et al 2005:176).

5.7 Recommendations

Based on the findings of this study and literature review, the following recommendations are made:

5.7.1 For Nursing Practice

A holistic approach to parent-child interactions and a developmentally supportive environment within the neonatal intensive care unit (NICU) is needed, as these help parents to become competent in understanding their infants, capabilities and their behaviours (Heerman et al 2005:176).

A family-centred partnership in care is needed in the NICU; parents' needs must be addressed as it may have an impact on the bonding process. Development of guidelines for the inclusion of fathers in the care of preterm low birth weight babies in NICU is imperative and recommended.

Parents of sick babies should be familiar with the policies and practices related to the care of the child. The benefits of nursing and medical procedures should be explained to parents to ease some of the tensions they experience due to the lack of knowledge on their intended outcomes.

❖ Encouragement

Fathers should be encouraged to be involved in the care of their sick babies if they so desire. Hospitals need to set aside programs for parents with sick babies in the NICU - to give them opportunity to talk and learn relevant interventions effective in promoting parent –infant bonding such as touching, soothing, early holding as well as

being involved in feeding, bathing, positioning and diapering (Heermann et al 2005:178).

❖ **Communication**

Good communication between parents and health care providers is very significant in preterm outcomes and this should be embraced by the neonatal staff to facilitate fathers' involvement in the care of their babies.

The findings of this study revealed that 9 (18%) of the fathers did not receive any information about their preterm babies whilst in the NICU. The researcher therefore recommends that staff working in the neonatal unit should give information about preterm babies, the baby's condition, the prognosis and the treatment plan as this will enhance fathers' involvement in the care of their preterm babies.

With reference to the NICU environment, the findings revealed that 17 (34%) of the fathers did not receive any information. Information for fathers about the NICU environment is very important and may reduce stress. For example, in a busy, highly technical NICU environment, there may be continuous beeping of alarms, these alarms are of mundane causes - families including fathers will not know unless they are told (Dyer (1995b) in Spencer & Edwards 2001:128).

Families should be prepared before entering the NICU to give them an idea of the general equipment, thereby reducing their level of stress (Spencer & Edwards 2001:128 cited Curry 1995).

Fathers in particular, in the case of the birth of a premature infant, should be encouraged to visit the NICU. This may enable them to offer greater support to their partners. .

Dyer (1995b) suggests that the use of pictures of the equipment and simple explanations should be given in a written format so that families can absorb it at their own pace.

Neonatal nurses have a central role in helping fathers manage their stress and to become increasingly involved with their babies.

5.7.2 For Nursing Education

The involvement of the fathers in the care of pre-term low birth weight (PTLBW) babies is critical to their outcome. Preterm infants whose fathers interacted with them in the hospital are more likely to gain weight, leave the hospital faster and adjust to their environment (Levy Shift, Hoffman, Mogliner, Levinger & Mogliner 1990:292). Student midwives and students undergoing a course in neonatal intensive care nursing should be made aware of this during the course of their studies.

The present registered nurses / midwives and neonatal trained nurses need to be updated on this practice of PTLBW babies. A continuous in service-program needs to be organized to target this group of nurses so that they are aware of the management strategies and the support they can offer to the fathers of preterm low birth weight babies whilst their babies are in NICU.

5.7.3 For Nursing Research

The involvement of fathers in the care of pre-term low birth weight babies in NICU in South Africa has received limited attention by researchers. A clear need exists for more research to be conducted on this topic.

In this study, the involvement of fathers of preterm low birth weight babies was determined through a Self-Administered Questionnaires (SAQs). It would be useful to

obtain the experiences of these fathers using qualitative research approaches as these provide greater depth and meaning to their responses.

Further studies need to be done in South Africa, where fathers and mothers of preterm infants describe their experiences of parenthood during the preterm infant's stay in the NICU.

5.8 Conclusion

The aim of this study was to describe the responses and involvement of fathers of preterm infants in the neonatal intensive care unit. Their reactions and ability to adapt during this time of admission was also identified. From the findings it appeared that the fathers responded in different ways on seeing their babies for the first time. Their experiences ranged from feelings of anxiety, shock, depression, apprehension, to surprise and confusion. Despite these reactions, birth of their babies was perceived as a positive experience. Adequate preparation for the birth of preterm babies, according to the fathers, was necessary in order for them to cope and deal with the difficulties their babies encountered due to this condition. Furthermore, some of the fathers felt that orientation and skills in handling pre-term birth were needed by them if they were to cope effectively and be knowledgeable in what was happening.

With respect to the type of support that they require whilst the babies were in the NICU, the fathers in the study mentioned that their physical presence is a source of support to their partners.

Support by nurses was seen as important by the fathers. They felt they needed knowledge and information about the progress of their babies on a daily basis.

Acquiring appropriate knowledge and information on premature birth was seen as necessary by the fathers for coping with later difficulties associated with prematurity. It is evident from the study that fathers of pre-term babies experienced different forms of reaction and feelings on the birth of a pre-term baby. Some of the fathers felt they could not give as much time as they wished to assist in the care and support of their baby due to their work schedule and official working hours.

