

**FACTORS INFLUENCING PARENTS/GUARDIANS' PARTICIPATION IN THE
CARE OF THEIR HOSPITALISED UNDER 5 YEARS CHILDREN AT KENYATTA
NATIONAL HOSPITAL PAEDIATRICS MEDICAL WARDS.**

**BY
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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT FOR THE AWARD
OF THE DEGREE OF MASTER OF SCIENCE IN NURSING IN PEADIATRICS OF
THE UNIVERSITY OF NAIROBI**

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DECLARATION

I declare that this dissertation is my original work and has not been presented in any other university for an award.

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DEDICATION

This work is dedicated to my parents in honor of the virtues they instilled in me and

The hardships they endured to ensure I got proper education.

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LIST OF ABBREVIATIONS

ACN	-	Assistant Chief Nurse.
ANOVA	-	Analysis of variance
AHRQ	-	Agency for Health care Research and Quality.
BScN	-	Bachelor of Science in Nursing.
KNH	-	Kenyatta National Hospital.
KDHS	-	Kenya Demographic Health Survey.
KMTC	-	Kenya Medical Training College.
KRCHN	-	Kenya Registered Community Health Nursing.
IMCI	-	Integrated Management of Childhood illnesses.
PEM	-	Protein Energy Malnutrition.
MScN	-	Master of Science in Nursing.
NCK	-	Nursing Council of Kenya.
SPSS	-	Statistical Package for Social Sciences.
Sd	-	standard deviation.
UON	-	University of Nairobi

OPERATIONAL DEFINITIONS

- Attitudes - The way one feels about parents' participation in the care of their hospitalized children
- Care - This is the medical and nursing management being offered to the sick children.
- Care givers - The parents/guardians who stayed with hospitalized children and participated in the care of the children.
- Children - Young individuals of age between 0 – 12 years.
- Hospitalization - The admission of children to the wards to be treated as in-patients.
- Parents' participation - Involvement of parents in care activities of their children in the wards.
- Public health staff - The hospital employees responsible for the cleanliness of the wards.

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ABSTRACT

Parents/guardians participation in the care of their hospitalized children is part of the integrated family health care, which has become the cornerstone of today's pediatric nursing practice. Parents/guardians participation in care of their hospitalized children has been shown to have benefits to both the child and the parent/guardian. It is common practice for parents to stay with their sick children in the hospital, however most hospitals lack operational procedures and staff guidelines for involving parents in care processes and decisions.

The purpose of this study was to establish factors influencing parents/guardians participation in the care of their hospitalized children under five years old at the pediatric medical wards of Kenyatta National Hospital (KNH).

This was a descriptive cross-sectional study conducted among the parents/guardians and the nurses in the pediatric medical wards of KNH. Data were collected from a sample of 178 parents/guardians and 54 nurses using two sets of semi-structured questionnaires, one for the parents/guardians and the other for the nurses. Statistical analysis was conducted using statistical package for social sciences (SPSS) version 15 and Stata version 10. The main study outcome was participation in care. ANOVA was used to compare participation in care across different levels of independent variables broadly classified into demographic and socioeconomic factors. The data were then presented in form of figures and tables.

Pneumonia, gastroenteritis and meningitis were the leading causes of hospitalization among the children. Majority of the parents/guardians were of low education level, unemployed or employed with low income levels of less than Kshs.10, 000 per month. The hospitalized children were mainly infants (53.1%).

Parents/guardians were willing to participate in the care of their hospitalized children. The parents/guardians' participation in care was influenced by their level of education ($p= 0.014$) and age group ($p= 0.039$). The characteristics of children did not significantly influence the parents/guardians participation in care. ($p>0.05$). There were discrepancies in care activities and role of parents/guardians amongst the nurses and between the parents/guardians. There was no consensus on who should perform some care activities, for example some nurses said nasogastric feeding should be performed by the parents/guardians. Twenty nine (55.8%) of the

nurses had the opinion that parents/guardians should not be involved in the decision making of their child's management. Only 5.6% of the nurses had a specialized training in paediatric nursing.

Majority of the parents/guardians felt that the nurses were uncooperative, and were too busy to talk to them.

