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FACTORS AFFECTING FATHERS' INVOLVEMENT IN THE CARE OF PRETERM BABIES ADMITTED IN THE NEONATAL UNIT AT KAWEMPE NATIONAL REFERRAL HOSPITAL

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DECLARATION

I hereby declare that this work is my original work unless otherwise acknowledged. This work has not been presented to any other University either partially or in total for any degree award nor has it been submitted anywhere for publication.

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DEDICATION

I dedicate this book to my parents Mr. Kasango Edward and Mrs. Agaba Mary. My grandmother Mrs. Kasango Beatrice, thank you for being great parents. My dear brothers Dr. Kasango Joet and Dr. Kulaba Nicholas, thank you for your continuous support throughout this course. And to my late parents; Nakasango Namukasa Irene and Ssekatawa Moses, RIP.

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OPERATIONAL DEFINITIONS

Preterm: Preterm is the baby delivered before 37 completed weeks' gestation.

Neonatal unit: Is a unit in a hospital specializing in the care of ill or premature newborn babies.
Father: -Identified as the current male partner of the mother of the newborn or the male biological parent of the newborn.

Fathers' Involvement: A male partner who regularly visits or voluntarily offers to stay with the admitted preterm baby either throughout the period of hospitalization or part of the hospitalization period so as to provide physical, psychosocial, or spiritual care.

Family centered care in NU: Is an interaction among family members and the healthcare providers in the management of the preterm babies.

ABBREVIATIONS

ANC: Antenatal Care.

E/MW; Enrolled Midwife

HDU: High Dependency Unit

HIV: Human Immunodeficiency Virus

ICU: Intensive Care Unit.

IDI; In-depth Interview

KII; Key Informants' Interview

KNRH: Kawempe National Referral Hospital.

MO; Medical Officer

NO; Nursing Officer

NU: Neonatal unit

R/N; Registered nurse

SHO: Senior House Officer.

ABSTRACT

Background: Fathers' involvement in the care of preterm babies has been associated with good health outcomes for the mother and the baby. However, fathers' involvement in the Neonatal Unit(NU) in Uganda remains sub-optimal and factors influencing this are not well understood.

Objective: To explore the factors affecting fathers' involvement in the care of preterm babies admitted in neonatal unit at Kawempe National Referral Hospital(KNRH).

Methods; This was a qualitative exploratory study conducted in the NU at Kawempe National Referral Hospital between April and July 2023. It included fathers whose preterms babies were admitted in the NU and were stable (a baby whose vital signs were steady and not on ventilation) at the time of study. Data was collected using an in-depth interview guide with 24 fathers of preterm babies and key informant interview guide with the nine health workers who were working in the NU. Data was analyzed using manual thematic analysis.

Results: The fathers in this study had a mean age of 33years, most of them were married and were employed in the informal sector. The perceived and actual roles of fathers of admitted preterms reported in this study mostly included providing financial support, direct childcare activities, providing emotional and physical support to the mother.

The key facilitators to fathers' involvement in the care of the preterms were; at individual level; improvement in health condition of the preterm baby, desire to fulfil responsibility, at interpersonal level, support from friends and relatives; at health facility level, the good quality of service delivery; and at community level, the positive cultural and religious beliefs.

Barriers to fathers' involvement in the care of preterms included the fear of preterm babies, financial constraints, busy working schedules of fathers, discouragements from peers and poor relationship between couples; poor attitude of some hospital staff, long hospital stay and inhibiting interaction between the father of preterm and mother-in-law.

Conclusion: Most of the perceived roles were actually played by fathers in NU and mostly included provision of financial support, direct childcare activities and emotional support. Improvement in the health status of the preterms, support from friends and relatives, and good quality of service delivery facilitated the fathers' involvement. However, fathers faced barriers like

fear of preterms, financial constraints, busy working schedules, discouragement from peers and poor attitude of some hospital staff.

Recommendations:

Heath workers in KNRH should sensitize fathers on their roles and need for their involvement in the care of preterms in the NU. Hospital management should train hospital staff to ensure positive attitude as they interact with fathers and provide the drugs and other necessary supplies to reduce the economic burden on fathers.

CHAPTER ONE

INTRODUCTION

1.1: Background to the study.

Preterm babies are defined as babies born alive before 37 completed weeks of gestation. Globally, over 15 million preterm babies are born annually (1). The survival chances of these babies born preterm each year vary dramatically depending on where they are born. In 2010, an estimated a range of 12.3 to 18.1 million babies were born preterm globally (2). Most of the preterm babies are born in South Asia and sub-Saharan Africa where half of the global live births occur (2). Around half of these babies are born at home, even for those born in a health clinic or hospital, essential newborn care is often lacking (3). Thus, exposing these babies to a high risk of mortality and morbidity hence overwhelming the parents and the healthcare workers. The risk of a neonatal death due to complications of preterm birth is at least 12 times higher for an African baby than for a European baby.

In Sub-Saharan African countries, the role of the father to preterm babies in neonatal unit (NU) may be influenced by the context, country of origin and personal preferences (4). A recent study involving fathers of full-term babies in East Africa, showed that fathers' involvement in breastfeeding was influenced by perceived approval of family members , fathers' knowledge of breastfeeding and marital relationships (5).More than three-quarters of preterm babies could be saved with feasible, cost-effective care, and further reductions are possible through neonatal care. The family centered care, is a team-oriented and multi-disciplinary approach which involves integration of parental care in breastfeeding, kangaroo care, care planning, and limitless presence alongside their preterm babies. In addition, it enables the family members to take care of their preterm babies with less expenses and optimal quality. It is also very crucial for the preterms' survival and psychological satisfaction of both parents (6).

Mothers to these babies are often very ill during intensive care period of their babies, meaning there is need for the father to take part in the care for these babies (3, 7). Fathers are usually not prepared for anything less than the coming of a healthy newborn and thus delivery of a preterm baby is usually an unexpected occurrence that profoundly influences individual and family life in parenting, couple's relationship and that with relatives. The preterm birth occurs when parents are psychologically premature (8). The preterm birth and the presence of serious illness, all of which may require admission into hospital is a source of stress and anxiety for families and has been reported to have long term implications for both

the mother and the father (9). Compared to parental presence in the NU, mothers participate more than fathers in the care of preterm babies. Most evidence on parental reactions to birth of preterms and to hospitalization of the newborn in NUs have involved mothers. However, emotional responses and behaviors of fathers are equally important (7). In cases where the mothers are critically ill or are unable to provide care, it has been shown that fathers take on the roles of mothers such as kangaroo care, cleaning of the baby, feeding and also the domestic activities, in addition to their continued roles as providers for the family (10).

Mothers' involvement in preterm care has been well studied in Uganda (11). There is still limited data on fathers' involvement in the care of preterms admitted in NU as noted from other setting (12). Studies indicate that fathers' involvement in the NU has good outcomes for former NU babies, including later positive patterns of interacting with the baby, and better baby cognitive development (13, 14). Fathers' involvement provides psychological support, emotional support, security and encouraging the female partner to her new role as a mother (15). This involvement also extends positive effects on mental health to the fathers themselves (13, 14).

Some factors have been found to facilitate fathers in their involvement in the care of their preterms and these included, being a father to twins, desire to become used to the baby, any form paternity leaves /holiday, and positive experience from previous NU hospitalization (16). The fathers have to handle challenges ranging from keeping safety at home, providing financial support, basic needs and resolving conflicts. In case of other siblings at home, the father has to take care of them too. In all these roles, he is usually left alone, despite not being psychologically stable (15). Studies have shown that fathers to these preterms experience high levels of anxiety, depression, and stress which may affect their involvement (16, 17). After a preterm birth, the father's worry and uncertainty tends to continue ranging from the admission time in NU throughout the discharge and up to home where they find out that they have to continue taking care of their premature who may need more medical attention and this becomes a difficult moment. Furthermore, father's roles in NU keep being underestimated by health workers who consider pregnancy and childbirth as a mother's problem (18).

It is against this background that the study seeked to explore the factors affecting fathers' involvement in the care of preterms admitted in NU at Kawempe National Referral Hospital.,

1.2 Problem statement.

Globally, 15 million babies are born preterm annually. Prematurity is among the leading causes of death in children below 5 years of age. Most of the preterm births occur in Africa and South Asia (19). In the recent years (2015-2019), Uganda's incidence of preterm admissions has been steadily increasing by an average of 45.6% annually (20). Prematurity remains the leading cause of neonatal mortality accounting for 8/27 neonatal deaths per 1000 live births (20). Kawempe National Referral Hospital is among the leading hospitals in handling preterm babies in Uganda and makes 4572 admissions, with 51% (2345 of 4572) of the total neonatal admissions per month being preterm admissions according to medical records ,2021 (un-published work).

Previous research showed that both mothers and fathers almost equally and eagerly wanted to know more about their hospitalized babies, even though it appears to be more important to mothers (6). Mothers seem to relate to their babies through their physical needs, especially while feeding, whereas fathers usually focus on the babies' capabilities and have a strong desire to understand the babies' response to stimuli (10). The preterm is born when parents are "psychologically premature" and still cannot perceive it as distinct and separate from the mother(8). It is a disturbing event that creates the need for hospitalization in NU, causing a condition of stress and concern in which not only the health and life of the newborn is in danger, but also the emotional balance of the relatives (21). The experiences of the NU period create strong emotional reactions in parents. Despite the need for the involvement of fathers in the care of preterms, there are few fathers participating in the care of the preterm babies (22). In addition, it was found that, on an average, mothers visited the NU more frequently compared to fathers(10). Studies conducted have not focused on factors affecting fathers' participation in the care of preterms even though the fathers involvement has been found vital in the development of their newborns through provision of protection, food, supporting the female in this period of uneasy or discomfort (16, 22). During the peri-natal period, fathers may be the only available caregivers as most of the time the mothers are critically ill or dead(3). Fathers of newborns in the neonatal unit at times feel that their contribution in the care of their preterms is limited and whether the same situation applies to Ugandan fathers is not clear. On the other hand, surveys suggest that fathers have limited involvement in infant caregiving, possibly due to exclusion, or due to barriers from personal, interpersonal or healthcare system factors (16). This is in spite of a policy that supports male involvement in maternal and newborn health. Paradoxically, qualitative studies have found that fathers do want to be involved, and their lack of involvement is an important source of stress (16).

In Uganda, there is lack of information on the roles played by fathers of preterms, facilitators and barriers to their involvement in the care, which was the focus of the proposed study in NU at Kawempe National Referral Hospital.

1.3 Justification.

Fathers involvement in the care of preterms is not only vital because it promotes attachment between the father and the newborn, with positive developmental outcomes, but also good for the health of the mother and of the family relatives (23). Fathers have an important role in promoting the wellbeing of the newborn and the mother especially during NU admission where financial support is usually from the father. This has sensitized health workers including gynecologists, pediatricians, neonatologists, midwives and nurses about the need to support both parents in playing an active role in care of their preterms, all the way from antenatal care to post-partum period.

Therefore, this study explored the roles of the fathers in NU, the factors that affect their active involvement in the care of their preterms and the results will create awareness to the individuals, health workers, communities and policy makers on the factors affecting fathers' involvement in the care for preterms in NU .This will help health workers come up with strategies to promote fathers involvement in the care of preterms admitted in NU so that a family-centered care is promoted in healthy facilities.

Findings of this study will help policy makers to promote fathers' roles, facilitators to their involvement in preterm care and solutions to mitigate barriers affecting their participation in the care of preterms admitted and also improve involvement so as to strengthen a holistic preterm care delivered and promote good healthy neonatal long-term outcomes even after NU admission. The study will provide a platform for further studies on the participation of fathers in the care for the preterms admitted in NU.

1.4 Research questions

i. What are the perceived and actual roles played by fathers during the care of preterms admitted in neonatal unit at KNRH?
ii. What are the facilitators of fathers' involvement in the care of preterms admitted in neonatal unit at KNRH?
iii. What are the barriers of fathers' involvement in the care of preterms admitted in neonatal unit at KNRH?

1.5 Objective of the study

To explore the factors affecting fathers' involvement in the care of preterm babies admitted in the neonatal unit at Kawempe National Referral Hospital.

1.5.1 Specific objectives

i. To explore the perceived and actual roles played by fathers during the care of preterm babies admitted in the neonatal unit at KNRH.
ii. To explore the facilitators of fathers' involvement in the care of preterm babies admitted in the neonatal unit at KNRH.
iii. To explore the barriers of fathers' involvement in the care of preterm babies admitted in the neonatal unit at KNRH.

1.6 Conceptual and Theoretical frameworks.

1.6.1 Conceptual framework

The conceptual frame work shows how the different factors may affect fathers' involvement in the care of the preterm babies in the NU and the possible outcomes (fig 1).

According to literature, educated African fathers have become softer and actively participate in childcare, personal responsibilities as a father to protect the baby and mother and addition to supporting them emotionally have been cited as the roles which influence fathers' involvement in care of their preterms.

Consequently, the individual responsibilities, intrinsic motives, number of babies in NU and a previous positive experience of fathers in NU have been found to influence positively their involvement in the care.

The long hospital stay, coupled with un familiar NU environment, high cost of treatment and healthcare attitudes were found to be barriers to fathers involvement in care of their preterms in NU.

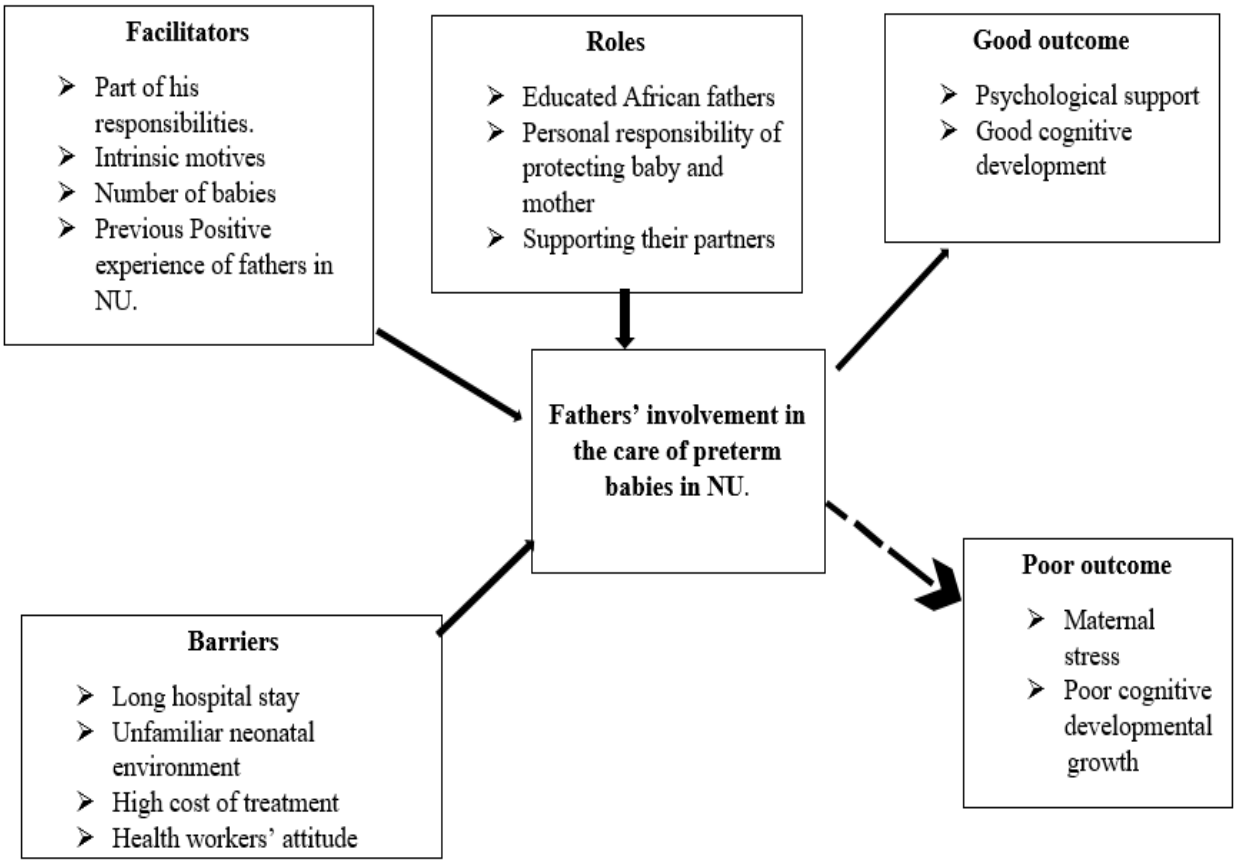

Figure 1: ***Conceptual framework illustrating involvement of fathers' care to preterm babies admitted in the neonatal unit at KNRH.***

1.6.2 Theoretical framework.

Socio-ecological model

Socio-ecological model was used to explore the facilitators and barriers of fathers' involvement in the care of preterm babies. The Social Ecological (SEM) Model takes a broader view of multi-level factors that influence health behaviors in this case fathers' involvement in the care for preterms admitted in NU(fig.2). Frequently depicted as a series of concentric circles, the SEM includes: (1) individual characteristics (age, education, religion, ethnicity, parity, socioeconomic status), knowledge, attitudes, and skills (Individual level) at the center; (2) relationships with family, friends, and those within their close social networks (Interpersonal level); (3) quality of service delivery and availability of service, the structural arrangement (organizational/healthcare level);(4)urban versus rural residence, distance to health services, availability of transport, , cultural, and environment within their "local" community , the greater social, , economic, and policy structures within which fathers exists(Community/societal level) could have a bearing on their

involvement in the care of preterms admitted in NU (24, 25). The SEM in this current study was used to explore facilitators and barriers of fathers' involvement in the care of their preterms admitted in NU at individual, interpersonal, healthcare, community and broader societal levels at KNRH.