From the discussions it is apparent that having a pre-term baby is traumatic for fathers and this situation has psychological implications for both the fathers and their spouse or partners. Concern for the welfare and continued care of their baby was evident in the feelings as described by the fathers.

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Annexure A

4A Newton Walker
Escombe – Queensburgh
Durban
4093
06/08/2004

Chief Executive Officer
Inkosi Albert Luthuli Central Hospital
Private Bag X03
Mayville, 4058
Durban

Dear Sir or Madam:

Request for permission to conduct a nursing project on fathers of pre-term babies in neonatal intensive care unit (NICU) at Inkosi Albert Luthuli Central Hospital.

My name is Afolake Felicia Soniyi. I am a Chief professional Nurse working in NICU at IALCH currently studying towards a Master's degree in Maternal and Child health at the University of KwaZulu – Natal. My dissertation is being undertaken as partial fulfillment of the requirements for this degree.

The title of the research project is:

The responses of fathers of pre-term low birth weight babies and their involvement in their care in NICU

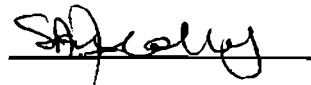
Participants would be asked to complete sets of Self – Administered Questionnaires (SAQs) on their responses as fathers of pre-term babies as well as their involvement in the care of those babies. Fathers describing their responses would serve as a basis for understanding how fathers react when they have pre-term babies, as too essentially to identify the factors that contributes to those responses.

The benefit to IALCH would be primarily in terms of the results obtained and how guidelines would be developed if necessary for the neonatal staff for the inclusion of fathers in the care of pre-term babies in NICU, thus bringing about a situation where both parents fully participate in the upbringing of the child.

I am prepared to abide by the policies, protocols and ethics of the institution, so too maintains confidentiality and ensure that no harm is caused to the father. There will be no cost implications to the institution.

Thanking you in anticipation.

Yours truly,



Afolake Felicia Soniyi.



Supervisor

Annexure A

Tel: (0310 4632701

Email: Kayode@samedical.co.za

4A Newton Walker Crescent

Escombe - Queensburgh

4093

Durban

06/08/2004

Mother and Child Domain Department

Inkosi Albert Luthuli Central hospital

Private Bag X03

Mayville, 4058

Durban.

Dear Mrs. P.J Ngwane,

Request for permission to conduct a nursing project on fathers of pre-term babies in neonatal intensive care unit (NICU) at Inkosi Albert Luthuli Central Hospital.

My name is Afolake Felicia Soniyi. I am a Chief professional Nurse working in NICU at IALCH currently studying towards a Master's degree in Maternal and Child health at the University of KwaZulu – Natal. My dissertation is being undertaken as partial fulfillment of the requirements for this degree.

The title of the research project is:

The responses of fathers of pre-term low birth weight (PTLBW) babies and their involvement in their care in NICU.

Participants would be asked to complete sets of Self – Administered Questionnaires (SAQs) on their responses as fathers of pre-term babies as well as their involvement in the care of those babies. Fathers describing their responses would serve as a basis

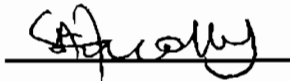
for understanding how fathers react and interact when they have PTLBW babies, as too essentially to identify the factors that contribute to those responses.

The benefit to IALCH would be primarily in terms of the results obtained and how guidelines would be developed if necessary for the neonatal staff for the inclusion of fathers in the care of pre-term babies in NICU, thus bringing about a situation where both parents fully participate in the upbringing of the child.

I am prepared to abide by the policies, protocols and ethics of the institution, so too, to maintain confidentiality and ensure that no harm is caused to the father. No costs will be incurred by IALCH.

Thanking you in anticipation.

Yours truly,



Afolake Felicia Soniyi.



Supervisor



DEPARTMENT OF HEALTH

PROVINCE OF KWAZULU-NATAL

INKOSI ALBERT LUTHULI CENTRAL HOSPITAL Annexure B

DEPARTMENT:

800 Bellair Road, Mayville, 4091
Private Bag X03, Mayville, 4058
Tel.: 031 240 1000, Fax.: 031 240 1050
Email.: @ialch.co.za

11/03/2006

Dear Sir/Madam

This is to certify that P/N A.F. Soniyi has been given permission to conduct research at Inkosi Albert Luthuli Central Hospital, in Neonatal Nursery, interviewing fathers of premature babies.

This will help us to know what the fathers think about premature babies and how much help they give to the mothers of these babies.

Thank you

Yours truly

Judith Ngwane
Unit Manager



Annexure C

Tel: (0310 4632701

Email: Kayode@samedical.co.za

4A Newton Walker Crescent

Escombe - Queensburgh

4093

Durban

06/12/2005

Head of Department

NICU - IALCH

Private Bag X03

Mayville, 4058

Durban.

Dear Dr Mackanjee,

Request for permission to conduct a nursing project on fathers of pre-term babies in neonatal intensive care unit (NICU) at Inkosi Albert Luthuli Central Hospital.

My name is Afolake Felicia Soniyi. I am a Chief professional Nurse working in NICU at IALCH currently studying towards a Master's degree in Maternal and Child health at the University of KwaZulu – Natal. My dissertation is being undertaken as partial fulfillment of the requirements for this degree.