Health education on the importance and practice of parents/guardians participation in the care of their hospitalized children should be enhanced. Formulation of guidelines and/ or policies on the level of participation of parents/guardians in the care of their hospitalized children be undertaken to standardize and enhance the practice of parents/guardians participation in the care of their hospitalized children. More nurses should go for specialized training in paediatric nursing to enhance their skills to work effectively in a paediatric set up.

CHAPTER ONE: INTRODUCTION

1.1 Background information

Parents/guardians participation in the care of their hospitalized children forms part of the integrated family health care. This is a phenomenon in which parents or guardians are given a chance to contribute in decisions and service delivery for the wellbeing of their hospitalized child.

Hospitalization is a stressful experience, both for the child and the parent(s). Great efforts need to be made to eliminate adverse effects of hospitalization chiefly by avoiding the separation of children from their parents.

Although it has become common practice for parents to stay with their sick child in hospital, most hospitals lack operational procedures and staff guidelines for involving parents in care processes and decisions.

Hospitalization can cause substantial long term negative effects on children, both physically and psychologically. Studies have affirmed the importance of the role of parents in both physiological and psychosocial health outcomes for their children (Zengerle-levy, K 2005). There are, however many factors influencing childcare interactions including attitudes of nurses, communications between parents and nurses, inadequate information from health care professionals, lack of negotiation between parents and nurses and inadequate availability of nursing staff.

Some studies have provided evidence on factors influencing parent participation in the care of the hospitalized child; these include parents and nurses characteristics, the child's condition, parent perception of hospitalized child care and lack of negotiation between parents and nurses (McCubbin 2001, Roden 2005).

Factors influencing the parents' participation which are associated with care interactions are grouped as barriers in one group and facilitators in the other.

Barriers hinder participation. These are factors like ineffective communication, short length of stay, paternalism, inadequate information from professionals, lack of availability of nurses due to understaffing, difficulty integrating nursing and parents' roles.

The facilitating factors promote cooperation and partnership between parents and nurses. These are effective communication between nurses and parents/guardians, education and guidance on performance of care activities to the parents/guardians by the nurses.

The increased practice of parent participation in the care of the hospitalized child has resulted in the changes in pediatric nursing practices. There is, however, no consensus in the literature about integration of parent participation in the care of hospitalized child within the healthcare environment. For example Cushing (2005) reported that parent participation in the care of hospitalized child was positive and evolving, and results of these investigations have supported changes in healthcare providers' attitudes and practice. Conversely, De Lima et al (2001) who studied parent participation in the care of hospitalized children in Brazil revealed that some difficulties occurred in the integration of the mother's and nurses tasks in the care of hospitalized child. These results provided a basis for concern regarding fragmentation of care into manual and intellectual work.

1.2 Problem statement

Parents' participation in the care of their hospitalized children is a fundamental aspect in pediatric nursing and the wellbeing of the child. Hospitalization is a stressful situation for both the child and the parents. Anxiety of parents in the event of a hospitalized child has a great impact on the rate of recovery for the child. The anxiety may often be lessened by involving parents in the nursing management of the child. Parents' involvement in planning for and their participation in the nursing care of their children has been emphasized; however studies indicate that parents are often ignored in this equation of pediatric care and there are lack of guidelines and/or policies for the nurse regarding the role of parents when children are hospitalized (Paliadelis et al, 2005).

From observations, parents/guardians staying with their children in the pediatric medical wards of Kenyatta National Hospital (KNH) have often complained of neglect and at times not being involved as far as their child's illnesses are concerned.

In KNH there are mixed reactions and perceptions among nurses and parents regarding parents' participation in the care of their ill child as to what extent, how and when parents should be allowed to participate. In addition, there are no published guidelines on parents' participation in the care of their hospitalized children, though it is said that

children more than four years of age who are stable can be left in wards without parents. In the KNH and many other hospitals in Kenya, pediatric wards do not take into account the residing parents in their design and the way they are furnished.

The parents staying with their children in the KNH pediatric medical wards have often complained of neglect and no cooperation between them and the medical staff.

More often, the public continue to criticize the poor quality of patient care in Kenyatta National Hospital (Daily Nation 14th December 2007; KNH public relations office 2007).

The public outcry over deteriorating health care services has often been blamed on the nurses. Parents participation in care which is a key component of quality care could however be influenced by many factors other than nurses.