Figure 2: The SEM used to understand the facilitators and barriers of fathers involvement in the care of preterms admitted in the NU at KNRH.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents literature about the factors affecting fathers' involvement in the care of preterms admitted in the Neonatal intensive care Unit. The literature is presented in relation to the perceived and actual roles played by fathers of preterms, facilitators and barriers to their involvement in the care of preterms in NU. The concept of family- centered care in NU from a study done between 1980 to 2012 had results attributed to benefiting the preterm babies, family and the hospital. It involved care taking of family assessment and provision of family needs, equal family participation in planning, decision making, inter-professional collaboration with family, and information sharing between healthcare workers and family (6).

In a recent study done in Malawi that was looking at the factors that influenced fathers' participation in care of hospitalized preterms revealed that fathers' involvement is influenced by different factors ranging from personal, interpersonal, infant, environmental to economic factors (26). In a study done in Uganda, it highlighted the need for sustainable male involvement interventions in reproductive, maternal, newborn and child health.as there was a positive association between male involvement and maternal and child health outcomes (27).

2.1 The perceived and actual roles played by fathers of preterm newborns admitted in the Neonatal unit.

Abass et al revealed that in Ghana, as in most cultures around the world, fathers are the heads of households (28). They command respect from members of their household. Fathers' involvement in childcare is mostly related to the provision of shelter, food and other needs of the family (29) . Direct childcare activities such as feeding, bathing, grooming and nappy changing are considered a woman's domain and if done by a man is regarded as a favor or an "extra job" (16). Fathers are perceived as surveyors of discipline who must behave in a harsh and masculine manner. Their involvement in childcare is only recently becoming popular with educated African fathers becoming 'softer', and actively participating in childcare (16).

Working together; a study by Burke (30) revealed that the feeding process was shared between the fathers and mothers. When the fathers talked about their preterm infants' feeding and shared responsibilities with

the mother, they talked in terms of “us” and “we”. They showed interest and engaged in the feeding process together with the mother. The fathers spoke about how, as a couple, “they” had practiced breastfeeding, tried different ways of feeding, inserted the nasogastric tube, and expressed milk. They were so involved in the feeding that it was almost as if they had breastfed and expressed breastmilk themselves. The fathers participated in the feeding process just as much as the mothers but in slightly different ways. As they could not breastfeed or express breastmilk, they administered more gavage feeds and changed the nappies.

Carter et al, reported that most of the fathers believed they have the role of protecting both the preterm infant and the mother, looking after the family’s best interests. However, at the same time, they felt that they themselves needed support (31). This finding is consistent with previous studies (16, 29) . When the mothers presented severe postpartum complications, the fathers were almost equally concerned about mother and infant.

Stefana A et al revealed that the fathers’ most common way of protecting their partners from further upheavals was to avoid showing and, in some cases, to hide their own worries and feelings. However, all the fathers’ reports suggest that, behind their idealized role as the protector of their partner, they might be hiding the deployment of defense mechanisms protecting themselves from the reality of their own inner experience (31).

Decision making; a study(18) revealed that both parents mostly agreed on decisions about their baby’s feeding. The fathers’ involvement was evident through the shared responsibility of decision making. To stop expressing milk was one of the hardest decisions for the fathers to make. There was a sense of disappointment when they talked about this decision even if it was a shared one and felt correct at the time as fathers wondered what might have been if they had tried a bit longer; maybe the infant would eventually have managed to suckle?

A study by Burke (30) revealed that the fathers would engage in supporting the partner. Their study found out that being supportive as a father was sometimes a difficult task. It was important to make sure the mother was both physically and emotionally well. Some mothers needed physical support after they had given birth, especially if they had a caesarean section, had lost a lot of blood, or had other complications. The mothers started expressing milk early on and continued to do this regularly. The father was available to undertake extra feeds to allow the mother time to eat, have some time out or to let her rest or go home.

2.2 The facilitators of fathers' involvement in the care of the preterm newborns admitted in the Neonatal Unit.

Facilitators of fathers' involvement in the care of their babies included intrinsic motives like the desire to become used to the baby, observe and promote baby's development, create a loving environment, learn to care for the baby and gain confidence in these abilities, and help the babies recognize them (16). Believing that fathers' involvement was important for the baby's development, feelings of love and happiness got from contact, and a sense of responsibility were other facilitators. Extrinsic sources of motivation for fathers' participation consisted primarily of requests and suggestions from hospital staffs or family, such as a nurse asked the father to hold their baby. According to Heinemann A, Opportunities to keep around over the night with their babies and taking care of them empowered parents in their roles and their motivation to stay in the NU. Kangaroo mother care participation made them to feel in control and needed, which facilitated their presence (32).

Fathers' involvement was reportedly influenced by several baby-related factors like their size and health status, and twin birth. Fathers of twin babies facilitated involvement of the fathers because there was often an obvious need for more than one caregiver to provide care for the two babies. These fathers described roles such as feeding, change of diapers. And both parents participated in activities each having their designated role. For example, the father burps one twin, while the mother feeds the other (16). It was found that a positive feedback from the newborn would facilitate involvement, while negative feedback acted as a barrier. Fathers often enjoyed the response of their babies to their involvement. One father was quoted saying in a study 'I just wanted to stay there since she doesn't have control over her smiles, but she had her two eyes on me, and she was making little smiles'.

Having older children and previous childcare in a NU setting influenced fathers 'involvement. (16). In spite of having other children, many fathers perceived that this experience did not facilitate involvement**.** They felt uncomfortable and uncertain as to how to be involved with their hospitalized newborn, because their other children had not been born premature. In contrast, previous hospital experience was perceived as beneficial. This same study revealed that fathers with prior history of hospitalization of an older infants or another family member were familiarized with the hospital setting which helped them cope so easily, thus getting more involved in the care. Also getting acquainted with the NU environment prior to the birth of the preterm also facilitated involvement. positive experience by fathers facilitated their involvement

(16). The same study done reported that paternity and any other form of employment leaves/holiday allowed for presence, contributing to greater fathers 'involvement in the care of their babies (16).

2.3 The barriers of fathers' involvement in the care of the preterm newborns admitted in the Neonatal unit.

Ireland et al(18) revealed that being a father and caring for an extremely preterm baby included many weeks of in-hospital stay, which involved sleep loss, worry, and stress. Later, when the baby was on formula and/or the baby's health status was more stable, the fathers who had other children were able to leave the hospital to care for older siblings at home. Other fathers continued with house renovations or took some time out for a couple of days.

Stefana et al (31) revealed the high cost of treatment was another challenge expressed by mothers in the current study. The above study is consistent with other studies. An earlier study indicated that 35% of all expenditures for newborns and approximately 10% of all medical expenditure for children are associated with preterm. Similarly, recent studies have found that the cost for hospital stay for premature newborns was much greater and cost also corresponded to newborn's birth weight; thus, the lower the birth weight, the higher the cost.

Aregawi et al (33) revealed that fathers stated that they faced inadequate support from the spouses. On the contrary to the findings of this study, several studies have reported that fathers provide support for their wives, which is mostly emotional. It is possible that fathers in the current study were dealing with their own anxiety and depression and were also faced with the need to play multiple roles which may be overwhelming for them. It could also be due to the different cultures in different population where men are required to cope with stressful events without expressing it. Significant levels of anxiety and depressive symptoms have been reported in fathers of preterm babies. Having a preterm baby does not only affect the mother but also affect the father's relationship and other facets of their lives.

In the study by Feelay et al, (16) he stated that fathers complained of inadequate information and communication from the staff. Another study reported that the amount and quality of communication with medical staff was not adequate (34). One study reported that parents preferred and relied on personal communication from the medical team as opposed to using the internet (35). This is similar in the current study where one father stated that though she reads from online, he would have preferred receiving the information from the staff, particularly nurses. Nurses play a major role in dissemination of information. In another study, a dismissive staff attitude were found to be barriers to parents' presence in the NU (32).

Researchers have also speculated about possible barriers to involvement, and these include nurses' beliefs about fathers' role (36) whereby nurses believe that social interaction and handling of the baby by fathers is stressful for the immature baby, so they will limit parent's involvement (37) and fathers' own belief that nurses and mothers provide the best care (38).

Fathers' involvement could be adversely affected by the numerous conflicting demands they confronted. In contrast, paternity leave and instrumental support contributed to greater involvement. Some fathers' time with their babies was limited due to several demands. They had to balance between housework, employment, supporting their spouse and caring for siblings, along with their desire to get involved in the care of their babies. As one of the fathers explained that the scenario is a continuous cycle (16).

A study by Abeasi et al (39) revealed that the special care baby unit environment was a challenge to most fathers. The key stressors had to do with the monitoring equipment some of which produce different sounds to alert the staff on the physiological happens of the baby, tubes, and other wires connected to the babies and the illumination in the room (32). In a meta-analysis of 12 qualitative studies about the experiences of fathers with preterm (40) one of the themes that emerged was coping with turbulent neonatal environment. The NU environment has been reported to impact families, especially fathers who assume the role of caregiving. Studies have reported that the NU environment remains stressful for parents. The physical environment thus can play a critical role in easing parental stress and producing satisfaction.

CHAPTER THREE

METHODS

3.1 Research design

The study employed a qualitative exploratory study design. This was chosen because of its suitability in generating detailed insights (41) about fathers' involvement in the care of preterms admitted in the NU.

3.2 Study area and setting

The study was conducted in the neonatal unit of Kawempe National Referral Hospital. The hospital is located in Kawempe division, one of the five administrative Units of Kampala Capital City Authority (KCCA). This location is approximately 12 kilometres, by road, north of the city's central business district, along Kampala-Gulu highway. The hospital was recently upgraded to a National Referral Hospital, following the renovation and re-organization of Mulago National Referral Hospital into a Specialized Referral Hospital. It was built from 2014 to 2016 and made of ten floors and an official bed capacity of 170 beds. It offers Maternal and Newborn health services, including Obstetrics and Gynecology, a level 3 Neonatal unit, Laboratory, Pharmacy and Radiology services. It is also one of the main teaching sites for Makerere University students. It was selected because it is one of the busiest maternity and neonatal centers in the country (42).

Neonatal unit admits all neonates from all social economic statuses but mostly those from the low- and middle-income societies in Kampala, Wakiso and their surrounding districts. NU has a total bed capacity of 70 in all the 4 cubicles, the first cubicle usually has new neonatal admissions, the 2nd cubicle has stable preterms awaiting discharge 3rd cubicle is for critically ill neonates and 4th cubicle has stable term babies. On average the neonatal unit admits about 400 newborns a month, of which about 200 are preterm neonates and therefore an overflow occurs and thus babies are forced to share beds in pairs or more. The common reasons for admission include; prematurity and its complications, birth asphyxia and its complications, sepsis. In 2021, the NU had 4572 admissions, with 51% (2345 of 4572) of admitted neonates being preterms (hospital records, 2021).

The unit provides mechanical ventilation or continuous positive airway pressure, warmth (incubators and radiant warmers), pulse-oximetry, phototherapy, enteral feeds, and blood transfusions to more complex procedures like exchange transfusion and umbilical artery catheterization and surfactant administration.

NU services are provided 9 pediatricians, 6 medical officers and 25 nurses allocated to the Unit. Additional support provided by 3-4 intern doctors and 4 senior house officers(SHO) on rotational basis. Each shift(12hours) is covered by one SHO, one medical intern and a 24hours covering specialist. The nurses have an 8hourly shift and usually have 4 nurses per shift for a day duty and 2 nurses for night duties.

Caretakers check on their babies every two hours and usually one caretaker (maximum 2, preferably father and mother) is allowed at a time. While inside the NU, they feed their babies and change diapers ensuring they are warm and practice kangaroo care. Anecdotal observation shows that most of the care givers are females involving aunties, grandmothers, sisters and a few fathers present to basically provide support.

3.3 Population

3.3.1: Target population

All fathers to preterm babies admitted in NU and the attending health workers in Uganda.

3.3.2: Accessible population

All fathers to preterm babies that were admitted in NU and the attending health workers at KNRH.

3.3.3 Actual/study population

All fathers to preterm babies that were admitted in NU and the attending health workers at KNRH that gave informed written consent and were present during the study period.

3.4 Eligibility criteria

3.4.1 Inclusion criteria:

Any father whose preterm baby was admitted in the neonatal unit.

Fathers whose preterms in NU were stable.

Health workers who had worked in the neonatal unit for at least 3months.

3.4.2 Exclusion criteria:

Those fathers whose preterms became critically ill during the data collection time.

3.5 Sample size

The participants comprised of 24 fathers of preterms hospitalized in the neonatal unit of KNRH that were purposively selected basing on the variations of participants' characteristics including education background, number of wives, number of children, occupation and ethnic background and data collection continued until data saturation was attained which was in line with qualitative research (43, 44).In addition , 9 health workers participated in the interviews as key informants (43).

3.6 Sampling strategy.

The participants were enrolled through purposive sampling to collect information rich data. Recruitment of participants was purposively based on different ages number of children, number of wives, religion, education level and ethnic background. Fathers were identified by the 2 neonatal unit staff who referred them to the principal investigator or research assistants to assess them for eligibility of the study and obtained consent.

For the key informants, it involved recruitment of health workers purposively according to cadres which included doctors and nurses working in the NU. There were 2 MOs, 2 SHOs, 2 E/MW, 1 N/O,1 R/N and 1 Pediatrician.

3.7: Data collection methods.

Data was collected using in depth interview guides and key informants' interview guides. Interviews were conducted by the principle investigator with support from two experienced and trained male research assistants who were socio-scientists. Interviews were conducted in a private room in the hospital so as to allow participants engage in a comfortable conversation with the principle investigator and research assistants. Interviews were conducted in the participants' language of choice (English or Luganda) and audio recorded. The recordings were transcribed and translated into English by the research assistants. The interviews with fathers were conducted first before the health workers (Key informants) because they were the primary study group and provided an opportunity to probe for some of the concerns raised by fathers during interviews with health care providers.

3.7.1 In-depth interviews.

In-depth Interviews started with socio-demographic characteristics from fathers and then followed by open ended qualitative questions to obtain information on the roles of fathers, facilitators and barriers to involvement in the care of preterms admitted to NU at KNRH.

Interviews were flexible with probes to allow in-depth understanding of the fathers' roles, facilitators and barriers to their involvement in care of preterms babies in NU. Each session lasted between 30 minutes to 45 minutes and audio-recorded in a private room. The information was kept confidential.

3.7.2 Key informants' interviews

This involved interviewing of health workers well acquainted with the neonatal unit and have worked in the unit for at least three months. It consisted of health workers of different cadres; 4 nurses/midwives and 5 doctors.

The principle investigator and research assistants conducted the interviews on health workers (key informants) with help of a key informants' interview guide to explore the roles played by fathers, facilitators and barriers to their involvement in the care of the preterms in NU at KNRH. This was to help in enhancing the views of the study participants(fathers).

3.8 Study Procedure

The two research assistants who were social scientists experienced in collecting qualitative data were trained on study objectives, design, and significance, the process of consent, interview process and ethical considerations. Fathers in the NU at KNRH were identified by the neonatal unit staff who refer them to the principal investigator and/or research assistants who then verified the admission records of their admitted neonates to confirm eligibility of the participants. The eligible fathers to preterms were briefed on the study objectives, design and significance of the study. They were informed that these sessions of the interview were to be audio-recorded as a quality control measure. Questions were invited from the participants and those who were willing to participate in the study were invited to provide informed written consent (signature/thumb print).

Interviews were administered to eligible participants by the principal investigator/research assistant and factors affecting fathers' involvement in the care of preterms in NU were captured. All interviews were audio-recorded and later transcribed by the research assistants /principle investigator.

3.9 Data analysis

Initially, socio-demographic characteristics of participants were described. Data analysis and collection were done concurrently. At the end of each day of data collection, the research team held a de-brief meeting to share emerging issues and identify areas of further data collection. The recordings were transcribed and data was read and reviewed repeatedly by the researcher to ensure no misrepresentation

of data as a way of quality control. Further data analysis was done by manual thematic analysis where themes of the study were generated.

In addition to the thematic analysis, triangulation was done which involved comparing findings from fathers of preterms and key informants. Each major theme generated was illustrated using quotations from the participants. The identities of individual study participants were masked with initials.

3.10: Quality control

To ensure credibility, the principle investigator checked the data collection tools, pilot-tested them to see if they would gather data that they were aimed for. The interview process was guided, audio recorded, and participant's representative quotes from the interviews were included in the report. Confirmability was ensured through the maintenance of an audit trail (i.e. notes about the interviews and decision-making during the data collection). Transferability of the findings was ensured through varied description of participant's socio demographic details, methodology and the setting.