The title of the research project is:

The responses of fathers of pre-term low birth weight (PLBW) babies and their involvement in their care in NICU.

Participants would be asked to complete sets of Self – Administered Questionnaires (SAQs) on their responses as fathers of pre-term babies as well as their involvement in the care of those babies. Fathers describing their responses would serve as a basis

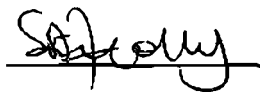
for understanding how fathers react and interact when they have PLBW babies, as too essentially to identify the factors that contribute to those responses.

The benefit to IALCH would be primarily in terms of the results obtained and how guidelines would be developed if necessary for the neonatal staff for the inclusion of fathers in the care of pre-term babies in NICU, thus bringing about a situation where both parents fully participate in the upbringing of the child.

I am prepared to abide by the policies, protocols and ethics of the institution, so too, to maintain confidentiality and ensure that no harm is caused to the father. No costs will be incurred by IALCH.

Thanking you in anticipation.

Yours truly,



Afolake Felicia Soniyi.

Supervisor

Annexure D



PROVINCE OF KWAZULU-NATAL
INKOSI ALBERT LUTHULI CENTRAL HOSPITAL

DEPARTMENT:
800 Bellair Road, Mayville, 4091
Private Bag X03, Mayville, 4058
Tel.: 031 240 1000, Fax.: 031 240 1050
Email.: @lalch.co.za

7 December 2005

A F Sonlyi
4A Newton Walker Crescent
Escombe – Queensburgh
4093
Durban

Dear Sr Sonlyi

**RE: RESEARCH PROPOSAL TO CONDUCT A NURSING PROJECT ON FATHERS
OF PRE-TERM BABIES IN NEONATAL INTENSIVE CARE UNIT (NICU) AT
INKOSI ALBERT LUTHULI CENTRAL HOSPITAL**

I was delighted to receive a proposal for the above project. I fully support the concept of the project. The project has a potential to make a valuable contribution to the care of newborns in intensive care. The Neonatal Intensive care team at Inkosi Albert Luthuli Central Hospital promises full co-operation to conduct this project.

Please keep me informed.

Yours truly

H.R. Mckanjo
Head – NICU
University of KwaZulu-Natal



Annexure E



30 January 2006

MRS A F SONIYI
School of Nursing
HOWARD COLLEGE

Dear Mrs Soniyi

PROTOCOL: The responses and involvement of fathers of pre-term low birth weight babies in a Neonatal Intensive Care Unit at a tertiary hospital in Durban. A F Soniyi, Nursing, Ref: H144/05

Thank you for your response dated 19 December 2005 to queries raised on 14 December 2005.

The Biomedical Research Ethics Committee considered the abovementioned application and the protocol was approved at its meeting held on 05 July 2005 pending queries and administrative issues being appropriately addressed.

We are in receipt of the outstanding procedural issue, namely, permission from the Manager of the Inkosi Albert Luthuli Central Hospital for commencement of the study.

The conditions have now been met and the study is given full ethics approval and may begin as at today's date: 30 January 2006.

This approval is valid for one year from 30 January 2006. To ensure continuous approval, an application for recertification should be submitted a couple of months before the expiry date. In addition, when consent is a requirement, the consent process will need to be repeated annually.

I take this opportunity to wish you everything of the best with your study. Please send the Biomedical Research Ethics Committee a copy of your report once completed.

Yours sincerely

PROFESSOR A C BAWA

cc: Ms R Cassimjee – Supervisor

ACB/sb/30/01/06

Professor Ahmed C. Bawa
Deputy Vice-Chancellor
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Telephone: +27 (0)31 260 2381

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Email: research@ukzn.ac.za

Website: www.ukzn.ac.za

Founding Campuses:

■ Edgewood

■ Howard College

■ Medical School

■ Pietermaritzburg

■ Westville

Annexure F

INFORMATION SHEET

Dear Sir/ Mr. /Chief/ Dr. /Prof... ..

I, Mrs. A.F. Soniyi, a sister at neonatal intensive care unit at Inkosi Albert Luthuli Central Hospital, Westville in Durban. I am presently studying towards Masters Degree in Maternal and Child Health at University of KwaZulu-Natal. I have special interest in pre-term babies and their care and am doing a study on experiences of father's of pre-term babies and their involvement in the care of that baby in neonatal intensive care unit.

The purpose of the study is to describe the experiences of fathers of pre-term infants in neonatal intensive care unit, as a basis for understanding how fathers react and adapt when they have a pre-term infant. And also, to identify the factors which contribute to those experiences.

As a father to a pre-term baby, I would like to request that you participate in my research study, which is in the form of a questionnaire. This questionnaire is designed to determine your experiences with regard to your pre-term baby, it is not a test, and therefore there are no RIGHT OR WRONG answers. The information supplied will remain anonymous and confidential and used purposely for the study. Participants may withdraw from participating in the study at any stage.

Researchers Name and Surname: Afolake Felicia Soniyi

Contact: 0833844356

Annexure G

INFORMED CONSENT

CONSENT DOCUMENT

Consent to participate in Research

You have been asked to participate in a research study.