Parents participation in care particularly to the under five years of age, during hospitalization, provides a sense of security to the child and gives valuable help in caring for the child.

1.3 Research questions

- 1) What are the socio-demographic characteristics of parents/guardians with hospitalized under five year's old children in the pediatric medical wards?
- 2) What are the characteristics of children staying with their parents/guardians in the pediatric medical wards?
- 3) What nurses' characteristics influence parents/guardians participation in the care of their hospitalized children?
- 4) What care activities do parents/guardians participate in caring for their hospitalized children?

1.4 Main objective

To establish factors that influence parents'/guardians participation in the care of their hospitalized under five years old children in the pediatric medical wards of Kenyatta national hospital.

1.5 Specific objectives

1. To determine the socio-demographic characteristics of the parents/guardians.
2. To determine the characteristics of children staying with parents/guardians' in the pediatric medical wards.
3. To determine the characteristics of nurses influencing parents/guardians participation in the care of their hospitalized children.
4. To establish the care activities in which parents/guardians participate in when caring for their hospitalized children.

1.6 The Null hypothesis.

1. There is no relationship between parents/guardians characteristics and their participation in the care of their hospitalized children.

1.7 Definition of key variables

1.7.1 Independent variables

- Nurses years of work experience
- Nurses' marital status
- Nurses' qualification status.
- Knowledge of parents.
- Days of child's hospitalization.
- Parents/guardians level of education.
- Parents/guardians age group.
- Parents/guardians level of income.

1.7.2 Intermediate variables

- a. Parental knowledge
- b. Parental attitudes
- c. Parental practice

1.7.3 Dependent variable

Parents/guardians participation in care.

1.8 Theoretical framework

The modified Casey's partnership model will be used. It states that partnership between the parents and the health care professionals is to meet child's needs and the process of nursing is carried out in partnership with the child and his or her family. In this model it is believed that the patient is both the child and family. It is also believed that the role of the children's nurse is to support and strengthen the family's ability to care for their child. Casey's philosophy of children's nursing states categorically that the child is best cared for by the family with varying degrees of help from appropriately qualified health care professionals.

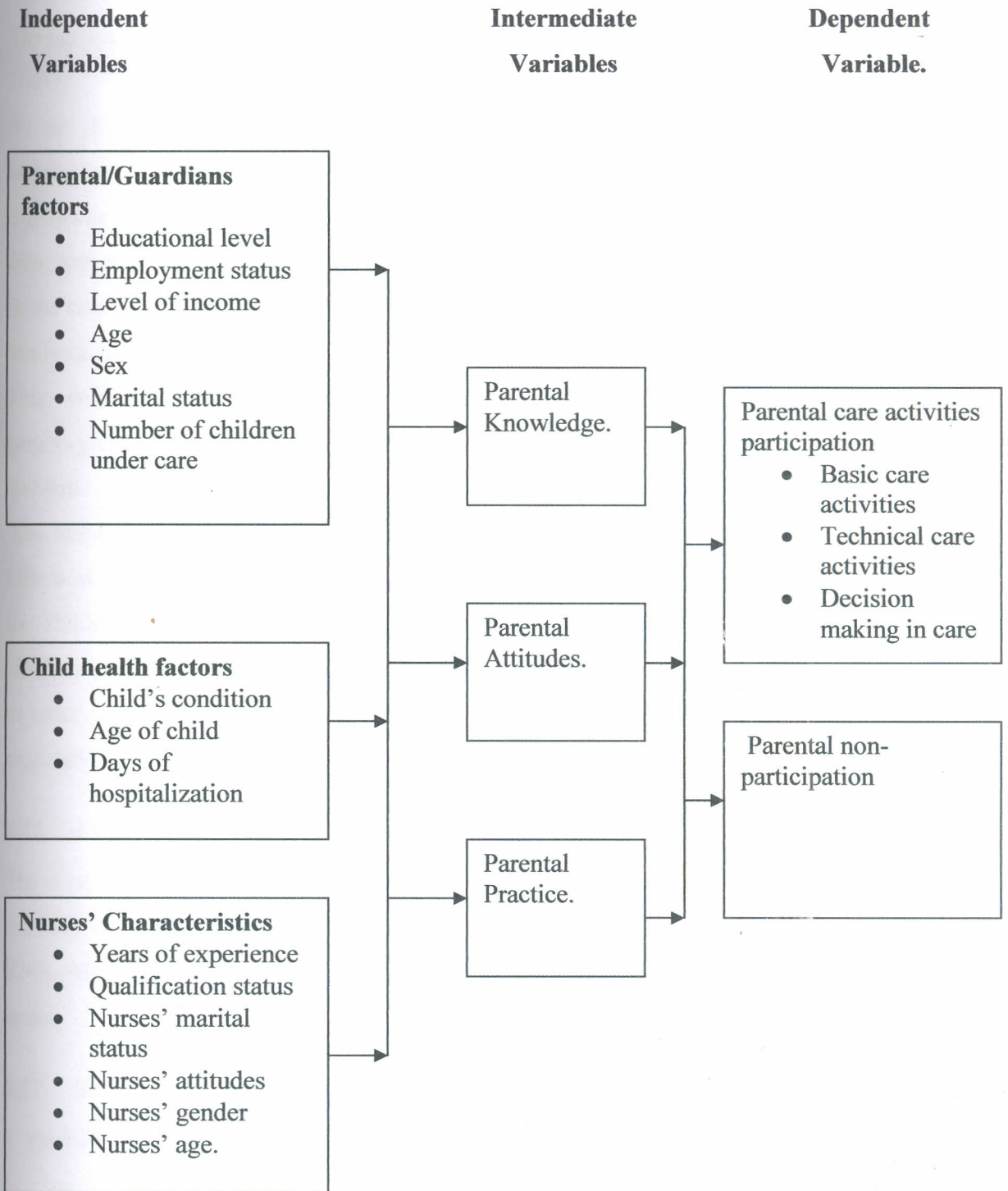
Nurses practicing the partnership model should take care to share the knowledge with the child and family. (Marilyn 2005).