3.11: Ethical consideration

Permission to conduct the study was obtained from the Department of Obstetrics and Gynecology, Department of Pediatrics, Kawempe National Referral Hospital management and Ethical approval was obtained from the School of Medicine Research and Ethics Committee (SOMREC).

3.12: Participant's Consent

Informed written consent was obtained from the study participants. The study carried minimal risk to the participants and did not influence health care given to their babies. Participation was voluntary with participants free to withdraw from the study at any point.

3.13: Participant's Confidentiality

Interview guides were coded and they did not bear participant's names. All the data was kept under lock and key. Any authorized representative of the Institutional Review Board (IRB) was allowed to inspect all documents and records required to be maintained by the investigator. All the information was treated with utmost confidentiality. Access to data entered on the computer was through a password known to the researcher.

3.14: Dissemination plan

During study implementation, the participants provided information to answer the study objectives.

The participants and care takers were informed of the results of the study via phone calls and through care giver education talks.

A policy brief from the findings was prepared to engage stakeholders on key results and recommendations.

The NU staff held a Continuous Medical Education about the study concept and its findings.

The study findings were also disseminated to Department of Pediatrics, Obstetrics and Gynecology KNRH, Directorate of Research and Graduate Training and manuscript submitted to peer review journals for publication.

CHAPTER FOUR:

RESULTS

4.1 Introduction

The major aim of this study was to explore the factors affecting fathers' involvement in the care of preterm babies admitted to the neonatal unit at Kawempe National Referral Hospital.

The study results are presented based on a thematic analysis of perceived and actual roles played by fathers in the care of preterm babies, facilitators of fathers' involvement in the care of preterm babies, and barriers of fathers' involvement in the care of preterm babies in the NU at KNRH.

4.2: Socio-demographic characteristics

This study included 24 fathers of preterm babies that were admitted in the NU at KNRH, with a mean age of 33 years and a range of 22 to 50 years. Six of the 24 participants held degrees, while 10 fathers attended up to secondary level and 8 fathers attended up to primary level. Fathers' occupations varied widely however, most of them had an informal employment (19). Four of them had formal employment and only one was still a student. Most of the fathers (13) were Muslims and 11 had varied denominations of Christianity. The participants had different tribal backgrounds with majority being Baganda and Basoga at 12 and 6 respectively, while 4 were from Ankole and 2 from Lugbara. Most of the participants were married to 1 wife,3 had more than 1 wife and 2 had lost their only wives. Most of the fathers (18) had more than 1 child and 6 were first time fathers. Characteristics of the preterms born to these fathers ranged from 26weeks gestation to 36weeks. Days spent in the NU ranged from 1 day to 14days. For detailed participant demographics (See Table 1).

The key informants included health workers that had worked in the NU and their ages ranged from 24years to 63years, with an average of 5 years in service, and these included 1 pediatrician, 2 senior House Officers(SHOs), 2 Medical officers(MOs), 1 Nursing Officer (In charge), 1 Registered Nurse(R/N) and 2 Enrolled midwives(E/MW).

Table 1: Socio-demographic characteristics of fathers to preterms admitted in NU at KNRH.

Variable	Frequency(N=24)	Frequency(%)
Age (years)		
21-40	20	83.3
41-50	4	16.7
Tribe		.
Ganda	12	50
Basoga	6	25
Ankole	4	16.7
Lugbara	2	8.3
Religion		
Moslem	13	54.1
Catholic	3	12.5
Protestant	2	8.3
Born again	5	20.8
7th day Adventist	1	4.2
Marital status		
Unmarried/single	1	4.1
Married	21	87.5
Widower	2	8.4
Education level		
Degree	6	25
Secondary	10	41.7
Primary	8	33.3
Employment		
Formal employment	4	16.7
Informal employment	20	83.3
Number of children		
1 child	6	25
More than 1 child	18	75
Length of stay in the NU		
1-7days	19	79.2
8-14days	5	20.2
Number of wives		
1 wife	20	83.3
More than 1 wife	4	16.7
Address		
Central region	22	91.7
Eastern region	2	8.3

4.3: Perceived and actual roles played by fathers during the care of preterm babies admitted to the neonatal unit at KNRH.

There were 6 major themes that were identified as the perceived and actual roles played by fathers of the preterm babies admitted in NU at KNRH as shown in the table 2.

Table 2; Thematic presentation of the perceived and actual roles played by fathers of preterms admitted in the NU at KNRH.

Theme	IDI		KII	
	Perceived	Actual	Perceived	Actual
Providing Financial support	√	√	√	√
Direct childcare activities	√	√	√	√
Providing emotional support to the mother	√	√	√	√
Providing Spiritual support	√	√	X	X
Protecting baby and mother through engagement with health workers	√	√	√	√
Providing Physical support to the mother	√	√	√	√

Key; √ = Role that was reported, X =Role that was not reportedly done.

Providing Financial support.

Most of fathers in this study acknowledged that provision of financial support to meet the basic needs of the mother and the admitted baby at the health facility such as food, pampers and drugs was one of their key roles that they perceived in the care of preterm babies.

> *"First, he has to provide help in terms of finance, why? Because everything you look at, it is associated with money, if they send you to buy the drugs that will help the baby, you will use money, if you say the baby needs clothes, money is needed, wife needs clothes money is needed. That means the need for money is too important in the care of these preterm babies" (IDI-1, 1st time father 24).*

Furthermore, most of these fathers mentioned financial support as a role they actually played in the care of their preterm babies in terms of looking for money and provide it to their wives to buy food, diapers and whatever they needed

> *"Everything that my wife needed, I have been providing it from the start, I give her money and tell her to go and get what she wants" (IDI-8;47years, father of 4).*

> *"As the father, I have looked for the money. It is needed in life for example to buy food, diapers, hot water and even her as a mother needs to be taken care of. There are things you need to buy for her and put them there, and clothes to take them and they wash them" (IDI-12;25years, father of 2).*

The health workers also acknowledged that these fathers were expected to provide financial support to the mother and baby and they actually provided the support in terms of money to buy drugs and other things that were not readily available in the hospital so as to ease management of the preterm babies.

> *"Probably when there is some treatment we don't have and you know for some premature we need caffeine for better breathing, so they tell them to go and purchase, that is why I have told you financial support! We tell them to go and purchase caffeine so that we can work on their babies." (KII-3,31years, E/MW).*

> *"Provision of things that are not around financially, the likes of buying pampers providing the wipes or providing clean sheets, the likes of re-assuring them about their babies yeah basically." (KII-2,22years, E/MW).*

Emotional support to the mother

Providing emotional support was a perceived as a role by most fathers during the care of their admitted preterm babies. Fathers affirmed that their physical presence and words of encouragement through counselling soothed the minds of mothers and brought a feeling of solidarity in the care of preterm babies.

> *"First of all, I would think as a father it's my role to make sure that I comfort my wife, mother of the baby to know that it's not an error or mistake for her to give birth to a premature baby" (IDI-4,38 years, father of 3).*

Most of the fathers in the study confirmed that providing emotional support through giving hope and comforting the wife, physically being present as a sign of solidarity was an actual role they played in the care of the preterms.

> *"Physically I come and give my wife hope and I show her that we are together in this situation and we shall be winners.*" ***(****IDI-1, 24 years, 1st time father).*
> *"As a father, what I did is always to comfort this woman, for example whenever they would put a nasogastric tube on a baby, the mother thinks they have got another illness, so my role there is to comfort her that this thing will get away, there is no any effect, and also helping the mother to use it since some of the women don't know how to use it" (IDI-13;23years,1st time father).*

The health workers also affirmed that the presence of fathers of preterms at the neonatal unit would provide continuous emotional and psychological support to the mothers of these babies so that they don't get stressed up to the point of lacking breastmilk and also to continue caring for them.

> *"We expect them to provide psychosocial support which should be continuous because wherever the mothers get stressed and the fathers are not involved they even end up lacking breast milk because if the mother is not stable and they cannot move from where they have been operated to the NU where the baby has been placed, so here we expect the fathers to continue supporting these mothers physically and emotionally". (IDI-8,31years, SHO).*
> *"They are supposed to present themselves to support these mothers because many of them are scared so they need the husband and when they come together even the father is supposed to help the mother like encouraging her" (KII-4,63years, N/O).*

Direct childcare activities

Interestingly, a reasonable number of fathers interviewed in this study acknowledged that providing direct care to the preterm babies was one of their key roles they perceived during their time of care. The fathers expected to engage in child care activities like monitoring, changing the babies, changing babies' diapers whether the mother of the baby was present or absent.

> *"The woman might have been operated and she has no energy, she is already sick like the baby, now it is you the father who remains there monitoring the baby, changing the diapers and also changing the baby and you make sure the baby is given the necessary care like that of a mother if she was present, until the mother gets better ,but still even if the mother is present, the father*

has to go along with her and attend to the baby ,also the care given by the father is big enough that if he doesn't push the mother, she might not be in good position to take care of the baby." (IDI-18,27years,1st time father)

Most of the fathers reported that they are directly involved in feeding babies, change of diapers and ensuring that health workers administer the drugs in time by giving reminders at the right time.

"I also sometimes get involved in the baby's care like changing the pampers when he has soiled it, and sometimes the baby may not be breathing well, immediately I go and inform the healthy worker, so those are some of the roles I have played" (IDI-3, 40years, father of 3)
"For the first two days, my wife was too weak so it was me coming to clean the baby and doing all the roles that the mother would have done. So the biggest thing that I think should be done specifically by the ladies or the mothers is to breastfeed but the rest of the things we are equally responsible for the babies." (IDI-4,38years, father of 3)

The health care providers greatly appreciated the fathers for this great role. They expected the fathers to be involved directly in child care activities and actually most fathers were seen providing care to these babies such as feeding, changing diapers, cleaning babies and even do kangaroo for stable babies.

"fathers have been a great part in taking care of the babies, let me say doing the routine work, there are some fathers who alternate with mothers in taking care of these babies for example a mother can be so tired and sleepy particularly a father may come along, let's say at 2pm to change the baby's diapers, beddings, to give the expressed breastmilk that the mother has provided" (KII-5,32years R/N)

Providing Spiritual Support.

Most of the fathers reported that one of the key roles they expected to play in the care of preterm babies was to provide spiritual support through prayers. Fathers reported that praying for both the baby and her mother to give hope where there seems no hope was a necessary role for them to get involved in the care of preterm babies.

"One, they are expected to give a hand of assistance to the mothers, it is two ways; it is both spiritual and emotional, you look at the spiritual part of it, the mothers need keeping in prayers, keep encouraging them, keep giving them hope because it is such a trying moment whereby there seems to be

no hope, so with that we have to put trust in God and we have to put God first…." (IDI-5, 38 years, 1st time father).

They provided spiritual support in terms of praying for the mother and baby to get better, comforting the mother. This was one of the roles these fathers actually played as they hoped for healing form God during the care of their preterms.

> *"You help the mother by comforting her spiritually, praying for the baby. I try to pray for him while I talk to him and tell him, Elisha, this is just for a while, we are moving out of this place victoriously, we are going to make it together and daddy is around and above all God is around." (IDI-5,38years, father of 2).*

> *"Praying for your babies, because they have been born prematurely. Praying for them to get better, and even those who died to rest in peace." (IDI-14, 26years, father of 3 with twins).*

Protecting baby and mother

Most of the fathers that participated in this study reported that it was their role to protect the health of both the mothers and the preterm babies. This was reported to have been done through various ways like being physically present and monitoring babies' condition, various engagements with the health workers where they informed them of the health status of both the mother and the baby.

> *"I take responsibility to know how they are doing, then I talk to the health workers depending on how they are, I can inform the nurse when the baby is not breathing well because even then, there many babies so when you are around you can notice and call the nurse to intervene." (IDI-14,26 years, father of 3 with twins)*

> *"Even as a father, I think it's always my responsibility to consult the doctors because my wife was operated and she is still weak and we cannot just continue feeding the baby without hearing from the doctors, so I make sure I come to the room" (IDI- 4;38years, father of 3).*

Consulting the health workers and getting instructions on how to manage their babies even when discharged was one way they protected their babies from harm.

> *"Yes, so the doctor writes on a sheet what I will use to help these children when I reach home, because now, as am in Kawempe am supposed to ask the doctor the drugs am supposed to use for the preterm babies while we are discharged home." (IDI-21,45years, father of 5)*

The health workers confirmed that the presence of the father fills up the gap that might have been left by the mother while instructions were being given by health providers in the care of the babies.

> *"If the mother forgets anything, the father will be there to fill the gap that is why we need fathers to be there, at least the mother may not be a first learner but at least the father can be there to pick up the knowledge." (KII-4, 63years, N/O).*

Providing Physical support to the mother.

The fathers interviewed in this study also reported that it was their role to offer physical support to the mothers of preterm babies. The physical support that was expected involved helping them to catch time for visiting the babies, supporting them to move from their resting place to the NU and carrying food for mother of preterm babies.

> *'They should help mothers in one way or the other. For example, helping them cleaning babies as they also prepare themselves to breast feed, also help mothers in catching time when coming to the breast feeding unit, helping mothers in acquiring various facilities for example food, and also helping them in moving long distances from different levels of the hospital. Since at times most of them are operated, they find it hard to move swiftly as a normal one can do." (IDI-13,23years,1st time father).*

The fathers actually played a supportive role to the mothers of the preterms as they helped in carrying for them food and luggage plus physically being around.

> *"Yeah, more so when it comes to helping the mother, as she is doing her breast feeding by supporting her with the luggage, helping her whenever she needs something like, distilled water to clean the umbilical cord and also comforting the baby most" (IDI-5;38years, father of 2)*

> *"Like carrying food for her, she doesn't have anyone to send except me, so I play the part of being part of her family so that she is not worried so much and when she sees me around, she becomes very happy, even if my family is around or my sister, she doesn't care but when am also around she becomes strong." (IDI 17-26years, 1st time father).*

Health workers too confirmed that the few fathers that come to the NU are seen supporting their partners to the NU through carrying luggage and a few things they need to use in the NU.

"Those few that come, at least you see them coming in with their wives, giving them support, help carrying like a few things that they need to carry when they are coming here at the unit and some of them you are able to see them around for a few days." (KII-7,30years, SHO)

4.4: Facilitators to fathers' involvement in the care of preterms admitted in the NU at KNRH.

There were 5 major themes that were identified in this study as the facilitators to fathers' involvement in the care of preterms admitted in the NU at KNRH. These included Baby related factors, father-related factors, friends and family related factors, healthy facility related factors and community related factors, as shown in the table 3.

Table 3: Thematic presentation of facilitators to fathers' involvement in the care of preterms admitted in the NU at KNRH.

SEM level	Themes	Subthemes
Individual	Baby related factor	• Improvement in health condition of the preterm baby
	Father related factors	• Fulfilling responsibility of fathers • Desire to know progress of baby's health • Desire to support the wife • Love for the baby and mother • Desire to have more babies in future • Joy of giving birth to a firstborn • Desire to learn to take care of preterm babies • Critically ill or death of the spouse
Interpersonal	Friends and family related factors	• Support from family members (Financial, physical, and emotional support) • Good relationship between couples
Organizational/health facility	Health facility factors	• Good quality of services offered, in terms of availability of equipments and good attitude of health workers • Motivation from health workers
Community /societal level	Community factors	• Positive cultural and religious beliefs • Counseling and support from community members

4.4.1 Individual level factors

Improvement in the health condition of the preterm baby

Most fathers that were interviewed acknowledged that improvement in the health status of the preterm baby was a major motivator in their involvement in the care. This was noticed through the baby's actions that were reassuring such as crying loudly, ability to look, and increase in size; and this gave them the hope to stay and continue caring.

> *"The baby promises like, when I go there and I see he is well, like the baby can look at you, the baby is having a good breath, I also become happy, the baby can cry and the sound is heard, then in my heart I also become happy other than finding the child when the situation is not good. But every time you leave when the child is in good condition then you get strong that even if it is a month or for how long, I will be there and care." (IDI-3,40years, father of 2)*

> *"what is amazing is that after like one week you keep on noticing the improvement, like there is something that has grown like the cheeks, fingers for example, my baby was produced when is so small but after two weeks now the baby has improved and grown fat, you can see the chest is growing big. This keeps us moving." (IDI-18,27years,1st time father).*

Fulfilling responsibility as a father.

The desire to fulfill their responsibility as fathers facilitated their involvement in the care of the preterm babies. Fathers reported that it's their full responsibility to take care of their babies and thus their involvement in the care of preterm babies.

> *"As me, I have been around in taking care of my baby, even if I find some challenges with some health workers, I cool down knowing it is my responsibility to care for my baby." (IDI-16,27years, father of 2)*

> *"It's just responsibility, so any person who fails to do it, he is just irresponsible. However much you can get various helpers, you as the father must get involved in the care of your preterm baby at the hospital. It's just responsibility, there is nothing else." (IDI-13, 23years, 1st time father).*

Health workers also acknowledged the fact that most fathers want to fulfill their responsibility as a father of the baby to physically be present and being responsible for their babies as some mothers may still be critically ill. This has highly motivated them to participate in the care of their admitted preterms

"The love for their babies because it's their responsibility towards their babies, yeah …and depending on the mothers' condition especially to these mothers that cannot come in immediately for example the caesarian mothers, the critically ill maybe in ICU, HDU" (KII-2,24years, E/MW)

"You know most of them say," am the father of the baby I must be there to see my baby", that's how they come in." (KII-4,63years, N/O)

Desire to know progress of baby's health

Fathers also acknowledged that their desire to know the health progress of their babies also facilitated their involvement in the care of preterm babies. They really wanted to know what happens to the baby as the treatment progresses and how they are doing health wise.