Sister Rani Govender has informed you about the study.

You may contact Afolake Felicia Soniyi at 0833844356/0314632701 any time if you have questions about the research or if you are injured as a result of the research.

Your participation in the research is voluntary, and you will not be penalized or lose benefits if you refuse to participate or decide to stop.

If you agree to participate, you will be given a signed copy of this document and participant information sheet, which is a written summary of the research.

The above study, including the above information, has been described to me orally. I understand what my involvement in the study means and I voluntary agree to participate.

I... ..hereby give my consent to participate in the study.

Signature of the participant

Date

Researcher's signature

Date

Witness's signature

Date

I thank you for participating.

Annexure H

Research questionnaire

Section 1

Questionnaire Number

Self-administered questionnaire for demographic data

Mark the appropriate choice with X”

1. Age in years

1 = 18-25

2 = 26-35

3 =36-45

4 = >45

2. Years of Formal Education

1= Less than 5

2= 6-10

3= 11-12

4= Others (Specify)... ..

2. Area of resident

1= Durban Metro

2= Outside Durban Metro

3= Other Province (Please specify)... ..

3. Home Language

1= Zulu

2 = English

3 = Afrikaans

4 = Others

4. Marital status

1 = Single

2 = Married

3 = Living with a partner

4 = Separated

5. Occupation

1 = Employed

2 = Self employed

3 = Unemployed

4 = Student

6. Religious affiliation

1 = Christian

2 = Moslem

3 = Hindu

4 = Traditional

5 = others (please specify)

SECTION 2

Research questionnaire to determine the responses and involvement of fathers of pre-term infants in a neonatal intensive care unit based on Roy's Adaptation

Model and literature review.

Please mark with an X'

A) New Pre-term infant.

1a. Did you attend Ante-Natal Clinic with your wife /spouse/ partner

1 = Yes

2 = No

1b. If yes, please specify how many times?

1 = Once

2 = more than once

3 = always accompany partner/wife/spouse

2. What was your reaction when your baby was born?

1 = Happy

2 = Unhappy

3 = Others (Specify)... ..

3a. After delivery, what was the time interval before you saw your baby for the first

time in NICU

1 = <1 hour

2 = 1-2hours

3 = 3-6 hours

4 = 7-12 hours

5 = more than 12 hours

6 = If more than 12hours- please give reasons for this.

A*

4. What was your reaction when you saw the physical appearance of your baby for the first time in NICU?

1 = terrified

2 = apprehensive

3 = shocked

4 = depressed

5 = others (Specify)

5. Do you agree with this statement? "Fathers usually don't know what to do" at the birth of pre-term low birth weight babies"

1 = strongly agree

2 = agree

3 = neither agree nor disagree

4 = disagree

5 = don't know

6. Who accompanied you to the bed -side of your baby in NICU?

1 = Nurses from NICU

2 = wife/partner/spouse

3 = other mother

4 = No companion

7. Was there any information given to you by nurses about your baby, during your visit to NICU?

1 = Yes

2 = No

8. Was there any information given to you by nurses about NICU environment before or during your visit?

1 = Yes

2 = No

9a. What did you do during your first visit to your baby?

1 = I touched the hand or body of the baby

2 = I carried the baby

3 = I was involved in feeding the baby

4 = I talked to the baby

5 = I stood by the bed side and looked at the baby

6 = I stood outside of the unit

7 = If you stood outside the unit, can you please give the reason for doing so.

.....

9b. What is the best visiting time for you?

1 = 08:00 - 12:00

2 = 13:00 - 16:00

3 = 17:00 - 20:00

4 = others (please specify).....

9c. How often do you visit your baby?

- 1 = twice a day
- 2 = daily
- 3 = weekly
- 4 = monthly
- 5 = Can you please tell us why...

10a. How did you feel when you handled your baby for the first time?

- 1 = hope
- 2 = fear
- 3 = sadness
- 4 = gladness
- 5 = guilt
- 6 = inadequacy

10b. Did your feelings remain unchanged during your subsequent visit?

- 1 = Yes
- 2 = No

3. Residual and Contextual stimuli

11a. Did you notice any of the equipment that was used on your baby?

- 1 = Yes
- 2 = No

11b. If yes, what was the name of the equipment used? Please see glossary on page fourteen (14) for more information on the meaning of these equipment / equipments

- 1 = Nasal prongs oxygen
- 2 = Ventilator or a respirator
- 3 = Continuous Positive Airway Pressure machine
- 4 = Oxyhood placed over the baby's head to provide extra oxygen
- 5 = don't know.

12. How can you describe your reactions when you saw the equipment that was used on your baby?

- 1 = frightened
- 2 = anxious
- 3 = confused
- 4 = surprised
- 5 = others (specify).

13. How did you feel about the NICU environment in general?

- 1 = concern
- 2 = anxious
- 3 = apprehensive
- 4 = don't know
- 5 = others (specify)

14a. Did you have any information with regard to very small babies, before the birth?

1 = Yes

2 = No

14b. Did you have any information with regard to very small babies, after the birth of the baby?

1 = Yes

2 = No

15a. Do you have any information regarding NICU?