Under Casey's partnership model, the nurse gives 'extra' care related to health needs; the parent/guardian carries out family care to help the child meet his needs.

Family care may be given by the nurse if family are absent or unable and the nursing care may be given by the child or parents/guardians with support and teaching from the nurse.

The child in this case needs help to meet his/her needs in order to function, grow and develop.

1.9 Conceptual framework



1.10 Justification of the study

Parents/guardians' involvement in the care of their hospitalized children is a fundamental aspect in the management of hospitalized children.

The participation of parents in the care is however influenced by various factors (Yvnee, 2003).

So far, there is no quality evaluation of parent participation in the care of their hospitalized children done in Kenyatta National hospital. In the course of my working experience in the pediatric wards of the same hospital, I encountered divergent views from both the nursing staff and the parents/guardians on the issue of parents' participation in the care of their hospitalized children; moreover there are no published guidelines on this issue in the hospital.

This study therefore intends to establish the various factors that influence parents/guardians participation in caring for the hospitalized under five years old children.

The less than five years group of children is unique in that it is highly vulnerable to the effects of hospitalization. One of the measures to lessen the effects of hospitalization on the children is to encourage parents to participate in the care of their hospitalized children.

In order for parents to participate effectively, they need support from the health system especially the nursing personnel.

1.11 Expected benefits

The results of the study would assist to come up with suggestions that would be useful in drawing up policies and guidelines for proper management of hospitalized children in KNH. Moreover, the findings will provide baseline data for future studies in related areas.

1.12 Study Assumption

1. Participants gave honest and accurate information.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Hospitalization is a stressful experience for both the child and the parents. Great efforts need to be made to eliminate adverse effects of hospitalization mainly by avoiding the separation of children from their parents. Preventing or minimizing separation is a key nursing goal for the child who is hospitalized, but maintaining parent-child contact is also beneficial for the family.

One of the best approaches is encouraging parents to stay with their child and to participate in the care whenever possible. In the participation, decisions on the treatment are paramount. Pyke-Grimm (2006) in a study showed factors that parents identified which influenced their decision making. The factors that parents identified as influencing their role in treatment decision making are relationship with the physicians, nature of communication, trust in experience of health workers and the importance of parental role. Pediatric healthcare providers tend to draw a line on what they believe are suitable parents activities. Parent participation is a major variable in reducing child's anxiety and stress during painful procedures and their involvement in the care of their hospitalized child is dependent on staff attitude, enthusiasm and willingness to work with the them (Britt 2006).