"We always come here after every 4hrs to check on the baby. So, I will be wanting to know how the babies are doing, and once you find one of them is not doing well, then you talk to the health workers." (IDI-14,26years, father of 3 with twins)

"So, I feel I should always come to check on the baby and see how she is doing and look at how other people are taking care of their kids and learning other things and I have appreciated with what the doctors are advising me to do and being cooperative." (IDI-4;38 years, father of 3)

Desire to support the wife.

The majority of the fathers in this study reported that it's their responsibility to support their wives. Supporting their wives involved things like helping them to learn the hospital environment and providing her with the needs. This facilitated their involvement in the care of preterm babies as a way of standing with the mothers in solidarity.

"Me, I left my work to come and be around because the wife doesn't know anything about this hospital but for me, I know how I can figure out certain things." (IDI-15,25years, father of 1)

"Have been up and down, bring this and that, and I have to look for money to get them food, so you have to be there because the wife can also get tired" (IDI-17,26years, 1st time father)

Some fathers reported that their facilitation to get involved in the care was to help the mother of the babies reach out to health workers for any support since some fear health workers.

"Maybe one of the other factors that has motivated me apart from responsibility is helping this mother, because at times they have that inferiority complex and fear to reach to the health workers in time, they can say that they will abuse me, so whenever I could see that, I could reach out to health workers so that all the necessary facilitation is given." (IDI-13, 23years, 1st time father)

Love for the baby and mother.

The love for both the baby and the mother was reported by most fathers to be among the facilitators of father's involvement in the care of preterm babies. The majority of the fathers acknowledged that it's because they love their mothers and their babies alive, so this motivated their involvement in the care.

"Me, what makes me come is my baby and the wife, I need them alive, that is what makes me come, maybe I wouldn't be here if she wasn't my wife whom we started this together." (IDI-12,25years, father of 2)

"Like me for all my children, have been around since the time of delivery because I love both the baby and the mother at the same time and I want to bring them home alive at that time because even if she had lost hope during the delivery, when she sees you and says Sam am not well, and you reply to her stay calm and endure, so she stays strong." (IDI-22: 39years, father of 6 with triplets)

On top of the love for their babies and mothers, a few fathers were excited for having had twins as a source of facilitation to getting involved in the babies' care.

"The love of the babies. The love of the twins since I had never got twins before made me come and take care of these babies. (IDI-20,36years, father of 4)

This was also supported by health workers in the NU, as they reported that fathers are compelled to take care of their babies because of the love for them and their mothers.

"Just like mothers, fathers do love their babies as well, others are getting babies for the first time" (KII-5,32years, R/N)

"The love for their babies because it's their responsibility towards their babies, yeah" (KII-2,24years, E/MW)

The joy of giving birth to a firstborn.

Some fathers acknowledged that the joy of giving birth to a first-born baby was one of the facilitators to their involvement in the care of preterm babies. Fathers felt that they were highly excited to take good care of first born as a new happiness to their marriage.

> *"What motivated me is because it's my first born, if I don't give him that care, then will I give it to the lastborn? so am very happy for that, as you can see the mother is still a young girl, and her family members are far, that side of Mbarara, so you have to be there for her as well." (IDI-17,26years, 1st time father)*

> *"Yes, I have some other work to do but I needed to be there for her so that in our marriage we have a child, she has her own children in her previous marriage but by the time we met here in town and she told me she could not give birth and I told her that I needed a baby and later she accepted for the good of the marriage. For her, she has other children but for me, that is the first child with her, so that keeps me moving." (IDI-23,35years, father of 3)*

Health workers also confirmed that the love and excitement of having their firstborns was a major driving force for a few fathers who are seen involved in the care of their babies.

> *"But for the few fathers that I have seen being involved, it is always their first born babies. Many of them come to check on their first born. Usually I think that they are still excited and they have not seen a baby before so I don't know but probably that's what I have been thinking they have not had any other baby before and that's their driving factor, first babies really (KII-8,31years, SHO)*

> *"Maybe it is their first born or a precious baby, those men come. Every baby is precious but there are those who are like the first born, they have been looking for a child for a long time and they were not finding, so they have gotten one." (KII-6,38years, pediatrician)*

Desire to learn to take care of preterm babies.

Fathers' desire to learn how to take care of such preterm babies also facilitated their involvement in their care. Fathers reported that they needed to be very close and learn exactly what is needed to take care of such babies such that even when they are discharged from the hospital, they can handle while at home

and others felt that they could use that knowledge as a precaution incase another incidence of the same kind happens in future.

> *"As fathers, we always need to be close to such matters such that we get to know exactly what is going on and to take precautions where necessary if such incidents happen or come in the future yes." (IDI-6, 47years, father of 6)*

> *"Most of the times when we sit back as parents , these areas being sensitive , we may not know what is going on , in other words, when you get involved in the care of the baby, you get to discover more, you get to know the formalities which are followed, you get to know how things move on, assuming I sat back I might not know what is going on in this environment or in this area so in other words, it has also made me to know more or to discover more about such infants"(IDI-6, 47years, father of 6)*

This was also emphasized by the health workers that the desire to get knowledge about how to take care of these preterm babies motivated some fathers to getting involved in the care.

> *"Majorly knowledge, they understand something about involving themselves in bringing the mother to hospital and in care of their preterms, what they need to know about the condition of the baby and if they don't know anything some of them just come peep and go because they don't know why they involve themselves in the care, and even if they come what are they supposed to do?, they are also supposed to involve themselves in changing the baby, cleaning and also assessing the condition of the baby and learning more of how the progress of the baby is and what they are supposed to do also."(KII-4,63years,NO)*

Critically ill or death of the spouse

A few fathers acknowledged that ill health of the mother to their babies and sometimes the death of their spouses as reported by two participants, was a key facilitator to their involvement despite them having relatives that could play the role of the deceased spouse in taking care of their admitted preterm babies.

> *"The fact that my wife didn't survive made me dedicate my time to caring for the baby to ensure that everything is under control so no one can do what I am supposed to do because this can lead the baby to contract diseases because of the person who is caring of the baby."* ***(****IDI-2, 50 years 1st time father)*

"I was supposed to be there since the mother of the baby had died and another thing the baby needed someone to be there for her like me since am the father am the one who has stayed and am the one to take care." (IDI-9,22years,1st time father).

Health care providers confirmed that one of the motivators of the fathers' involvement was the fact that the mother to the babies are critically ill and they couldn't have substitutes like relatives to step in.

"There are those ones whose mothers of preterms are critically ill and there are no other relatives. It is the father that has to come around, so this forces them to come and be more involved…" (KII-6,38years, pediatrician)

Desire to have more babies in future

A few fathers reported that the desire to have more babies in the future was among the facilitators of their involvement in the care of preterm babies. One of the fathers acknowledged that his involvement was partly because he was afraid that if he's not involved in the care of the baby, the wife may become hesitant to bear more children in the future.

"What facilitates me most is that we are still young and we still want to have more children, remember if a lady like her sees that I didn't care for our first baby, the next time she will recall that she suffered alone with the first child "I went to the hospital alone and tried calling the husband for help and he was not caring", so I was like let me get involved in taking care of the admitted baby and the mother so that if things don't go well as planned then next time it will be better." (IDI-3, 40 years, father of 2)

4.4.2 Interpersonal level factors

Family and friends support (Financial, physical and emotional support)

Fathers reported that they were motivated to take care of their babies through support from their family relatives and friends. The support was in terms of previous positive experiences, physical presence and encouragement through continued appreciation for their involvement in the care.

"The parents, my friends and some of my family members told me to come because they have ever seen others who were born at six months, that one is not the only one and so I also had to continue praying and saying that if God accepts, then this will be done." (IDI-3, 40 years, father of 2)

"My relatives and other community members come to check on me and they appreciate me. That makes me feel motivated because you know when you do something and someone appreciates, you feel like you should do more." (IDI-4,38 years, father of 3.)

Some relatives don't appear physically because they are far but they give support through encouragements by making calls and prayers.

My relatives are far but they call, they pray for us and my other wife also prays for our baby to be fine. And I don't blame anyone but they call and encourage you. (IDI-23,35years, father of 3)

Health workers also confirmed that a good family background propels fathers to get involved in the care of their babies.

I think the fathers background also influences their care for their newborns at this unit as I am imagining the father who grew up under the care of his mother and father and has supportive background, this one feels more propelled to come and check on their preterm babies here at the unit (KII-8,31years, SHO)

Good relationship between couples

Some fathers reported that the strength of the relationship in marriage or at home between the couples would determine their active involvement in the care of the admitted preterms. They emphasized that a good relationship between the couples, will motivate fathers to come to the hospital and get involved in the care of their babies.

"If the relationship is good, the father will come to hospital and bring stuff and take care of them and this can give strength to the mother to take more care of the baby." (IDI-18,27years,1st time father)

"Now things to do with coming to the hospital depends on the strength of the love you have at home in a marriage as a couple, for example, the love at home will bring the father to the hospital…" (IDI-23,35years, father of 3),

On the other hand, health workers pointed out the fact that married couples are seen to be more involved in the care of their preterm babies as opposed to those individuals who aren't legally married.

"Those who are legally married of course they have a higher chance of getting involved in the care of preterms but also those who are not legally married I would say their chances are lower than those who are legally married" (KII-7,30years, SHO).

4.4.3 Organizational/health facility level factors

Good quality services

Fathers acknowledged that the good quality of services delivered by the health facility is a motivation factor for them to get involved in the care of their preterm babies. Fathers further explained that good quality of services in terms of the availability of equipments, hygienic environment and the good attitude of health workers gives them hope that their babies will get well soon.

> *"Since the day I came with this daughter of mine, I have seen they are giving better services to the patients and the environment is clean and that means they clean everything they use and they are organized so I feel my baby is in safe hands" (IDI-4,38 years, father of 3.)*
>
> *"…but when I saw the machines I got inspired because the baby was born underweight but because I saw the machines that work, I said am at the good place. The instruments motivated me and I said my baby will be fine." (IDI-16,27years, father of 2)*

Health workers added their voices to the fact that NU is located at a National referral hospital, most of these fathers will be motivated to know the quality care that happens at such hospitals.

> *"If the father heard that his baby has been taken to a National referral, most of them would want to come and see the care which is in a National referral and how they look after babies there in the special care, so they will want to come and see. If they come in and they see everything is moving on smoothly, they will come back again." (KII-3,31years, E/MW)*

Motivation from health workers

In this study, some fathers reported that their involvement in the care of preterm babies was as a result of the motivation they received from the health workers. Fathers reported that the motivation taught them the importance of father's involvement and the continuous advice to continue with the care promoted their involvement.

> *"I have friends who are health workers that briefed me about the importance of going with my wife to antenatal clinic to take the medication. so for me it's the reason I go with my wife in hospital and take care of her and the baby..." (IDI-15,25years, father of 1)*
>
> "*The motivation am getting from the doctors whenever I talk to them, they always advise me to continue with the care and help the baby and I have appreciated with what the doctors are advising me to do and being cooperative." (IDI-4,38 years, father of 3.)*

The health workers too believed that their encouragement influenced fathers' involvement positively as they kept on being encouraged to move with their partners so that they learn how to care for the baby upon discharge.

> *"We have also encouraged them to come along with their wives as they take care of their babies so that they can learn what they can do to the baby in case we discharge them. So the information we give involves both of them to participate in the care. That alone has improved on their involvement." (KII-5,32years, R/N)*

4.4.4 Society/Community level factors.

Positive cultural and religious beliefs

The fathers acknowledged that positive cultural and religious beliefs was among the facilitators that motivated their involvement in the care of preterm babies. Culturally, they were encouraged to take care of babies and follow the vows they made during religious meetings.

> *"Yeah, culture wise and the fact am a born again Christian, we look at supporting our spouses. We have the vows that we make in good and worse, so now we look at this as the worse moment or situation whereby we need to move together with her since am the husband. We have to move in good times and in bad times, so basing on that fact I don't have any option but then I have to do what is expected of me because I have to accompany her as she has been accompanying me in good and bad times..." (IDI-5,38 years,1st time father)*

> *"The Religious leaders emphasize on the issue of men getting involved in taking care of the babies, not to throw them or leaving them to only mothers ..." (IDI-10,35years, father of 4)*

They believed in getting blessings whenever they take care of babies since the babies are angles who don't know anything, as one of the fathers mentioned.

> *"The culture encourages everyone to take care of the family, even the religion I believe in, am a Muslim, it tells us that these babies are angels, they don't know anything so take care of them and even when your wife is happy you all get blessings and whatever you do moves on very well." (IDI-12, 25years, father of 2,)*

Counseling and support from community members.

A few fathers interviewed at KNRH reported that the counselling and support they received from fellow community members was a very big factor that facilitated their involvement in the care of preterm babies.

> *"The community members supported it and they encouraged me to come as they told me that, that's how children are! the baby will grow." (IDI-3, 40 years, father of 2).*
>
> *"Other community members come to check on me and they appreciate me. That makes me feel motivated because you know when you do something and someone appreciates you feel like you should do more." (IDI-4,38years father of 3).*

4.5: Barriers to fathers involvement in the care of the preterms admitted in the NU at KNRH

Five themes emerged from the interviews held with the fathers of preterms admitted at the NU at KNRH and these are summarized in the table 3.

Table 3; Thematic presentation of the barriers to fathers' involvement in the care of preterms admitted in the NU at KNRH.

SEM level	Themes	Subthemes
Individual	Baby related factors	• Fear of preterm babies by fathers
	Father related factors	• Financial constraints • Busy work schedules of fathers • Lack of responsibility • Uncertainty of paternity • Fear to be tested for HIV
Interpersonal	Friends and family related factors	• Discouragement by peers • Poor relationship between couples
Organizational /health facility level	Health facility factors	• Poor attitude of hospital staff • Fear of high hospital bills and expenditure. • Visiting restrictions • Long hospital stay and long waiting hours
Community/societal level	Cultural beliefs and practices	• Inhibiting interaction between father and mother in law. • Unfulfilled cultural expectations

4.5.1 Individual level factors in the care of preterms.

Fear of preterm babies

The majority of fathers acknowledged that fear of preterm babies is one of the barriers to fathers' involvement in the care. Fathers reported that they feared that they may harm the preterm babies since they look very fragile and delicate. The small size of these preterm babies scares them and hence discouraging them from being involved in the care of preterm babies.

> *"Some fathers are cowards; they fear touching premature babies because they think the baby may die or being very tender like you would see a balloon." (IDI-3, 40years, father of 2)*

> *"The truth is size of the preterm baby scares a lot compared to the term baby but because it is your baby you have nothing to do ..." (IDI-18,27years,1st time father)*

Furthermore, most healthcare providers affirmed that the fear of these preterm babies because of their small size by some fathers was a big hindrance to their involvement in the care. They also believed that they never deliver such preterm babies.

> *"Some of them have fear for the babies, they fear, they say the babies are too small, they cannot look at the baby and they are too scared for the baby, that they have never had such a baby, some say for us we don't deliver such babies" (KII-4, 63years, N/O)*

> *"Some of them will tell you the father has phobia and fears to come there to see these preterm babies. The father will tell you for us in our clan we don't give birth to preterm so I will not come there, that is not my baby! such kind of things" (KII-3, 31years, E/MW)*

Financial constraints

Most of the fathers that were interviewed pointed out financial challenges as a major factor that prevented them from being involved in the provision of care to their preterm babies. This prevented many from staying at the hospital for days without working because they will not have money to provide for other essential needs to both the mother and the preterm baby.

"Financial difficulties where one isn't able to cater for the necessities can fail him because at times, they have left children at home or even he is just renting at home." (IDI-2, 50 years, 1st time father)

"The second one is poverty, some of our friends are poor to an extent that he cannot spend three days here taking care of the baby and the mother minus going to work. there will not be food so you find someone wants to come but the situation does not allow him to come" (IDI-4,38years, father of 3)

Furthermore, some of the fathers felt they could not have money to put in transport to move them to the facility on a daily basis to take care of their admitted babies.

"The finances one may not even be able to move to and from on a daily basis, may be able to come once in a week or twice in a week" (IDI-5,38 years,1st time father)

This was also supported by the health workers in the NU, that some fathers shy away from the care of their admitted babies because they think they might ask them money at the hospital, which they didn't have while others will not appear because they have to look for money to meet the needs at hospital.