1 = Yes

2 = No

15 b Where did you get the information?

1 = Nurses

2 = Doctors

3 = Friends

4 = Internet

5 = others (specify)

4. Stress and coping mechanisms –Regulator and Cognator

16. How did you feel about your baby's chances of survival?

1 = Good

2 = Concerned

3 = Worried

4 = Don't know

17a. Did you cope with the feelings?

1 = Yes

2 = No

17b. If yes, how did you cope?

1 = Reading books about premature baby

2 = Talking to friends at work

3 = Talking to wife/ spouse / partner

4 = talking to nurses and doctors in NICU

17c. If not coping, who do you think will help you to cope better?

1 = Nurses

2 = Doctors

3 = Presence of your wife/ partner/spouse

4 = Friends

5 = Do not know.

18. What specific requirements do you need for coping?

1 = Specific guide to neonatal intensive care

2 = Presence of spouse/wife/ partner

3 = Explanation about conditions of the baby on daily basis

4 = Do not know

5. Support, Psychological and interdependence modes

19. Who do you think gave the most teaching about the baby, baby's care, baby's progress, nursery and your role?

1 = Nurses

2 = Doctors

3 = Do not know

4 = others (specify)

20a. Are you aware of your baby's condition?

1 = Yes

2 = No

20b. If yes, what aspect of his or her condition, were you aware of? Please

explain

.....

20c How do you think the medical staff can prepare fathers for the birth of pre-term

baby?

.....

.....

20d. How did you think you could support your partner?

.....

.....

.....

6. Self –concept

21. Do you agree with the statement, being the father of a pre-term baby, makes you different from other fathers?

1 = Agree

2 = strongly agree

3 = Disagree

4 = neither agree nor disagree

22a. How did the appearance of your baby affect you?

1 = positively

2 = negatively,

22b. If you were affected in a negative way, kindly explain the reason for feeling that way?

.....
.....
.....

23a. Are you satisfied with the care of your baby in NICU?

1=Yes

2= No

23b. If unsatisfied – give reason

.....
.....

24. What would you like to see more off, when you visit your baby, to make you comfortable.....

.....

Previous Children:

25. Do you have any other children?

1 = Yes

2 = No

25a. If yes, how many?

1 = 1

2 = 2

3 = 3

4 = 4

5 = > 4

26. Were any of your other children pre-term with low birth weight?

1 = Yes

2 = No

3 = not applicable

27. Did you visit that baby in NICU?

1 = Yes

2 = No

28. If yes, what did you do during your visits?

1 = Stood at the window outside the unit

2 = Stood by the incubator

3 = Opened the incubator and touched the baby

4 = Carried the baby

5 = Assisted in feeding the baby

I thank you for participating.

GLOSSARY:

- (A) **An oxygen hood:** Is a clear plastic that fits over the baby's head to provide extra oxygen to the baby to help with ease breathing.
- (B) **A nasal prongs cannula:** Is a transparent tube with two prongs, that can be positioned across the infants upper lip allowing the prongs to enter each nostril to provide extra oxygen.
- (C) **Continuous Positive Airway Pressure (CPAP):** this equipment delivers oxygen and pressure to the lungs to increase functional residual capacity and partial pressure of oxygen to improve compliance of the lung and lessens work of breathing by the baby.
- (D) **Ventilator or Respirator:** It is breathing equipment. It is used for babies who are unable to breathe properly. Usually a tube called endotracheal tube (ETT) is inserted through the mouth or the nose into the windpipe. This ETT is connected to a ventilator or respirator, which provides necessary support. A baby in this situation is unable to make a sound when crying.

Ikhasi Lwemininingwane (Information sheet)

Sawubona Mmimzane (sir/mr.) / Nkosi (chief) / Dokotela (dr) / Solwazi

(Prof).....

Ngingu mama. A.F. Soniyi, ngingumhlengikazi egumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu (neonatal intensive care unit) esibhedlela Inkosi Albert Luthuli Central Hospital, Westville EThekwini (Durban). Njengamanje ngenza iziqu ngezempilo kamama nengane. Nginothando kakhulukazi ekuzalweni kwezingane kanye nokuzinakekela kanti futhi ngifunda ngendima yobaba abanezingane ezizalwe ngaphambi kwesikhathi sokuzalwa ezinesisindo esincane egumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu (neonatal intensive care unit).

Inhloso yalesisitadi (study) ukucaza indima edlalwa ngobaba abanezingane ezizalwe ngaphambi kwesikhathi sokuzalwa eneonatal intensive care unit.

Njengoba ungubaba wengane ezalwe ngaphambi kwesikhathi, Ngiyacela ukuba ube ingxenye yalesisitadi (study), esiyimibuzo. Lemibuzwana yenzelwe ukubheka indima edlalwa ngobaba ukunakekela izingane ezizalwe ngaphambi kwesikhathi, lokhu akusona isivivinyo, ngakho-ke ayikho impendulo eyiqiniso nengayona iqiniso.

Izimpendulo onginika zona akekho oyoza ziylimfihlo kuphela-nje ziyosetshenziswa kulesisitadi (study). Obamba iqhaza kulolucwaningo unelungelo lokuyeka ukuphendula lemibuzo noma nini.