Continuous presence and involvement of parents in the care of their children is recognized to have benefits to the children. It reduces child's emotional stress and increases the child's sense of security, among others. Parents are today encouraged to participate more fully in the care of their hospitalized children (Latour et al 2008). Parental involvement in the care of their hospitalized children brought into perspective the concept of family centered care. Family centered care, which has become the cornerstone of pediatric nursing practice in the 21st century, is conceptualized as a philosophy that supports the integrity of the family unit and individualizes care to promote patient and family health.

The basic concepts in family centered care are enabling and empowerment of family member's participation in the care of their hospitalized children. Professionals enable families by creating opportunities and means for all family members to display their

abilities and competencies, and to acquire new ones that are necessary to meet the needs of the child and family. Empowerment describes the interaction of professionals with families in such a way that families maintain or acquire a sense of control over their lives and make positive changes that result from helping behavior that fosters their own strength, abilities and actions. Service systems and personnel must support, respect, encourage and enhance the strength and competencies of the family through an empowerment approach and effective giving of help as needed by the family (Marilyn 2005).

Over the years parents were restricted access to their child in the hospital and at times actively discouraged from visiting. According to Guzzeta (2006), the evolution of parent/staff relationship and the acceptance of parents into the hospital environment to share in their child's care occurred in stages as follows:-

- Stage 1** - The rejection of parents by the hospital staff. The children were literally handed over to the hospital staff and minimum access allowed.
- Stage 2** - The acceptance of parents as visitors on a daily but limited time basis.
- Stage 3** - The acceptance of parents for longer time periods plus allowing parents to continue some caring role, example bathing and feeding the child.
- Stage 4** - The residential admission of parent(s) with their young child to continue the full caring role to whatever extent possible.
- Stage 5** - The acceptance of parents of young children as residential members of the ward team capable of taking part not only in the child's care but also in the nursing and medical treatments after learning appropriate skills.

According to Coyne (2007), parental presence and participation in their child's care has been shown to have several benefits in that it;

- maintains continuity of the family's relationship throughout the child's hospitalization.
- facilitates parent competency in caring for the child following discharge.
- provides a connection for the child between home and the hospital life.
- increases the child's sense of security
- reduces children's emotional stress.

2.2 Extent of parents' participation and care activities.

Although it has become common practice for parents to stay with their sick child in hospital, most hospitals lack operational procedures and staff guidelines for involving parents in the care process and decisions. The increased practice of parent participation in the care of their hospitalized child has resulted in changes in pediatric nursing practice.

A study conducted by De Lima et al (2001), in Brazil on parent participation in the care of the hospitalized child, showed some difficulties that occurred in the integration of mother's and nurses tasks in the care of hospitalized child. These provided a basis for concern regarding fragmentation of care into manual and intellectual work. The question has been; to what extent should mothers be allowed to take care of their hospitalized children?

Parents need formal instruction regarding their children's care from the nurses. Some of the care activities that parents may need to learn are wound care, cast care, enteral feeding, suction and administration of medications. (Cushing 2005). However, the extents to which this can be learnt depend on effective communication. Roden (2005) found that there were communication problems between nurses and parents as regards to learning of these skills.

The patient is usually taken care of by a multidisciplinary team. In this case all members of the health care team are important in the care of the patient. A multidisciplinary round where every member including the parent/patient is given an opportunity to discuss their insights gives empowerment to the parents/patient to contribute to their care (Rosen et al 2009). This empowerment influences the extent to which the parents/patient is involved in the care.

Although research supports the need for increased parent participation during a child's hospital stay, integrating research findings and changing practices of health care professionals may not be easy. Paediatric nurses especially those working in the critical care environments may have difficulty integrating this philosophy into their care. In realizing the numerous benefits that exist, health care providers would be prudent to embrace the concept of parent participation in care. Furthermore, results in the study by Cushing (2005) showed that parents were unclear of their expected roles.

Various factors were shown to influence parental participation in the care of their hospitalized children (Polkki, 2002).

(a) Promoting factors.

- Sufficient and understandable information.
- Opportunities for emotional support.
- Clearly defined roles
- Opportunities to participate according to personal preferences

(b) Hindering factors.

- Lack of information/understanding
- Underestimation of parents' expert knowledge.
- Negative feelings for example; anxiety, depression, guilt.
- Nurses' lack of time.