"Some think they are going to ask money from them which is not true because we don't ask for any kind of cash here because most of the things we have them and if it is not around we shall write for them a note to go and buy but most of the time we have the medication we need so some may think it's all about finances they are going to pay" (KII-2,24years, E/MW)

"Some of them, it's financial issues, some of them will tell you the father is there looking for money so he cannot come to be here when he has to look for money to look after us" (KII-3,31years, E/MW)

Busy work schedules of fathers and other responsibilities

The study further established that fathers are usually engrossed in busy work schedules and they are left with very little time to get involved in the care of preterm babies. Fathers reported that one biggest challenge they faced was working in a private sector whereby it becomes so hard for the bosses to give them time off to take care of their admitted babies and therefore some of them end up delegating their relatives.

"It can be the work schedule, one may be working, maybe the time may not allow that person, it may not be intentional... it's a bit challenging and being in a private setting it becomes a bit very hectic and tasking because there is no way you can tell your boss today, tomorrow, and the other day to go and check on your people in the hospital" (IDI-5,38years, father of 2)

"Because most of us men, we look more on how to make money and make the family stand and we forget that this is also important to take care of the family in hospital. So, we end up delegating our relatives to come and take care of them yet they may not do it to the point you can do it." (IDI-15, 25years, father of 1)

Others reported having other responsibilities such as taking care of home activities and children left at home.

"Who do you thing takes care of the children that have remained home? It's the man so it becomes hard sometimes to come and be around with the wife." (IDI-14,26years, father of 3 with twins)

Health workers also confirmed that the tight work schedules of these fathers and as well the other responsibilities such as taking care of other children at home as there would be no other person to take care of them since their mother is in hospital. This hinders their active their involvement as some noted here from the health workers.

"Others have tight work schedules, the mother may be here but when the father is working very far from town and not able to come and participate daily in the care of this baby or maybe he has not been able to make it here" (KII-5,32years, R/N)

"The fact that you find that these couples have other children at home so the father will tell you that I am not able to be there because they have to take care of other children." (KII-7,30years, SHO)

Lack of responsibility

Some of the fathers reported the lack of responsibility by their colleagues to intentionally fear taking on the caring role, as a major factor that prevented them from getting involved in the care of their preterms.

"So the issue of the fathers not coming here, that is one of the reasons that they intentionally fear responsibilities. Even some send the wife to her mother may be two months to delivery and the guy switches off the phone intentionally just to drop his role..." (IDI-11,39years, father of 3)

"They keep telling us for me once I give birth and my wife calls me that the child is sick, it is none of my business, am not the doctor to administer drugs…" (IDI-22: 39years, father of 6, with triplets)

Other fathers think that it's a woman's responsibility to take care of the baby in the NU and it's a waste of time for men to get involved in the care.

"...but others don't have responsibility they think those are matters of the mothers." (IDI-16,27years, father of 2)

"The problem is that we as men, see most of these things as a waste of time, even if we say they put educational gathering to teach these fathers still they will not come, as you can see many hospitals have tried to encourage women to come with their husband on antenatal clinic but still the turn up has not been good, and the woman reaches and says "he refused yet is a mature person you can't beat him." (IDI 15, 25years, father of 1)

Health workers added to the voice of the fathers that the fear of responsibility makes some fathers to run away from the care while others think they are still young to take up the responsibility of caring for their babies.

"Others just run away, that is the responsibility we are talking about like they don't care, others don't want the babies, others think they are too young to have children yeah, among others." (KII-2,24years, E/MW)

Uncertainty of paternity

A few fathers reported that being doubtful of true paternity of the preterm babies is one of the barriers to involvement in care. One of the fathers asserted that he had refused to get involved in the provision of care for the preterm baby because of being doubtful of paternity.

"I had refused to come because I was doubtful of being the true father of the preterm baby... but the main issue is, ladies cheat that is why most men or people don't want to come here to take care of the kids" (IDI-7, 30 years, father of 3)

Fear to be tested for HIV

A few fathers reported fear of being tested for HIV as a major barrier for their involvement in the care of the preterm babies. One of the fathers was quoted saying that a friend told him that the doctors will force you to do an HIV test and he realized this being a hindrance to care of their babies

> "*He told me, do you know doctors are going to force you to take HIV tests when you accompany your wife to the hospital! then I was like what is wrong with it if my wife has done it why not me? I felt like this guy if it was his wife, he could not come because he is fearing to take an HIV test." (IDI, 4,38years, father of 3)*

4.5.2 Interpersonal factors.

Discouragement by peers

Negative words from peers and relatives prevented fathers from providing care to the preterm babies. Fathers received discouraging stories from friends about the preterm babies' survival, the bad attitude of health workers at Kawempe and others were being told to leave their wives in hospital because of delivering preterms.

> *"These friends, there are those who will give you a story that discourages you to go to hospital, he will tell you, you see that Kawempe is hard place, health workers are hard to deal with" (IDI-17,26years,1st time father)*

> *"Sometimes being scared by the people we live with, discouraging us like now that baby who was delivered as a preterm, how will you handle till the end? It's just for trying and see, it can scare you because of the other people's suggestions" (IDI-24,32years, father of 6)*

Some fathers reported getting discouragements from family relatives and insults from gender related roles as they believed that some roles are not meant for men.

> *"Also another issue is,..., my relative gave birth to the baby when is too small and my dad told her to throw away the baby that he didn't want that baby here, now there are such people when they see that the baby has been produced as a preterm, they don't want to come and look at the baby and abandons the wife in the hospital but when there is no reason that has stopped him but just they don't want to look at such a preterm baby." (IDI 15,25years, father of 1)*

"They say when they find out that you are doing a role that is supposed to be played by a woman, they get ashamed in front of their fellow men, and that's what I told you that, if they find you helping your wife with fetching water, they will insult you, "your wife bewitched you, she will even make you wash her under garments", those are the things that have prevented many men from taking care of their babies." (IDI-22: 39years, father of 6 with triplets).

Poor relationship between couples

Most fathers pointed out that the poor relationship between the couples in their marriage was a major barrier to their involvement in the care of the admitted babies. Poor relationship can result from misunderstandings between the couples and misconduct of one of the partners and this was identified as a reason as to why some fathers don't come to the hospital.

"Another thing might be the misunderstanding at home that have been happening in the family before getting the baby, that can be an excuse for the father not to come and see his baby." (IDI-12,25years, father of 2)

Now things to do with coming to the hospital depends on the strength of the love you have at home in a marriage as a couple, for example... if there is no love at home, he will not come (IDI-23,35years, father of 3),

Health workers also revealed that fathers who abandoned their pregnant partners were less likely to be involved in the care of preterm babies.

"Some of them are family issues you cannot tell because when you ask the mother they will tell you the father abandoned me when I told him I was pregnant, just know such a father will not come to the hospital" (KII-3,31years, E/MW)

"On the other hand, I have seen that most mothers who do not have the fathers come to hospital, many of them report that they separated or were abandoned" (KII-8,31years, SHO)

4.5.3 Organizational/health facility level factors

Poor attitude of hospital staff.

Some of the fathers described the poor attitude from some hospital staff that prevented them from being involved in the care of preterm babies. It was reported by fathers that some health workers and security

guards give a negative response to the fathers whenever they are approached which discourages them from getting involved in the care of the babies.

> *"Sometimes your baby is not in good condition, not breathing well and you call the doctor and the doctor barks at you. So in this, you also lose hope" (IDI-3,40years, father of 2)*

> *"There is a health worker who has made life a bit hard for us, she cannot respond on time when we give her our concern..." (IDI 17-26years, 1st time father).*

The security guards give them a hard time; they don't listen to the concerns of the fathers as long as the mother of the baby is available.

> *"... the security guards also some of them give us hard time." (IDI-17,26years, 1st time father).*

> *"We first of all get issues with the security guard that, he doesn't allow us to go and see the baby when the mother to the baby is around. That is how you start having arguments and telling him that am the father of the baby and that's the mother of the baby, why don't we go together to check on our baby... he can refuse you and allows only one person, in that way my role to go and see the child is stopped. and you remain in dilemma asking yourself why am I stopped from going to see my baby, until you wait for the mother to tell you how the baby is doing." (IDI-15,25years, father of 1)*

The health workers also acknowledged that their poor attitude towards the fathers of these preterms at times prevents fathers' active involvement. One of the health workers was quoted saying...

> *"We the nurses, if the father comes in and you are very rude, I don't think they come next time" (KII-3, 31years, E/MW)*

> *"As I have told you attitude, if they come and you give bad attitude of course they will not bother coming back in special care unit." (KII-3, 31years, E/MW)*

Fear of high hospital bills and expenditures

The fear of paying hospital bills was reported to prevent most fathers from being involved in the care of the babies. Fathers reported that the constant need to spend on the hospital bills and other needs with in the facility scares them away.

"Some fathers think this hospital is expensive and they don't have money that brings them here" (IDI-3, 40 years, father of 2).

".. if you come in the hospital and the health worker sees you, like me I don't have money but at least the nature of work I do I can get 10000shs per day, but when the health work sees you they will ask for money. So most of them stay there behind the doors, they provide from there and let the mother to behave poor in front of the health workers.it even makes me think that, "is it because they see me around, that is why they over ask for money?", I think that is one reason that makes fathers not to come." (IDI-12, 25years, father of 2)

While others fear to spend on a baby admitted in a hospital where they are uncertain of their survival.

"In the government hospitals they also ask you for some money so the fathers are like but now this child at these months will it really mature so some people fear to spend." (IDI-3,40years, father of 2).

Health workers also confirmed that the fear to pay bills scares the fathers away although they reported that they don't ask any form of cash from the fathers but rather ask them to buy missing drugs for their babies.

"Some think they are going to ask money from them which is not true because we don't ask for any kind of cash here because most of the things we have them and if it is not around we shall write for them a note to go and buy but most of the time we have the medication we need so some may think it's all about finances they are going to pay" (KII-2,24years, E/MW)

Visiting restrictions

The majority of fathers interviewed unanimously acknowledged that they are usually denied easy access to the preterm babies by the hospital staff when they come to the hospital. They reported about various visiting restrictions including the cards they give them, strictness on the visitation time and the tough security guards. This prevented fathers from being involved in the care of preterm babies.

"The other challenge is that when am coming to see my child, I have to come with a card and they issue only one card. At times it is the wife who has first gone there then the guard will stop you from entering there so you stop there and go back. "(IDI-3,40years, father of 2)

"Once you reach the hospital, they refuse you to enter. And they try to ask you where the mother of the baby is; you try to explain but in vain, because for them they think that the mother should be the one taking care of the baby yet you know the mother is still sick." (IDI-16, 27years, father of 2)

Other fathers reported the fact that there are restricted visitation hours, time catches up with them and they fail to appear.

"You find time has caught you up and you cannot go see the babies because the visiting time is done" (IDI-14,26years, father of 3 with twins)

This was further confirmed by the key informant study participants who reported that this is done to prevent neonatal sepsis.

"We are fighting sepsis! if there many caretakers, everyone comes and touches the baby and we don't know where they have passed, yes we put water for them to wash their hands but some of them don't do it, so you see that you are doing this for nothing. You are preventing sepsis from them but they are just bringing it in. So sometimes we do restrict." (KII-3,31years, E/MW)

Long waiting time and long stay on admission

It was reported by some of the study participants that some fathers are prevented from getting involved due to long stay of admission of preterm babies. It was further reported that the long waiting time for accessing the preterm babies also prevents them from getting involved.

"The problem we have got is one, we were told to come in at 2pm and we have put that in mind but again when you reach, they tell you at 3pm and now you find many see the time they are going to wait for! so it ends up stopping many fathers to come." (IDI 17-26years, 1st time father)

"The long stay at the hospital, since these babies are neonates and are preterms, I expect everything to move in a process ...it's difficult to convince someone to stay and actively take part in the care of their babies" (IDI-11,39years, father of 2)

In this regard fathers reported lack of patience to wait for too long as some have to go for work and thus preventing them from getting involved in the care of babies at NU.

"…he cannot spend three days here taking care of the baby and the mother minus going to work. there will not be food so you find someone wants to come but the situation does not allow him to come (IDI-4,38years, father of 3)

Health workers affirmed to long hospital stay as the biggest barrier to fathers' involvement in the care of their admitted preterms.

"The biggest barrier here is the long stay in hospital because some can even stay here up to two months "(KII-8,31years, SHO).

4.5.4 Community/societal factors.

Inhibiting interactions between the father and the mother-in-law

The presence of mothers-in-laws prevented some fathers from being involved in the care of preterm babies. Most fathers acknowledged that it's against their socio- cultural background for them to come near their mother-in-law and hence their presence in the hospital was reported as a barrier in their involvement in the care of preterm babies.

"I have been confused, the mother of my wife could not come near me ...I was scared of those cultural things and I even told them next time I will not come back if things are like this...! everyone has their own ideas but some, if the mother of the woman will be there, then fathers will not come" (IDI-7,30 years, father of 3)

"Sometime the mother- in-law, their presence all affects men's involvement in the management of their babies, just like me I used to come here freely before but ever since she came to take care of her daughter, my coming was restricted as a father because of our culture you cannot be close your mother-in-law." (IDI-12,25years, father of 2)

Health workers also affirmed to the fact that some tribes in Uganda inhibit interactions between the mother in-law and the father of the baby thus her presence in the NU keeps the father away.

"Yeah our culture in Uganda for some tribes, you have to keep away from your mother-in-law ... and usually it is the mothers-in-law who comes to keep their daughter and then as a man to this woman you have to keep a distance, that's how it is." (KII-6,38years, pediatrician)

Unfulfilled cultural expectations

This was also reported as barrier to fathers' involvement in the care of their preterms by a few fathers, due to the fact that some cultures require the father to have fulfilled the cultural expectations such as paying dowry before having a baby with their daughters, however, this doesn't regularly happen and thus those fathers who fail to fulfill the expectations tend not to appear in hospitals especially when the parents of the mother of the preterm baby are present.

> *"In some cultures, if you don't pay dowry to the parents of your wife, you may even fear to look at them and if such an incident happens like what happened to my wife after giving birth to a premature baby, the wife was operated on and it was obvious that her parents had to come here. So if I had not gone to pay her dowry by now, I would be hiding, so those are some of the factors." (IDI-4, 38 years, father of 3)*

4.6: Suggestions to improve fathers' involvement in the care of the preterms admitted in the NU at KNRH

The suggestions are presented in line with the socio ecological model.

At individual level;

Counselling by expert fathers

Fathers in the study suggested that sensitization of fellow men by expert fathers or fathers of preterms who had a positive experience in the NU to encourage them to be there for their wives and babies.

> *"As for me, I think when I have a friend who has got an issue like this one and I notice that he has fear or has an idea of dropping his responsibility, for me who has ever experienced it, I can sit him down and counsel him and I tell him that the (baby) is your blood" (IDI-11, 39years, father of 3)*

At health facility level;

Health talks

Regular health talks provided by health workers to the fathers and other caretakers to teach them the importance of attending care with your partner.

"So what can be done is educating them to know the advantages and disadvantages of going with your woman in hospital for any care." (IDI-15,25years, father of 1)

This was further affirmed by health care providers who suggested that these talks should start from the time of ANC.

"Through good antenatal care I think if they talk to the fathers while they are still in antenatal because they will know they have to escort their wives to hospital for delivery and whatever the birth outcome" (KII-3, E/MW)

Counselling from health workers

Most fathers suggested that they needed counselling from the healthcare providers to keep encouraging them so that they keep coming with their partners to take care of the babies.

"Just to keep encouraging them especially the nurses who first see these men, tell them that they should keep coming and be around for their wives. and let them know why we need them to be around and be part of the care system." (IDI-17,26years, 1st time father)

Change of bad attitude of hospital staff

The fathers also suggested that the hospital staff should change the bad attitude towards them such that they can be a bit friendly and approachable, and also adjust on the restrictions of fathers to access the hospital.

"I would say that the health workers also can try to be friendly to these fathers, in so doing they will be motivated to come more, well knowing they will not be chased out. Even the cleaners also need to handle the care takers well other than harassing us." (IDI-17,26years,1st time father).

Provision of free hospital services

Fathers suggested that the government should provide free services to the patients and avail drugs in the hospital to avoid asking caretakers to buy unavailable utilities in the care of the babies.

"For these fathers the motivation is to prove that everything is free like the medicines because sometimes you come here and they ask you for money and you feel like not coming back" (IDI-7,30 years, father of 3)

At community /societal level.

Sensitization of community members.

Most fathers suggested that the community should be sensitized on the roles of fathers in the care of their preterms and the dangers of them neglecting their families

> *"Sensitization through mass studies to teach them the reasons why they should be able to take care of their children in the nursery and the dangers of neglecting their children because a good father is one who takes responsibility and stands up for his family in all situations." (IDI-2, 50 years 1st time father)*

Health care workers in the NU also added up to the voice of sensitizing the community through mass media communication

> *"The Media if they could have talks telling the fathers to involve themselves even in hospital, those programs should be put on televisions other than Nigerian movies even on televisions of the hospitals." (KII-9, N/O)*

Policy

The fathers also suggested that the government should put in place a policy to make it mandatory for fathers to get involved in care of their admitted babies.

> *"I think setting up laws by the parliament on such issues ensures that fathers take care of their babies." (IDI-2,50years,1st time father)*

CHAPTER FIVE:

DISCUSSION OF RESULTS

5.1 Introduction

The major aim of this study was to explore the factors affecting fathers' involvement in the care of preterm babies admitted to the neonatal unit at Kawempe National Referral Hospital.