Igama nesibongosomcwaningi: Afolake Felicia Soniyi

Izinombolo zocingo: 0833844356

Name of translator: Mr. Innocent

Cell no: 0846493059

IDOKHUMENTE YESIVUMELWANO

Isivumelwano sokubamba iqhaza kulolucwaningo

Ingabe usuke wacelwa ukubaba iqaza kulesisi-study.

Ingabe usuke wacazelwa ngalesisi-study ngu Rani Govender

Ungathintana no Afolake Felicia Soniyi kulenombolo 0833844356 /0314632701

noma ngazikhathizini uma maleyana nalocwaningo noma uma ngenxa yalocwaningo

.Ukubamba kwakho iqhaza kulocwaningokusuka othandweni lwakho, futhi ngeke

uhlawuliswe noma ulwahlekelwe uma unqaba uku bamba iqhaza kulocwaninigo noma

ucaanga ukuyeka.

Uma uvuma ukubamba iqhaza, uzonikezwe ifomu ozoyicwalisa kanye nefomu

enolwazi olubhaliwe mayelana nalolucwaningo.

Lolucwaningo olungenhla, kanye naloluwazi olungenhla, lucaziwe

kimina.Ngiyaqonda ukubamba iqhala lami kulolucwaningo ukuthi kusho ukuthini

kanti ngiyavuma ukubamba iqhaza. Ngingu... ..

Ngiyavuma ukubamba iqhaza kulesisitadi (study

Ukusayina kobamba iqhaza

Usuku

Ukusayina kukafakazi

Usuku

Ukusayina kukatolika

Usuku

Ngiyabonga ukubamba iqhaza lakho.

UHLA LWEMIBUZO

INGXENYE YOKUQALA (Section 1)

Sebenzisa u “X” ukukhetha impendulo

1. Iminyaka yakho mingaki?

1 = 18-25

2 = 26-35

3 = 36-35

4 = >45

2. Ugcine kuliphi ibanga lemfundo?

1 = Ngaphansi kwebanga lesihlanu (5)

2 = 6-10

3 = 11-12

4 = Noma elinye (chaza)

3. Uhlala kuphi?

1 = Durban Metro

2 = Ngaphandle KweDurban Metro

3 = Kwenye iProvince (chaza)

4. Yiluphi ulimi olukhuluma ekhaya?

1 = IsiZulu

2 = IsiNgisi

3 = IsiBhunu

4 = Olunye (Chaza)... ..

5. Kungabe ushadile?

1 = Angishandile

2 = Ngishandile

3 = Ngihlala nesithandwa sami

4 = Sehlukanisile

6. Ngabe uyasebenza?

1 = Ngiyasebenza

2 = Ngiyazisebenza

3 = Angisebenzi

4 = Ngingumfundi

7. Yiluphi uhlobo lwenkolo yakho?

1 = Ikholwa (Christian)

2 = Inkoloyama (Moslem)

3 = inkoloyama (Hindu)

4 = Inkolo yesintu

5 = Olunye uhlobo (chaza)... ..

INGXENYE YESIBILI (2)

Lemibuzo engezansi imayelana nokubamba iqhaza kobaba bezingane ezizalwe ngaphambi kwesikhathi sokuzalwa kwazo egumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu (neonatal intensive care unit). Lokhu kuzobhekwa ngaphansi kwe-Roy's Adaptation Model nokubheka ulwazi lwabanye ababhali nabagwaningi.

Sebenzisa loluphawu 'X' ukukhetha impendulo

A) Ukuzalwa ngaphambi kwesikhathi kwengane.

1a. Ngabe wake waya emtholampilo wabakhulelwe (Ante-Natal Clinic) nonkosikazi wakho/onganene naye/othandana naye

1 = Yebo

2 = Cha

1b. Uma wake waya, chaza ukuthi kukangaki?

1 = Kanye

2 = Kungaphezulu kokukodwa

3 = uhlale umphelezela onganene naye/othandana naye

2. Wazizwa unjani ngesikhathi ingane yakho izalwa?

1 = Ngajabula

2 = Angithokozanga

3 = Okunye okwenzeka (Chaza)...

3a. Emva kokuba isitetiwe ingane, kwathatha isikhathi esingakanani ukubona ingane okokuqala egumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu (neonatal intensive care unit)?

1 = Ngaphansi kwehora

2 = Phakathi kwehora lokuqala kuya kwelesibili

3 = Phakathi kwamahora amathathu kuya kwayisithupha

4 = Phakathi kwamahora ayisikhombisa kuya kwayishumi nambili

5 = Ngaphezulu Kwamahora ayishumi nambili

6 = Uma kungaphezulu kwamahora ayishumi nambili, ngabe isiphi isizathu salokho

3. Wazizwa unjani ukubona ingane yakho okokuqala egumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu (neonatal intensive care unit)?