Parents' participation in the hospitalized child's care has increasingly been promoted in pediatric nursing because it ameliorates the adverse aspects of hospitalization amid parental separation and contributes to quality care for the sick children.

2.3 Parents/guardians' characteristics and opinion on their participation in care

Parents' opinions are varied depending on the characteristics of the parents. One of the care activity in which parents could participate in the care is decision making on the care given to the child. Parents with less than a high school education were significantly less likely to report participation in decision-making, while those with children who had prior hospitalization and those who felt more confident communicating with physicians were more likely to report sharing in medical decisions (Tarini et al 2007). In the same study the age of the child did not affect parental reports of participation.

Most parents or family care givers in Mozambique had a desire to be involved in the care of their hospitalized child, much the same as has been shown in studies in Western and Eastern countries. In Mozambique, just like in most African countries the family care givers' expectations, needs and experiences are rooted not only in poverty, their household situation and health care system, but also in the hierarchical construct of their culture (Soderback & Christensson, 2008). These factors were said to influence their

communication and relationship with the hospital staff. Moreover, the hospital staff is perceived to be superior and therefore the care givers could not negotiate the care given to the child.

Most parents viewed accompanying their hospitalized child and participating in care as an unconditional aspect of being a parent and had a strong desire for participation (Lam 2006).

In another study, parents who were younger, had a higher education level, had previous experience of caring for their child during hospitalization, had previous experience with their child having surgery and who had younger children had more positive attitudes towards parental participation (Wen-Lin 2005).

Coyne (2007) reported that parents chose to participate in care because of concern for the child's emotional welfare. The participation was influenced by sense of parental duty, past experiences with hospitals and consistency of care. Moreover, parents were willing to adapt their parenting skills in order to be able to care for their child at home and were willing to perform more provided it did not cause pain for the child, had nurses' approval and increased their confidence and competence as carers.

Though many parents may want to participate in the care, not all mothers (or fathers) feel equally comfortable in assuming responsibility for their child's care. Some may be under such great emotional stress that they need a temporary reprieve from total participation in care giving activities (Kyle, 2007). Others may feel insecure in participating in specialized areas of care such as bathing the child after surgery. On the other hand, some mothers may feel a great need to have control of their child's care.

Individual assessment of each parent's preferred involvement is necessary to prevent the effects of separation while supporting parents in their needs as well. Parents should care for their child during the hospital stay to the extent that they are comfortable in doing so.

2.4 Nurses' characteristics and willingness to involve parents in care

Pediatric healthcare providers tend to draw a line on what they believe are suitable parents' activities. Parent involvement in the care of their hospitalized child is dependent on staff's attitude, enthusiasm and willingness to work with the parent (Britt 2006).

Increased efforts need to be made to eliminate adverse effects of hospitalization on the child by encouraging parents to participate in caring for their children, to avoid feelings of separation. A study by Wen-Lin (2005) showed that nurses who had more working experience with children had more positive attitude towards parents' participation in the care of their hospitalized children than those with less experience. Those with higher education level were also found to have more positive attitude towards parents' participation in the care of their hospitalized children than those with less education.

Nurses' characteristics have been shown to influence participation of parents/guardians in the care of their hospitalized children by more studies. In a study by Hong-Gu et al (2005) found that nurses background factors including age, education, nursing position, professional work experience, number of their own children and experiences of earlier hospitalization of their children were significantly related to their perceptions regarding parental guidance and hence influenced parental participation.

Oncology unit staff involved parents better in their children care and experienced less strain from parental demands compared with staff in other pediatric units (Britt 2006).

Nurses working in special units, those who were married, those who had children, the older, those who had higher educational level and those more experienced, were found to have more accepting attitude toward parent participation in the care of their children (Guzzeta 2006). Positive staff attitude towards parents is a critical requirement to enhancing parent participation in the care of their hospitalized children. A negative attitude towards parent participation can create barriers to collaborative working relationship between nurses and parents. When parents are included in the care planning and understand that they are a contributing factor to the child's recovery, they are more inclined to remain with their child and have more emotional reserves to support themselves and the child through the crisis. Research has confirmed parents' desire and expectations to participate in their child's care. The attitudes and activities of health care professionals are both barriers and facilitators to parent participation (Power and Frank 2008). Positive attitudes being facilitative while negative ones being a barrier to parents' participation in the care of their hospitalized children.