The study results are discussed in line with the major themes of the study and in association with the socio-ecological model in exploration of the perceived and actual roles played by fathers in the care of preterm babies, facilitators of fathers' involvement in the care of preterm babies, and barriers of fathers' involvement in the care of preterm babies in the NU at KNRH.

5.2 Perceived and actual roles played by fathers during the care of preterm babies admitted in the neonatal unit at KNRH.

The study findings showed that fathers played the role of providing financial support during the care of preterm babies. Most fathers acknowledged that it is important to provide financial support to meet the basic needs of the mother and the admitted baby. The provision of food, pampers, drugs and other things that are not readily available in the hospital was one of their key roles that they perceived, played in the care of preterm babies. The health workers also acknowledged that these fathers were expected to provide financial support to the mother and baby which they actually did. Similar to our findings, a study done in Italy on the role of fathers and psychologists in the neonatal intensive care unit by Franco Baldoni et al described how fathers dealt with practical problems in terms of ensuring a comfortable and safe home, provision of financial support to cater for food and other necessary goods relating to extra familial environment (7). This is because both the society and the health care system (especially during antenatal) encourage fathers to take on the role of financial support to their families.

Fathers were expected to provide emotional support to mothers. This was a perceived and actual role that most of fathers reported during the care of their preterm babies in the hospital. Fathers affirmed that their physical presence and words of encouragement through counselling soothed the minds of mothers and brought a feeling of solidarity in the care of preterm babies. Similar findings were also reported by a study done by Bry et al. at a university hospital in Sweden on psycho social support of parents of preterms which showed that parents of extremely premature infants needed various forms of emotional support at the NICU, including support from staff, professional psychological help and/or companionship with other

patients' parents. Parents were highly variable in their desire to discuss their emotional state with staff (45). Although fathers played a role of providing emotional support to their mothers, they also seemed bothered by the state of their babies suggesting they may also need support although they fronted the need for emotional support for their spouses. These findings are in line with other studies like a study by Govindaswamy et al..(46) done in Australia about the fathers needs in a surgical neonatal intensive care unit which reported that items related to personal physical comfort emotional support (including parent support groups) were consistently rated among fathers' lowest needs. This may reflect fathers' focus on their critically-ill infant and their tendency to prioritize the comfort and support needs of the mother and infant above their own. This finding is supported in a recent review by Ireland et al...(18) which concludes that most fathers generally prefer a 'back-ground' supportive role and give priority to the needs of mothers and infants .Another study on parents' coping experience in Neonatal intensive care unit(NICU) in Norway (47) revealed that coping seemed easier where parents' opinions were heard regarding their baby's care and when both parents were present in the neonatal intensive care unit. This is because most mothers are stressed by the mere fact that their babies never reached term, so this support is really needed to cope with the situation.

Fathers were also involved in direct baby care activities. In this study, most fathers acknowledged that providing direct care to the preterm babies was one of the key roles they perceived and actually played. The fathers reported that they were directly involved in feeding babies, changing diapers, providing warmth in form of kangaroo care and ensuring that doctors administer the drugs on time by giving reminders at the right time. Previous studies have also reported fathers' involvement is mostly related to the provision of shelter, food and other needs of the family (29) . Other studies regarded activities such as feeding, bathing, grooming and nappy changing as a woman's domain and if done by a man is regarded as a favor or an "extra job" (16). Another study done by Baldoni F et..(7) from Italy on being a father of preterm baby, revealed how both fathers and mothers performed daily child care activities such as tube feeding, mouth care ,and unrestricted nappy change and un restricted skin-skin contact with their babies during the COVID-19 pandemic lockdown. It was noted that hospital staff nurtured the parents especially fathers and gave them an opportunity to establish an intimate contact with their preterm, thus improving their confidence in their parental role and as primary caregivers during this difficulty time. This is so because the health care team in NU have always encouraged fathers to take on the role of caring for the preterms as the mothers are still critically ill and not interested emotionally.

This study showed that fathers played a protection role to both the mother and the baby. This was reported to have been done through being present and monitoring babies condition, various engagements with the health workers where they informed them of the health status of both the mother and the baby. In compliment, the health workers reported that the presence of the father fills up the gap that might have been left by the mother while instructions are being given by health providers in the care of the babies. In line with our findings, a study done on fathers of preterms in NU in Italy, most of the fathers interviewed believed they had the role of protecting both the preterm infant and the mother, looking after the family's best interests; however, at the same time, they felt that they themselves needed support (31).It revealed that the fathers' most common way of protecting their partners from further upheavals was to avoid showing and, in some cases, to hide their own worries and feelings. However, all the fathers' reports suggest that, behind their idealized role as the protector of their partner, they might be hiding the deployment of defense mechanisms protecting themselves from the reality of their own inner experience(31).

Providing physical support to the mother was another role for fathers as revealed by this study. This study found out that the physical support provided involved carrying the preterm baby, carrying of luggage and carrying food for mother of preterm babies. Similar to our findings, a study in USA by Burke (30) revealed that the fathers would engage in supporting the partner. Their study found that being supportive as a father was sometimes a difficult task. It was important to make sure the mother was both physically and emotionally well. Some mothers needed physical support after they had given birth, especially if they had a cesarean section, had lost a lot of blood, or had other complications. The father was available to ensure availability of extra feeds to allow the mother time to eat, have some time to rest. Most mothers are subjected to cesarean section for different reasons, hence they can't carry on any role of feeding the baby, this is also added onto the fathers' roles.

Provision of spiritual support to both the mother and the preterm baby was among the roles fathers perceived and actually played during the hospitalization of their babies. This spiritual support was in terms of prayers and trusting God for life of the baby and her mother, so that they are discharged alive. Similar to our findings, a study done in USA on brief reflections from mothers and fathers in the neonatal intensive care unit showed that parents who presented to the NICU with a religious or spiritual background indicated their faith grew as a result of their experience in the NICU (48).

5.3 Facilitators of fathers' involvement in the care of preterm babies admitted in the neonatal unit at KNRH.

The facilitators of father's involvement in the care of preterm babies were grouped into individual, interpersonal, organizational/health facility and societal/community factors as guided by the socio-ecological model(25).

At individual level, the facilitators identified by this study included, improvement in the health condition of the preterm baby, fulfilling responsibility as a father, desire to know progress of baby's health, desire to support the wife, love for the baby and mother, the joy of giving birth to a firstborn, desire to learn how to take care of preterm babies, critical illness or death of the spouse and desire to have more babies in future. In line with our findings, a study done in Canada by Feeley N et al…(16)showed that fathers involvement could be reinforced by positive feedback from the child. Fathers looked for and often enjoyed the response of their infants to their involvement. This acted as a sign of improvement in the health condition of the preterm.

Fathers considered fulfilling their responsibility as fathers in the care of the preterms as a facilitator to their involvement and this was similar to a study done in north Ethiopia which reported that fathers considered child care provision as responsibility for both the father and the mother (49).

In another study done in Kenya about parents' perception of the quality of pediatric oncology in-patients care revealed that the desire to know the progress of the baby's health was a reported facilitator of fathers involvement(50) ,and was in line with another study from Canada (16).

The love for the baby and mother which creates a bond between the father and the baby and promotes cognitive development of the baby was one of the main facilitators. Similarly, a study conducted in New York found that fathers' involvement enhances bonding between the father and the baby(51). According to Heinemann A, opportunities to keep around over the night with their babies and taking care of them empowered parents in their roles and their motivation to stay in the NU. Kangaroo mother care participation made them to feel in control and needed, which facilitated their presence (32). This suggests that more involvement in caregiving would be a motivating factor for fathers to frequently visit the baby at the hospital and create more chances for them to get involved in care as it would help them feel more responsible for their newborns.

Fathers pointed out that their wives might be in critical states after delivery or died after delivery which compelled some fathers to take care of their admitted preterm babies. These findings were consistent with findings from a study done by Dadkhahtehrani and colleagues in Iran which found that the critical condition caused by the early birth made the fathers feel that the family members were vulnerable and needed their support more than ever. Therefore, a sense of responsibility has been strengthened in them and they applied all of their power to support their family and meet their needs. They took care of their wives and other children and did the household chores in the absence of their wives or during their illness. (52)

The interpersonal factors reported by this study included family and friends support in terms of financial, physical and emotional support and good relationship between couples. In line with these findings, a similar study reported that family and friends helped in difficulties in coping with ongoing medical needs, feeding, parenting post-discharge(53). Our findings support the notion that the social context influences involvement and the different sources of support that impact on involvement, including encouragement from the spouse and instrumental or emotional support from extended family(16).

In our study, most participants were married and emphasized that a good relationship between married couples was a major motivator for fathers to get involved in the care of their preterms admitted in the NU. This was further expressed by the fact that the two individuals have a good understanding of the current problem and are ready to face the challenges together. Most health care providers also affirmed to the fact that most fathers who are married and are in a good relationship with their wives get involved actively in the care of their admitted babies as opposed to the co-habiting or un married couples. This finding is consistent with a study done among Jewish fathers by Kaitz M et al on temporal changes in fathers' affective experience during the first year of parenthood which indicated that a satisfying marital relationship is expected to provide new parents with a secure base from which they can meet the challenges of parenthood with confidence and feelings of self-efficacy, knowing that they are not alone in their endeavors(15).

At the organizational/health facility level, the current study revealed that the quality of the services played a big role in facilitating fathers to care for their preterm babies. Fathers acknowledged that the good quality of services delivered by the health facility is a motivation factor for them to get involved in the care of their preterm babies. Fathers further explained that good quality of services in terms of the availability of instruments, good hygiene and the good attitude of health workers gives them hope that their babies will

get well soon. In this study, some fathers reported that their involvement in the care of preterm babies was as a result of the motivation they received from the health workers. Fathers reported that the motivation taught them the importance of father's involvement and therefore motivated their involvement. The health workers too believed that their encouragement influenced their involvement positively. Previous studies have reported the physical environment and the quality of services offered at the hospitals where the babies were admitted as another factor that influences fathers in being involved in care activities. A research conducted by Feeley et al. in Canada reported that open-spaced beds allowed the fathers an opportunity to see their colleagues hold the babies and get involved in care activities which helped them realize that it was possible to get involved in care. It was reported that having health care workers who cared much about their babies also encouraged them to be with their babies(16).

At the community/ society level, culture and religion were paramount facilitators that influenced father's care to preterm babies. In this study, the fathers acknowledged that religion is among the facilitators that motivate their involvement in the care of preterm babies as they are continuously reminded to be responsible parents who should always fend for their children. Fathers also acknowledged that counselling and support they received from fellow community members was a very big factor that facilitated their involvement in the care of preterm babies. Previous studies have indicated that some cultural beliefs made fathers consider some roles as feminine hence not taking part in care. Various studies reported that childcare was culturally considered a feminine role and this necessitated a shift of mentality to help fathers realize that they could also take part in caregiving activities(54-56). Other factors that emerged as facilitators to the fathers' involvement included the joy of giving birth to a first born, and desire to learn how to take care of preterms.

5.4 Barriers of fathers' involvement in the care of preterm babies admitted in the neonatal unit at KNRH.

The major barriers to fathers' involvement in the care of preterm babies were categorized into individual, interpersonal, organizational/health facility and societal/community factors in line with the SEM(25).

At individual level, fathers acknowledged that fear of preterm babies is one of the barriers of fathers to get involved in the care of preterms. Fathers reported that they feared to harm the preterm babies since they looked very small and fragile. This scares them and thus discouraging them from being involved in the care of preterm babies. Previous studies have also reported that fathers' involvement was hindered by baby-related factors like their small size, for example a study conducted in Malawi reported that

caregivers, including fathers, were afraid of holding the preterm newborns because they looked small and fragile, and the caregivers feared harming them(55), which is consistent with findings from studies conducted in other countries like Ethiopia(49)and Iran (57). The fathers have always feared preterms because of their small size, fear of breaking their bones, or causing injury to them.

Financial constraints were also reported to hinder fathers' involvement in the care of the preterm babies. In this study, most of the fathers were employed and still acknowledged that financial challenges prevent them from being involved in the provision of care to their preterm babies since they may not afford to move to the facility on daily basis as well as providing other essential needs to both the mother and the preterm baby. Similar to our findings, a study by Taing et al....on factors influencing paternal attachment done in New York (51) reported fathers acknowledged that their inability to raise enough funds for the provision of care as a barrier to their involvement in the care of preterm babies. Furthermore, in a study among fathers hospitalized preterm newborns done in Malawi (26) ,it was found that, fathers struggle to meet the babies' needs. As such, they spent much of their time away from the hospital searching for resources that would enable them to provide for the baby's needs and this reduced the time they would be at the facility providing care to the baby. Similarly, other studies included a study by Dadkhahtehrani from Iran which high cost of hospitalization and treatment of neonates was the most important issue that all the fathers mentioned. Most of them were young and experiencing fatherhood for the very first time. Thus, they did not have enough savings (52). The financial role has been perceived by fathers as their sole responsibility but most fathers in our study were young and with low earning jobs hence they were prone to financial constraints. Also very few families from which the father come from were supportive during this critical time.

This study further established that fathers are usually engrossed in busy work schedules and other responsibilities thus, left with very little time to get involved in the care of preterm babies. Fathers reported that one biggest challenge they faced was working in formal employment sectors where it becomes so hard for the bosses to give them time off to take care of their admitted babies and therefore some of them end up delegating their relatives. Others reported having other responsibilities such as taking care of home activities and children left at home. This is consistent with findings from other studies done in Malawi where work and other responsibilities have been reported to impend fathers' involvement in the care of hospitalized preterm newborns (26).

At interpersonal level, discouragements from relatives and peers was cited as one of the barriers to fathers involvement in the care of preterms. Fathers received discouraging stories from friends about the preterm babies' survival and the bad attitude of health workers at Kawempe while others were being told to leave their wives in hospital because of delivering preterms. Some fathers reported getting discouragements from relatives and insults from gender related roles as they believed that some roles such as taking care of babies in hospital are not meant to be done by men. This was in agreement with a study done in Iran where their culture promotes family involvement but family members make negative and offensive remarks regarding preterm infants because Iranians do not perceive preterm infants as normal human beings because the Iranian socio-cultural structure is based on glorifying the perfect form and finding a reason to discard anything less than perfect, and another in Malawi on fathers of preterms (26) whereby the fathers considered some roles as belonging to women and they could only do them when the mother is sick or busy with other tasks. This is based on the belief that infant care was traditionally a female role while the fathers have to provide for the family's needs.

In this study, poor relationship of couples in marriage was a barrier to fathers involvement. The misunderstandings between couples or misconduct which resulted into fathers abandoning their wives. On the contrary, a study done by Stefana in Italy on fathers of hospitalized preterms in NU revealed that concerning the couple relationship, the fact that the degree of collaboration between partners in the division of infant-care tasks was regarded as good, regardless of the quality of the couple bond suggests that both parents put the baby's well-being first.(31)

At health facility level, poor attitude of some hospital staff was reported as a barrier to father's involvement in the care of preterm babies. It was reported by fathers that some health workers and security guards gave a negative response to the fathers whenever they were approached which discouraged fathers from getting involved in the care of the babies. In line with our findings, a study by Mhango et al…(26) in Malawi reported that the behavior of other providers prevented the fathers from being involved whereby some health providers were rude in communicating with them while other providers preferred communicating with the mothers than the fathers which impeded fathers' involvement in care. Other researchers have also speculated about possible barriers to involvement, and these include nurses' beliefs about fathers' role (36) whereby nurses believe that social interaction and handling of the baby by fathers is stressful for the immature baby, so they will limit parent's involvement (37) and fathers' own belief that nurses and mothers provide the best care (38). Finally, on another level, mothers, more so than fathers,

tend to perceive good treatment by the staff as a facilitator and poor treatment as a barrier for parental presence. In other words, mothers are more sensitive towards treatment by NU staff, while fathers place less emphasis on treatment by staff in their decisions to be present or otherwise(10). This result clearly corresponds to prior reports from a study from Australia(58), where the fathers were often the ones to initiate a complaint when the parents deemed that the staff behaved inappropriately or inadequately.

The fear of high hospital bills and expenditures were also barriers to father's involvement in caring for preterm babies. This study revealed that the fear of paying hospital bills prevented some fathers from being involved in the care of the babies despite the fact that the hospital is a government facility where services are expected to be free. Fathers reported that the constant need to spend on the personal needs and the things that are not readily available at the hospital scares them away. In a study by Feeley at al…(16) on fathers' perceptions on barriers and facilitators to their involvement with their hospitalized newborn in Canada, revealed that fathers acknowledged that their inability to raise enough funds for the provision of care affects their involvement in the care. In another study by Mkandawire et al…done in central Malawi ,fathers reported that all that the baby needs at the moment required money which most of them did not have hence they spent much of their time away from the hospital searching for resources that would enable them to provide for the baby's needs and this reduced the time they would be at the facility providing care to the baby(54).These findings are similar in these studies were conducted in referral hospitals of the respective countries.