1 = Ngaqaqazela

2 = Ngesaba

3 = Ngathuka

4 = Umoya wami wawuphansi

5 = okunye (Chaza)

5. Ngabe uyavumelana nalesisitatimende? “Kuyenzeka kobaba ukuthi bangazi ukuthi bangenzani” ekuzalweni kwezingane ngaphambi kwesikhathi zinesisundo ezincane”

1 = Ngiyavuma kakhulu

2 = Ngiyavuma

3 = Angivumi futhi angiphiki

4 = Ngiyaphika

5 = Angazi

6. Ubani owakuphelezela wakuyisa lapho kulele khona ingane yakho egumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu?

1 = Abahlengikazi egumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu?

2 = Unkosikazi/othandana naye

3 = Omunye umama

4 = Akekho owakuphelezela

7. Ngabe kukhona imininingwane owanikwa yona ngabahlengikazi mayelana nengane yakho, ngesikhathi uvakashele yona egumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu?

1 = Yebo

2 = Cha

8. Ingabe ikhona imininingwane noma ulwazi owatshelwa ngalo mayelana nesimo segumbini lokunakekela izingane ezisanda kuzalwa ezigula kakhulu ngaphambilini noma ngenkathi uvakashele khona?

1 = Yebo

2 = Cha

9a. Yikuphi owakwenza ngenkathi uvakashele ingane yakho okokuqala?

1 = Ngayithinta isandla noma umzimba wengane

2 = Ngayiphatha ingane

3 = Ngayifunza ingane

4 = Ngakhuluma nengane

5 = Ngama eceleni kombhede ngayibuka ingane

6 = Ngamangaphandle kwendawo lapho kwakukhona ingane

7 = Uma wamangaphandle kwegumbi, ngicela unginike isizathu salokho... ..

9b. Isiphi isikhathi esihle kuwe sokuvakashela ingane yakho?

1 = 08:00 - 12:00

2 = 13:00 – 16:00

3 = 17:00 – 20:00

4 = Esinye isikhathi (Chaza)... ..

9c. Uyivakashela kangaki ingane yakho?

1 = Kabili ngosuku

2 = Nsuku zonke

- 3 = Masonto-onke
- 4 = Nyanga zonke
- 5 = Ungasitshela ukuthi yingobani.....

10a. Wazizwa unjani ngesikhathi uphatha ingane yakho okokuqala?

- 1 = Ngabanethemba
- 2 = Ngasaba
- 3 = Ngadabuka
- 4 = Ngathokoza
- 5 = Ngazisola
- 6 = Ngingathokozile

10b. Ngabe imizwa yakho ayishitshanga ngoba ulokhu uvakashela Ingane?

- 1 = Yebo
- 2 = Cha

3. Residual and Contextual Stimuli

11a. Ngabe kukhona i-ekhwiphimenti owayibona eyasetshenziswa enganeni Yakho?

- 1 = Yebo
- 2 = Cha

11b. Uma kunguYebo, yini igama le-ekhwiphimenti?
Ngcela ubheke izichazelo ekhasini lekhulu namashubu amathathu nanye (131)
Ukuze uthole imininingwane ngale-ekhwiphimenti.

- 1 = Nasal prongs oxygen
- 2 = Ventilator or a respirator

3 = Continuous Positive Airway Pressure machine

4 = Iplastiki efakwa ekhanda lengane ukusiza ngomoya asizwa ngokuthi i-oxygen (Oxyhood placed over the baby's head to provide extra oxygen)

5 = Angazi

12. Ake uchaze ukuthi wazizwa unjani ngenkathi ubona le-ekhwiphimenti eyasetshenziswa enganeni yakho?

1 = Ngesaba

2 = Wafuna ukwazi

3 = Ngadideka

4 = Ngashaqela /ngamangala

5 = Okunye (Chaza)

13. Uzizwa unjani nge gumbi lokunakekela izingane usanda kuzalwa ezigula kakhulu?

1= Nokungaculiseki

2 = Izelela ukwazi

3 = Ngabanokwesaba

4 = Angazi

5 = Okunye (Chaza)... ..

14a. Wawunalo ulwazi mayelana nezingane ezi nesindo esincane kakhulu ngaphambi kokuzalwakwegane yakho?

1 = Yebo

2 = Cha

14b. Wawunalo ulwazi mayelana nezingane ezinesisindo ezincane kakhulu kokuzalwa kwengane yakho?

1 = Yebo

2 = Cha

15a. Unalo yini ulwazi mayelana negumbi lokunakekela izingane ezinsanda kuzalwa ezigula kakhulu?

1 = Yebo

2 = Cha

15b. Ngabe waluthola kuphi ulwazi?

1 = Kubahlengikazi

2 = Kodokotela

3 = Kubangane

4 = Kwi-internet

5 = Okunye (Chaza)

4. Stress and coping mechanisms – Regulator and cognator

16. Uzizwa unjani ngamathuba okuphila kwengane yakho?

1 = Kahle

2 = Ngigagculisekile

3 = Ngikhathazekile

4 = Angazi

17a. Ngabe wakwazi ukuyibekezelela imizwa yakho?

1 = Yebo

2 = Cha

17b. Uma utheYebo, ngabe wasibekezela kanjani isimo?