At the community level, inhibiting interactions between the father of the baby and the mother in-law and unfulfilled cultural expectations were reported. The presence of mothers-in-laws prevented some fathers from being involved in the care of preterm babies. Fathers acknowledged that it's against their social cultural practice for them to come near their mother-in-law and hence their presence was reported as a barrier in their involvement in the care of preterm babies. This was a peculiar to this study and a renown cultural belief among the bantu ethnic group in Uganda (59).

Previous studies have reported that gender roles and cultural beliefs prevented the fathers from being involved in the care of the babies. Mhango et al (26) reported that fathers considered some roles as belonging to women and they could only do them when the mother is sick or busy with other tasks. This is based on the belief that infant care was traditionally a female role while the fathers have to provide for the family's needs (56). Other factors that emerged as barriers to fathers involvement in the care of our preterms include the lack of responsibility by fathers, uncertainty of paternity, fear to be tested for HIV.

5.5: Strengths of the study

This study involved fathers and health workers which provided opportunity for triangulation.

Use of male research assistants not associated with NU at KNRH allowed more open and honest responses by the fathers.

5.6: Limitations of the study.

The study was conducted on fathers whose babies were still under care in the NU thus some participants may have been biased in their responses (courtesy bias). However, this was minimized by use of research assistants who were not involved in the care of preterms at the hospital.

Strict visitation hours of fathers in the neonatal unit, limited the participants' recruitment in the study as few fathers would be available for the care of their preterms in NU.

The study was a hospital based research thus prone to selection bias of participants.

CHAPTER SIX:

CONCLUSION AND RECOMMENDATIONS.

6.1 Conclusion

Most of the perceived roles were actually played by fathers in NU, and they included provision of financial support, provision of emotional support, participating in direct childcare activities and physical support to the mother. These were confirmed by the healthcare providers working in the NU.

The facilitators and barriers ranged from those considered personal, interpersonal, to those related to health facility and community. The main facilitators of fathers' involvement in the care of the admitted preterms among which included; improvement in health condition of the preterm baby, fulfillment of fathers' responsibility, desire to support the wife, support from friends and relatives, good quality of service delivery, motivation from health workers, and good experience from community members and positive cultural and religious beliefs.

The major barriers included; fear of preterm babies, financial constraints, busy working schedules and other responsibilities, discouragements from peers, poor attitude of hospital staff, fear of affording high hospital bills and expenditure and unfulfilled cultural beliefs and expectations and; these required ways of mitigation to promote fathers' involvement in the care of the preterms admitted in the NU at KNRH.

6.2 Recommendations

Heath workers in KNRH should sensitize fathers on their roles and need for their involvement in the care of preterms in the NU.

Health workers should continue counselling and encouraging fathers to participate in maternal and child care.

Hospital management should train hospital staff to ensure positive attitude as they interact with fathers and provide the drugs and other necessary supplies to reduce the economic burden on fathers.

The government and ministry of health should set up a policy to promote male involvement in the care of babies admitted in the NU.

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APPENDICES:

APPENDIX I: INFORMED CONSENT FORM FOR FATHERS OF PRETERMS (ENGLISH VERSION).

Title of the study:

FACTORS AFFECTING FATHERS' INVOLVEMENT IN THE CARE OF THEIR PRETERMS ADMITTED IN THE NEONATAL UNIT AT KAWEMPE NATIONAL REFERRAL HOSPITAL.

Study number: ……

Principal investigator: Dr. Ssekatawa Wycliffe, Senior House Officer in the Department of Obstetrics and Gynecology at Makerere University College of Health Sciences.

Brief background and rationale for the study: I am Dr. Ssekatawa Wycliffe, pursuing a Master's degree in Obstetrics and Gynecology at Makerere University College of Health Sciences. I am carrying out a research to understand the factors affecting fathers' involvement in the care of their preterms admitted in the neonatal unit at Kawempe National Referral Hospital. Globally, 15 million babies born premature annually. Most of the preterm births occur in sub-Saharan Africa and South Asia, yet prematurity is among the leading causes of death in children below 5 years of age and. Fathers' involvement in the care of preterm babies in Neonatal unit may have good outcomes for babies and mothers. Despite the need for the involvement of fathers in the care of preterms, there are few fathers participating in the care of the preterm babies. Therefore, understanding the factors affecting their involvement in the care will enable increase their participation and improve on maternal and neonatal outcomes.

Purpose of the study:

The purpose of this study is to explore the factors affecting fathers' involvement in the care of their preterm babies admitted in the neonatal unit at Kawempe National Referral Hospital. The results of this study will help in creating awareness to the individuals, health workers, communities and policy makers about Strengthening of a holistic preterm care delivery and promote family centered care. This will provide a platform for further studies.

Duration of involvement: This process will take utmost 45 minutes.

Procedure: If you agree to participate in this study, written informed consent will be sought from you by the principal investigator or his research assistants, either in English or Luganda. You will then be

interviewed face to face by a trained research assistant or principal investigator and information will be audio recorded. Roles of fathers, facilitators and barriers to their involvement in the care of their preterm babies admitted in the neonatal unit will be obtained from you using an interview guide.

Who will participate in the study:

All fathers whose preterm babies are admitted in the neonatal unit and the attending health workers at Kawempe National Referral Hospital and meet the inclusion criteria will be recruited into the study.

Risks/Discomforts: The study may not pose any risk to the participants and this will not affect health care given to the babies in neonatal unit.

Benefits: There are no direct benefits to you but the information gathered will help to create awareness on fathers' roles, facilitators and barriers of your involvement in the care of the preterms in the neonatal unit at Kawempe National Referral Hospital, to promote family centered healthcare and good neonatal outcomes, and to add to the body of knowledge in the scientific world.

Confidentiality: Your names will not appear anywhere on the study forms. A study identification number will instead be used. Your records will only be accessed by the research team and probably by local Research Ethics Committee (REC) where need be. The information will only be used for the purpose of this study and no publication of this study will use your name or identify you personally.

Participation in this study is not mandatory. You have a choice to discontinue from the study once you feel uncomfortable to progress. There will be no discrimination against you.

Cost: The study will be conducted from the hospital and you will not incur any costs. However, you be compensated for you time to participate in this study.

Compensation: You will be compensated 10000Ugsh for your time given to participate in this study.

Questions: In case of questions or problems related to the study, you can ask now or contact Dr. Ssekatawa Wycliffe at the Department of Obstetrics and Gynecology, Makerere University college of Health sciences or on mobile phone number +256-781692370 at any time during the study. If you have any questions concerning your rights while you participate in this study, please address them to the School of Medicine Research and Ethics Committee Chairman Prof. Ponsiano Ocama on Telephone 0772421190.

Your rights as a research volunteer: This form gives you information about the purpose and the details of the study you are about to consent to. Once you understand the study, and agree to participate in it, you will be asked to sign this consent form. You will also be given a copy of the form to keep. Your participation in this research is entirely voluntary. You may decide to withdraw from the study at any time. Such a decision will not affect the medical care given to your preterm baby or possible participation in future research studies in any way.

Statement of voluntariness:

Participation in the study is voluntary and you may join or leave at free will. You have a right to withdraw from the study at any time. There is no penalty associated following withdrawal from the study.

Dissemination of results:

You will get feedback on findings and progress of the study and any new information that affects the study or data that has clinical relevance to research participants (including incidental findings) will be made available to research participants and/or their health care providers.

Ethical approval: Permission to carry out this study was sought from the department of Obstetrics and Gynecology and ethical approval to carry out the study has been granted by the school of medicine research and ethics committee.

Informed consent: I have been informed that Dr Ssekatawa Wycliffe is carrying out a study to explore the factors affecting fathers' involvement in the care of their preterms admitted in the neonatal unit at Kawempe National Referral Hospital. This study is being conducted as a partial fulfilment for the award of a degree in Masters of Medicine in Obstetrics and Gynecology of Makerere University. By this form a written consent is being sought for my participation in the study.

Statement of consent:

..... has described to me what is going to be done, the risks, the benefits involved and my rights regarding this study. I understand that my decision to participate in this study will not alter my baby's usual medical care. In the use of this information, my identity will be concealed. I am aware that I may withdraw at any time. I understand that by signing this form, I do not waive any of my legal rights but merely indicate that I have been informed about the research study in which I am voluntarily agreeing to participate. A copy of this form will be provided to me.

Name of participant…….

Signature/thumb print of participant ……. Date …….

Name of witness……

Signature of witness (if applicable) ……

Date…….

Name of interviewer ……

Signature of interviewer…… Date …….

APPENDIX II; INFORMED CONSENT FORM FOR FATHERS OF PRETERMS (LUGANDA VERSION)

OLUPAPULA BATAATA KWEBAKKIRIRIZA OKWETABAMU.

OMUTWE: ENSONGA BATAATA KWEBASINZIILA OKWENYIGIRA MU KULABIRIRA ABAANA ABAZALIBWA NGA TEBATUSE ABAWELIDWA EKITANDA MU NASALE YE DWALIRO EKULU ELY'E KAWEMPE.

Enamba y'okunonenkereza; ……

Omunonyereza omukulu: Dr.Ssekatawa Wycliffe, asoma eby'obukugu mu kujanjaba bakyala ku yunivasite y'e Makerere College of Health Sciences.

Enyanjula mu bufunze ne Nsonga yo kunonyereza. Nze Dr. Ssekatawa Wycliffe, nga nsooma diguuli eyo kubiiri mu ndwadde za bakyaala ku Yunivasite e Makerere. Ndi mu kunonyereza okuzuula ensonga ba taata kwebasinziila okwenyigira mu kulabiririra abaana abazalibwa nga tebanatuuka nebaweebwa ebitanda mu nasale e Kawempe National Referral Hospital. Mu nsi yonna buli mwaka miliyoni kumi nataano eza baana bazalibwa tebanatuuka, ate nga abaana abasinga abazaalibwa nga tebanetuka basinga kubera mu maserengeta ge Dungu Sahara mu Afirika ne mu maserengeta ga Asia. Abaana okuzalibwa nga tebanatuuka yemu kunsonga ezisinga okutta abaana abali wansi we myaka etaano. Bataata okwenyigira mu kulabilira abaana abazalibwa nga tebatuuse mu nasale kisobora okuretawo enjawula enungi ku baana ne ba maama. Wadde nga waliwo obwetavu bwa ba taata okwenyigira mu kulabilira abaana abazaalibwa nga te banetuuka, waliwo bataata batono abenyigira mu kulabilira abaana abo. Nolwesonga eyo, okuzuula ensoga kwebasinziila okwenyigira mu kulabirira abaana abazalidwa nga tebanetuuka kijja kuyambako okwongeza ku muwendo gwa bataata abeyigira mu kulabirira abaana abazalibwa nga tebanetuuka no kulungosa empereza ya matineti ne abaana abakazalibwa.

Ensonga enkulu lwaki tunonyereza

Ensonga enkulu lwaki tunonyereza eri nti twagala kuzuula ensonga ba taatakwebasinziila okwenyigira mu kulabira abaana abazalidwa nga tebanettuuka abaweredwa ebitanda mu nasale ye dwaliro ekulu ely'eKawempe. Ebinava mu kunonyereza kuno bijja kuyamba okutekawo okumanya eri ba taata, abasawo, ne abateesa entabula ye byobulamu bagumizze edabilira yabaana abatanetuukano ku pulomotinga famile zenyigire mukulabilira abaana bano. Kino kijja kutekawo ensonga z'okwongera okunonyereza mu maaso eyo.

Obudde bwokwenyigira mu kunonyereza

Okunonyereza kujja kutwala ekineene enyo eddakiika anna mutaano.

Ebigobererwa: Bwokiriza okwetaba mu kunonyereza kuno, omunonyereza omukulu oba abamuyambako okunonyereza bajja kufunako olukusa mubuwandiike mu lulimi oluganda oba mu lungereza.

Omunonyereza omukulu oba abamuyambako okunonyereza bajja kubuuza ebibuuzo maaso ku maaso nga bweba likoodinga amaloboozi. Emigaso gyaba taata,ensonga ezibaletera ne zibaziyiza okwetaba mukulabilira abaana abatanetuuka abaweledwa ebitanta mu nasale zijja kufunibwa nga tukozesa yintaviyu.

Ani anenyigira mu kunonyeereza

Ba taata bona nga abaana babwe abaazalidwa nga tebanetuka baweredwa ekitanda mu nasale ye dwaliro ekulu ely'e Kawempe ate nga batuukana no mutindo okugobererwa okulonda abanenyigira mu kunonyeereza.

Obulabbe.

Okwenyigira mu kunonyereza kuno kuyinza obutakutuusako bulabe bwona ela nga kino tekijja kukosa bujanjabi buweebwa baana mu nasale..

Ekuganyurwamu: Tiwaliiwo birungi bya mpagirawo byofunamu naye ebikunganyizidwa mukunonyereza bijja kuyambako mu kuleeta wo okumanya ku migaso gya ba taata, ebibaletera ne ebibakugira okwenyigira mu kulabirira abaana abazaalidwa nga tebanetuuka abaweledwa ebitanda mu nasale ye dwaliro ekulu ely'e Kawempe.

Okulembeza okumanyisa obujanjabi obwesigamizidwa ku famile ne bibala ebirungi ebiva mu kujanjaba abaana**,** no kwongera ku kumanya mu nsi ya sayansi.

Okukuma ekyama: Amanya gamwe tegalina wegagenda kulabikira ku lupapula lwe bibuzo. Enamba eyanjawulo yejja okozesebwa. Ebikujidwako bijja kuba bisobola kulabibwako ba timu enonyereza yoka mpozi n'abo abakola ku kakiiko akalwanirira eddembe lyaabo abetabye mu kunonyereza mu kitundu wamu ne muggwanga (Local Research Committee (REC) ne Uganda National Council for Science and Technology) singa kiba kyetagisa. Ebibajidwako bijakozebwa mu kunonyereza kuno kwoka ate era teli kiwandiko kya kunonyereza kuno kijja kozesa linya lyo oba kunokolayo muntu sekinomu.

Okwetaba mu kunonyereza kuno sikwalukako,era osobola okuvamu saawa yona kasita owulira nga tolimwetefutefu kweyongerayo n'okunonyereza okugenda mu maaso.

Ebisaale no kusasulwa:

Ojja ku sasulwayo omutwalo gwa Uganda gumu singa osalawo okwenyigira mu kunonyereza kuno olwobudde bwonaba otaddemu.

Ebibuuzo:

Bwe wabawo ekibuuzo kyona oba obuzibu bwona obwekusa ku kunonyereza kuno, Osobola okubuuza kati oba webuuze ku Dr.SSekatawa Wycliffe owe department ya obstetrics and gynecology e Makrere college of health sciences oba ku namba yesimu 0781692370 esaawa yona mu musomo gwo' kunonyereza.Bwe wabaawo ekibuuzo ebikwatagana nedembe lyo okwetaba mu musomo gwokunonyenkereza,webuuze ku kyeyamani wa School of Medicine Research and Ethics Committee Prof. Ponsiano Ocama ku simu namba 0772422190.

Edembe lyo nga Eyewadeyo okwenyigira mu kunonyereza:

Olupapula luno lukuburira ebikwata ku nsonga enkulu eyo kunonyereza ne byona ebikwata ku kunonyereza kwonatera okukiriziganya okwenyigiramu. Bwoba otegenda okunonyereza kuno, nokiriza okukwenyigiramu, osabibwa okuteka omukono gwo ku lupapula luno olulaga nti okiriza okwetaba mu kunonyereza watali kukakibwa. Era ojja kuwebwa ne kope yo lupapula luno ogitereke. Okwenyigiirakwo mu kunonyereza kuno kulina kuva mu kusalawo kwo. Osobola okusalawo okuva mu kunonereza kuno obudde bwona. Okusala bwekutyo tekujja ku kosa bujanjabi buwebwa omwana wo eyazalibwa nga tanatuuka oba okwenyigirakwo mu kononyereza okwo mu biseera ebyo mumaaso mungeri yona.

Okusalawo kyeyagarire:

Okwenyigira mu kunonyereza kuno kwakyeyagalire era oyinza okusalawo okukwenyigiramu oba okukuvamu nga bwoba oyagadde. Olina eddembe okuva mu kunonyereza kuno obudde bwona. Tewaliwo kibonerezo kiwebwa muntu avudde mukunonyereza kuno**.**

Okufulumya ebivudde mu kunonyereza:

Ojja kufuna obubaka obukwata ku bizuulidwa ne kuntabula yo kunonyereza ne kipya kyona ekizulidwa ekikosa okunonyereza oba data yena alina kyayogera ku byo bulamu byabo abenyigidde mu kunonyereza bijja kuwebwa abe nyigidde mu kononyereza oba na basawo babwe.

Okuwa Olukusa

Olukusa olukiriza okukola okunonyereza lwa sabibwa okuva mu tabbi elikola ku ndawadde za bakyala (department of obstetrics amd Gynacology) ate era Okusalawo kwe mpisa okukola okunonyereza kuno kwa webwa School of medicine research and ethics committee.

Okusalawo kyeyagalire:

Nze ntegezedwa nti Dr. Ssekatawa Wycliffe ali mu kola okunonyereza okuzula ensonga ba taata kwebasinziila okwenyigira mu kulabilira abaana abazalidwa nga tebanatuuka abaweredwa ebitanda mu nasale ye dwaliro ekulu ely'e Kawempe. Kuno okunonyereza kuli kolebwa nga ekimu ku byetagisa okufuna digiri eyo kubiiri mu ndwadde za bakyala e Makerere Yunivasite. Luno olupapula luli mukunsaba mu buwandike okukiriza kwange kyeyagalire okwenyigira mu ku nonyereza.