1 = Ngafunda izincwadi mayelana ngokuzalwa kwengane
Ngaphambi kwesikhathi sokuzalwa

2 = Ngaxoxisana nabangane emsebenzini

3 = Ngaxoxisana nonkosikazi/engithandana naye/
umyeni wami

4 = Ngakhuluma nabahlengikazi nodokotela eNICU

17c. Uma ungakwazi ukumelana / ukubekelelana nesimo, Ngubani ongakusiza ukuthi ukwazi ukumelana nesimo?

1 = Abahlengikazi

2 = Odokotela

3 = Ukuba khona konkosikaziwakho/othandana naye

4 = Abangane

5 = Angazi

18. Yikuphi okudingakalayo okuzokusiza ukwazi ukuthi Ubekezelelane nesimo?

1= Incwajana yezegumbi lokunakekela izingane ezisandakuzalwa ezigula kakhulu.

2 = Ukubakhona kukankosikazi wakho/umyeni wakho/othandana naye

3 = Incazelo ozoyithola nsuku zonke mayelana nesimo sempilo yengane

4 = Angazi

5. Support, Psychological and Interdependence modes

19. Uma ucabanga, ngabe ubani okufundise kakhulu ngengane ukunakekelwa kwenganendima okumele, ukuyinakekela kanye uyidlale enganeni?

1 = Abahlengikazi

2 = Odokotela

3 = Angazi

4 = Okunye (Chaza)... ..

20a. Ngabe uyazi ngesimo sengane yakho?

1 = Yebo

2 = Cha

20b. Uma uthe Yebo, isiphi isimo sengane yakho osaziyo? Ngicela uchaze... ..

.....
.....

20c. Uma ucabanga, abasebenzi bezempilo ukuphi abangakwenza ukusiza ukulungiselela obaba bezingane ezizalwe ngaphambi kwesikhathi?

.....
.....
.....

20d. Uma ucabanga ungamsiza kanjani umuntu othandana naye kulesisimo?

.....
.....
.....
.....

6. Self-concept

21. Ingabe uyavumelana nalesisitatimende, ukuba ubaba wengane ezalwe ngaphambi kwesikhathi kukwenza uhluke kwabanye obaba?

1 = Ngiyavuma

2 = Ngivuma ngempela

3 = Angivumi

4 = Angivumi futhi angiphiki

22a. Ngabe kwakuphatha kanjani ukubukeka kwengane yakho?

1 = Kahle (Positively)

2 = Kabi (Negatively)

22b. Uma kwakuphatha kabi, ngicela uchaze isizathu salokho?

.....
.....
.....

.....

23a. Ingabe unelisekile ngempatho yengane yakho egumbini lokunakekela izingne ezisanda kuzalwa ezigula kakhulu?

1 = Yebo

2 = Cha

23b. Uma unganelisekile- ngiphe isizathu

.....
.....
.....
.....

24. Yikuphi oyothanda ukukubona uma uvakashele ingane yakho, okuzokwenza uthokoze?

.....
.....
.....

Previous Children:

25. Ingabe unazo ezinye izingane?

1 = Yebo

2 = Cha

25a. Uma uthe Yebo, Zingaki?

1 = Yinye

2 = Zimbili

3 = Zintathu

4 = Zine

5 = Zingaphezu kwezine

26. Ngabe ikhona kwezinye zezingane zakho eyazalwa ngaphambi kwesikhathi sokuzalwa inesisindo esincane?

1 = Yebo

2 = Cha

3 = Akukaze kwenzeke

27. Ingabe wawuyivakashela leyongane egumbini lokunakekela ezisanda kuzalwa ezigula kakhulu?

1 = Yebo

2 = Cha

28. Uma uthiYebo, wawenzenjani ngesikhathi uyivakashela?

1 = Wawuma ngaphandle ewindini lalapho yayilele khona

2 = Wawuma eceleni kwebhodlela eyayifakwe kulona

3 = Wawulivula ibhodlela eyayifakwe kulona uyithinte

4 = Wawuyiphatha ingane

5 = Wawusiza ukuyifunza ingane

Ngiyabonga ukuthi ube ingxenye yalolucwaningo.

INCAZELO.

A. **An oxygen hood:** Kuwuplastiki ofakwa ekhanda lengane ukusiza ingane ngomoya ukuthi ikwazi ukuphefumula kalula.

B. **A nasal prongs or cannula:** Kuyishubhu leplastiki elinezinbobo ezimbili ezifakwa emakhaleni egane elisetshenziswayo ekusizeni ingane ukuba ikwazi ukuthola umoya owanele ukuze ikwazi ukuphefumula.

C. **Continous Positive Airway Pressure (CPAP):** Lekhwiphimenti iletha omoya nomfutho emaphashini isiza ukusebenza kangcono kwamaphaphu kanti isiza ingane ekuphefumuleni kangcono.

D. **Ventilator or Respirator:** Lena ikhwiphimenti yokuphefumula. Isiza izingane ezingakwazi ukuphefumula kahle. Ishubueligamazalo lisizwi ngokuthi Endotracheal Tube (ETT) ifakwa emlonyeni noma ekhaleni phakathi epayipini lomoya. I-ETT ixhunywa kule ekhwiphiment ebizwa nge ventilator noma respirator enika usizo. Ngalesosikhathi ingane ayizwakali umsindo uma ikhala.