Okusalawo okwetabamu:

…… anyinyonyodde ki ekigenda okolebwa, ebizibu ebiyinza okuvamu, ebirungi ebikilimu ne dembe lyange okusinzira ku kunonyereza kuno. Nkimanyi nti okusalawo kwange okwenyigira mu kunonyereza kuno tekijja ku teteganya bujanjabi bwamwana wange. Ela mukukoseza ebijjidwa mu kunonyereza tebijja kwasanguza muntu. Ela nkimanyi nti nsobola okuvamu mu kunonereza akadde kona kemba njagadde. Nkitegera nti bwenteka omukono ku lupapula luno, silina dembe lyange elyobwebange lyemba ninyiridde ate era ntegezedwako ku kunonyereza era nga nzikiriza okukwenyigiramu nga tewali ankase. Kopi yo lupapula luno ejja kumpebwa.

Erinya ly'enyigidemu……

Omukono/ ekikumu ……

Enaku z'omwezi ……..

Elinya lyo gwo mujulirwa (bwekiba kyetagisa)……...

Omukono gwo mujulirwa……

Enaku z'omwezi……..

Elinya ly’omunonyereza…….

Omukono gw’omunonyereza……..

Enaku z’omwezi ……

APPENDIX III: INFORMED CONSENT FORM FOR THE HEALTH WORKERS.

Title of the study:

FACTORS AFFECTING FATHERS' INVOLVEMENT IN THE CARE OF THEIR PRETERMS ADMITTED IN THE NEONATAL UNIT AT KAWEMPE NATIONAL REFERRAL HOSPITAL.

Study number: ……

Principal investigator: Dr. Ssekatawa Wycliffe, Senior House Officer in the Department of Obstetrics and Gynecology at Makerere University College of Health Sciences.

Brief background and rationale for the study: I am Dr. Ssekatawa Wycliffe, pursuing a Master's degree in Obstetrics and Gynecology at Makerere University College of Health Sciences. I am carrying out a research to understand the factors affecting fathers' involvement in the care of their preterms admitted in the neonatal unit at Kawempe National Referral Hospital. Globally, 15 million babies are born premature annually. Most of the preterm births occur in sub-Saharan Africa and South Asia. Prematurity is among the leading causes of death in children below 5 years of age and yet. Fathers' involvement in the care of preterm babies in Neonatal unit may have good outcomes for babies and mothers. Despite the need for the involvement of fathers in the care of preterms, there are few fathers participating in the care of the preterm babies. Therefore, understanding the factors affecting their involvement in the care will enable increase their participation and improve on maternal and neonatal outcomes.

Purpose of the study:

The purpose of this study is to explore the factors affecting fathers' involvement in the care of their preterm babies admitted in the Neonatal unit at Kawempe National Referral Hospital. The results of this study will help in creating awareness to the individuals, health workers, communities and policy makers about Strengthening of a holistic preterm care delivery and promote family centered care. This will provide a platform for further studies.

Duration of involvement: This process will take about 45 minutes.

Procedure: If you agree to participate in this study, written informed consent will be sought from you by the principal investigator or his research assistants, either in English or Luganda. You will then be interviewed face to face by a trained research assistant or principal investigator and information will be

audio recorded. Roles of fathers, facilitators and barriers to their involvement in the care of their preterm babies admitted in the neonatal unit will be obtained from you with help of an interview guide.

Who will participate in the study:

All fathers whose preterm babies are admitted in the neonatal unit and the attending health workers of Kawempe National Referral Hospital.

Health care workers working in the neonatal unit of neonatal unit at Kawempe National Referral will be included in the study as key informants.

Risks/Discomforts: The study may not pose any risk to the participants and this will not affect health care you provide to babies in neonatal unit.

Benefits: There are no direct benefits to you but the information gathered will help to create awareness on fathers' roles, facilitators and barriers of your involvement in the care of the preterms in the neonatal unit at Kawempe National Referral Hospital, to promote family centered healthcare and good neonatal outcomes, and to add to the body of knowledge in the scientific world.

Confidentiality: Your names will not appear anywhere on the study forms. A study identification number will instead be used. Your records will only be accessed by the research team and probably by local Research Ethics Committee (REC) where need be. The information will only be used for the purpose of this study and no publication of this study will use your name or identify you personally.

Participation in this study is not mandatory. You have a choice to discontinue from the study once you feel uncomfortable to progress. There will be no discrimination against you.

Cost: The study will be conducted from the hospital and you will not incur any costs. However, you be compensated for you time to participate in this study.

Compensation: You will be compensated 10,000Ugsh for your time given if you decide to participate in this study.

Questions: In case of questions or problems related to the study, you can ask now or contact Dr. Ssekatawa Wycliffe at the Department of Obstetrics and Gynecology, Makerere University college of Health sciences or on mobile phone number +256-781692370 at any time during the study. If you have any questions

concerning your rights while you participate in this study, please address them to the School of Medicine Research and Ethics Committee Chairman Prof. Ponsiano Ocama on Telephone 0772421190.

Your rights as a research volunteer: This form gives you information about the purpose and the details of the study you are about to consent to. Once you understand the study, and agree to participate in it, you will be asked to sign this consent form. You will also be given a copy of the form to keep. Your participation in this research is entirely voluntary. You may decide to withdraw from the study at any time. Such a decision will not affect the medical care given to your preterm baby or possible participation in future research studies in any way.

Statement of voluntariness:

Participation in the study is voluntary and you may join or leave at free will. You have a right to withdraw from the study at any time. There is no penalty associated following withdrawal from the study.

Dissemination of results:

You will get feedback on findings and progress of the study and any new information that affects the study or data that has clinical relevance to research participants (including incidental findings) will be made available to research participants and/or their health care providers.

Ethical approval: Permission to carry out this study was sought from the department of Obstetrics and Gynecology and ethical approval to carry out the study has been granted by the school of medicine research and ethics committee.

Informed consent: I have been informed that Dr Ssekatawa Wycliffe is carrying out a study to explore the factors affecting fathers' involvement in the care of their preterms admitted in the neonatal unit at Kawempe National Referral Hospital. This study is being conducted as a partial fulfilment for the award of a degree in Masters of Medicine in Obstetrics and Gynecology of Makerere University. By this form a written consent is being sought for my participation in the study.

Statement of consent:

..... has described to me what is going to be done, the risks, the benefits involved and my rights regarding this study. I understand that my decision to participate in this study will not alter my usual health care provision. In the use of this information, my identity will be concealed. I am aware that I may withdraw at any time. I understand that by signing this form, I do not waive any of my legal rights but merely indicate that I have been informed about the research study in which I am voluntarily agreeing to participate. A copy of this form will be provided to me.

Name of participant…….

Signature/thumb print ……. …….. Date …….

Name of witness……

Signature of witness (if applicable) ……

Date…….

Name of person obtaining the consent ……

Signature of …… Date …….

APPENDIX IV: BUDGET

ITEM	QUANTITY	UNIT COST	TOTAL (ug.shs)
Research Assistants	2	@ 20,000/day for 3months	1,200,000
Participants compensation	34	10000	340,000
NU staff	2	50000	100,000
Disposable face mask	2 boxes	36, 865/=	73,730
Hand sanitizer ½ gallon jug	4	73,915/=	295,660
Printing proposal	39 pages x 3 copies	100Ush/page	11,700
Printing interview guides	6 pages x 45copies	100 Ush/page	27000
Printing report plus binding	100 pages x 3 copies	100Ush/page,12000@binding	66,000
Printing final thesis plus binding	100 pages x 8 copies	100Ush/page,12000@binding	176,000
Internets	9 GB x 6 months	50,000/=	300,000
Box file	5	@ 12000/=	60,000
Pens	1 box	12,000/=	12,000
Note books	6	5,000/=	30,000
Transport	14 days		200,000
Feeding/refreshment		100,000	100,000
Miscellaneous		200,000/=	200,000
Total			**3,165,090**

APPENDIX V: TIME FRAME

Activity	April - Dec 2022	Jan-Mar 2023	April-July 2023	July-Aug 2023	Sept 2023
Proposal development					
Proposal review					
Proposal approval					
Data collection					
Data analysis and reporting					
Development of the draft report					
Review of draft report					
Submission of report for external examination					
Defense of report					

APPENDIX VI: IN-DEPTH INTERVIEW GUIDE FOR FATHERS OF PRETERMS.

FACTORS AFFECTING FATHERS' INVOLVEMENT IN THE CARE OF PRETERMS ADMITTED IN THE NEONATAL UNIT AT KAWEMPE NATIONAL REFERRAL HOSPITAL.

Introduction:

Hello, my name is ***Ssekatawa Wycliffe*** and I am a final year medical student pursuing a master's program of Obstetrics and gynecology at Makerere college of health sciences.

Thank you for agreeing to talk to me today. As I explained earlier, we are studying the factors affecting fathers' involvement in the care of preterms admitted in NU of Kawempe National Referral Hospital. We are interested in learning more about their roles when their preterm newborns are admitted to the Neonatal unit, exploring the facilitators and barriers to fathers' involvement in the care of the preterm newborns admitted in the neonatal intensive care unit. We plan to use the information to tailor health programs to actively engage male partners and to improve positive health outcomes especially of children. We will talk to only fathers of preterm newborns admitted in the neonatal intensive care unit at this health facility about their opinions and ideas on this topic. I want to remind you that we are conducting research to help improve health outcomes.

We are interested in your opinions; everything you say will be considered confidential and nothing will be taken negatively. You are the expert, and I would like you to talk as freely as you want.

The interview will take about one hour. Whatever we will discuss will be tape recorded but all the information you provide to me will be kept confidential.

Question and probes
Background Characteristics/icebreakers

I'd like to begin by asking some questions about you, your home, and what you do from day to day:

Can you tell me about yourself?

Probe: age, tribe, religion, marital status, number of wives, children, work, education.

- Have you ever had a baby admitted in NU before?
- At how many months was the baby delivered?
- How long has the baby been in NU?

Roles played by fathers of preterms admitted in the neonatal unit at KNRH.

- Which roles would you say fathers are expected to play?
- As a father of preterm baby admitted in the NU, have you been involved in the care for the baby? If yes, why if no why not?
- Explain the actual roles you have played as a father of preterm baby admitted in the NU.

Probe: details of the actual and perceived roles of fathers of hospitalized preterms.

The facilitators of fathers' involvement in then care of preterms admitted in the neonatal unit at KNRH.

- What has motivated/helped you to take part in the care of your preterm baby in the NU?
  (*probe for facilitators at individual level, interpersonal, organizational,community and society level).*
- What more can be done to motivate fathers to take part in the care of their preterm babies admitted in the NU?

Barriers to fathers' involvement in the care of preterms admitted in the neonatal unit at KNRH.

- What are the different things that prevent you as a father from participating in the care of your preterm baby admitted in NU?
  (probe for barrier factors at individual, interpersonal, organizational,community and society levels)

• Why do you think fathers of preterms admitted in NU don't get involved in the care of their babies? • What should be done to improve fathers' participation in the care of their babies admitted in the NU?
• Is there anything else? • Do you have any questions? • Thank you for taking the time to talk to me!

APPENDIX VII: KEY INFORMANTS' INTERVIEW GUIDE FOR THE STUDY:

FACTORS AFFECTING FATHERS' INVOLVEMENT IN THE CARE OF PRETERM ADMITTED IN THE NEONATAL UNIT AT KAWEMPE NATIONAL REFERRAL HOSPITAL.

Introduction:

Hullo, my name is Ssekatawa Wycliffe and I am a final year medical student pursuing a master's program of Obstetrics and gynecology at Makerere college of health sciences.

Thank you for agreeing to talk to me today. As I explained earlier, we are studying the factors affecting fathers' involvement in the care of preterms admitted in NU of Kawempe National Referral Hospital. We are interested in learning more about their roles when their preterm newborns are admitted in the Neonatal intensive care Unit, explore the facilitators and barriers to fathers' involvement in the care of the preterm newborns admitted in the Neonatal intensive care Unit. We plan to use the information to tailor health programs to actively engage male partners and to improve positive health outcomes especially of children. We would like talk to health workers who take care of the preterms admitted in the Neonatal intensive care Unit at this health facility about their opinions and ideas on this topic. I want to remind you that we are conducting research to help improve health outcomes.

We are interested in your opinions; everything you say will be considered confidential and nothing will be taken wrong. You are the expert, and I would like to talk freely as much as you want.

The interview will take about one hour. Whatever we will discuss will be tape recorded but all the information you provide to me will be kept confidential.

Question and probes
Background/icebreakers
• ***I'd like to begin by asking some questions about you, and what kind of roles you do in NU:*** • Can you tell me about yourself? *Probe: age,sex, marital status, education. work (cadre). How long have been you working in the NU?* • Tell me about your work in NU? (probe for the things the participant does during a duty)
Roles played by fathers of preterms admitted in the neonatal unit at KNRH.

I am interested in hearing about roles expected to be played by fathers of preterms admitted in the Neonatal unit of this health facility.

- What roles do fathers of preterm babies admitted in the NU expected to play?
- What roles do fathers of preterm babies admitted in the NU play?

What are the facilitators of fathers' involvement in the care of preterms admitted in the NU at KNRH.

- What do you think promotes father's involvement in the care of their preterm babies in the NU? (*probe; individual,interpersonal,organisational, community and societal levels*)

What are the barriers to fathers involvement in the care of the preterms admitted in the NU at KNRH?

- What prevents fathers of preterm babies admitted in NU from taking part in the care of their babies? (*individual,interpersonal,organisational,community and society levels).*

Any suggestions.

- What can be done to overcome these challenges?
- What more can be done to facilitate fathers' involvement in the care of the preterm babies admitted in the NU?

Conclusion.

- Let us summarize some of the key points from our discussion. Is there anything else?
- Do you have any questions?
- Thank you for taking the time to talk to me!

APPENDIX VIII: DETAILS OF PARTICIPANTS

Participants	Age (years)	Tribe	Education	Address	Marital status	Number of wives	Religion	Gestation age at delivery of preterm	Length of admission	Number ofchildren	Occcupation
IDI-1	24	Muganda	Degree	Wakiso	Un-married	1	Moslem	7month	5days	1	Student
IDI-2	50	Muganda	Primary	Kampala	Married	1(deceased)	Moslem	8months	3days	4	Driver
IDI-3	40	Lugbara	Secondary	Kayunga	Married	1	Catholic	6months 2weeks	3days	2	Farmer
IDI-4	38	Munyankole	Degree	Kampala	Married	1	Bornagain	30weeks	4days	3	Businessman
IDI-5	38	Muganda	Degree	Wakiso	Married	1	Bornagain	28weeks	12days	2	Teacher
IDI-6	47	Lugbara	Degree	Luwero	Married	2	Moslem	7months	6days	6	Blocker
IDI-7	30	Muganda	Secondary	Kawempe	Married	1	Moslem	36 weeks	4days	3	Farmer/businessman
IDI-8	47	Muganda	Certificate	Kampala	Married	1	Catholic	8months	3	4	Driver
IDI-9	22	Musoga	Secondary	Mpigi	Married	1	Moslem	8months	3days	1	Carpenter
IDI-10	35	Muganda	Primary	Wakiso	Married	1	Moslem	8months	1	4	Shoe seller
IDI-11	39	Muganda	Degree	Wakiso	Married	1	Moslem	32weeks	3	3	Builder
IDI-12	25	Muganda	Secondary	Wakiso	Married	1	Moslem	7months 3weeks	4days	2	Welding

IDI-13	23	Muganda	Degree	Mukono	Married	1	Adventist	8months	4days	1	Teacher, nutritionist
IDI-14	26	Munyankole	Secondary	Kampala	Married	1	Catholic	7months	5days	3(multiples)	Shopkeeper
IDI-15	25	Musoga	Primary	Kamuli	Married	1	Moslem	7months	6days	1,2died	Builder
Idi-16	27	Mukiga	Secondary	Mukono	Married	1	Bornagain	7months	14days	2	Self employed,farmer
Idi-17	26	Muganda	Primary	Kawempe	Married	1	Moslem	8months	3days	1	Boda boda
Idi-18	27	Munyankole	Secondary	Wakiso	Married	1	Protestant	7months	14days	1	Security
Idi-19	36	Musoga	Primary	Jinja	Married	1	Moslem	7months	9days	6	Mechanic
Idi-20	36	Musoga	Secondary	Wakiso	Married	2	Moslem	8months	9days	4	Driver
Idi-21	45	Musoga	Primary	Wakiso	Married	1	Born again	7months	3days	5	Business man/self employed
Idi-22	39	Muganda	Primary	Butambala	Married	1	Born again	Seven,1/2months	3days	6	Farmer/plumber
Idi-23	35	Muganda	Primary	Wakiso	Married	2	Protestant	7 months	3days	3	Businessman
Idi-24	32	Musoga	Secondary	Kampala	Married	2	Moslem	8months	2days	6	Businessman