2.5 Condition of the child

Parents' perceptions about their child's pain level had an impact on their participation in the care. If the parents perceived that the child pain level has decreased, then they increased participation in their child's care (Hong-Gu et al 2005).

Paliadelis et al (2005) indicated that parents of children who experienced single, short hospital admissions found participation in their child's care difficult.

2.6 Need for parents participation in care

Hospital personnel do not always realize the advantages of having the mother stay with the child. They fear that she will be difficult to work with. However, the more her maternal feelings are satisfied through providing care for the child (feeding & bathing him), the less anxious she will be. Multidisciplinary studies have affirmed the importance of the role of the parent in both physiological and psychosocial health outcomes for children. According to Guzetta (2006), parental presence and participation in their child care has been shown to have several benefits such as;

- Maintaining continuity of the family's relationship throughout the child's hospitalization.
- Facilitating parent competency in caring for the child following discharge.
- Providing a connection for the child between home and hospital life.
- Increasing the child's sense of security.
- Reducing children's emotional stress.

In a study by Latour et al (2008) it was concluded that parents are important partners who collaborate with the multidisciplinary team to improve quality of care and that there is need for quality improvement by parental empowerment through parent participation in the care of their hospitalized children.

2.7 The parent-child-nurse relationship

Communication is the most important skill a nurse uses when dealing with children and their families. Accomplishments depend on the ability of the nurse to make parents and children feel accepted and comfortable in the relationship. Parents are unlikely to reveal true feelings about their children if there is even a slight possibility that they will be

judged as incompetent parents (Kyle 2007). Children are sensitive to lack of recognition from adults. It is important to focus on the child, giving opportunity for the child's expression of fears and concerns. Some children may look upon parents to speak for them whereas others like to speak for themselves. The nurse's sensitivity to these differences is central to developing a relationship and making all members of the family feel accepted. Respect for the individuality of each person within the relationship has particular relevance when dealing with parents and children. Communicating respect involves recognizing that the views that parents hold regarding childbearing and rearing, health promotion and children's roles, may be in opposition to those of the nurse. To respect parents as individuals is to recognize that long-standing family and cultural patterns are an integral part of their way of life and affect their view of parenting. Children also need to be respected as individuals (Kyle 2007).

2.8 Nursing roles

To promote participation by parents in the care of their child, health professionals need better understanding of what facilitates and what obstructs participation. It is the nurses' role to identify these factors. Lack of clarity and uncertainty among the staff with regards to the extent to which requirements should be expressed to parents, dominating medical-technical care, a shortage of staff and space for parents made it difficult for the staff to involve the parents in the care of their children (Wigert 2008).

In the Casey's partnership model, nursing roles were identified as;

- To provide family care – when the child or family are no longer able to provide the care which they would normally carry out independently at home.
- To administer nursing care – the specific health care interaction required by the child.
- To act as a teacher – by teaching parents to give family care and specific nursing care during their child's illness.
- To provide support – by helping the family come to terms with their child's illness and treatment and being available to enable the expressions of concerns.
- To be a resource – by providing specific answers to questions and liaising with agencies to enable continuing care in the community. (Marilyn 2005).

Nurses' expectations of the parents were seen to contribute to disputes between nurses and parents. Parental participation in the care began with parents' involvement in their child's basic care needs. Nurses expected that all parents wanted to be involved in their child's care and that parents would behave in a certain manner, hence nurses need to assess parents individually in order to gauge how to help (O'Haire and Blackford 2005).

There is however a different view on this as other studies indicate. In one study, nurses expected parents to stay in hospital and provide emotional care, childcare and some nursing care for their children. The nurses viewed their role as facilitators rather than doers. (Coyne 2007).

Many studies have shown that parents want to be involved in their child's care, but nurses' lack of communication and limited negotiation meant that this could not occur (Corlett and Twycross, 2006). Also nurses appeared to have clear ideas about what nursing care parents could be involved with and did not routinely negotiate with parents in this context.

2.9 Gap in knowledge

While the importance of parental involvement in caring for the sick children has been documented, little attention has been paid to the factors influencing parents/guardians participation in the care of their hospitalized children.

There is a dearth of research which focuses on factors influencing parents/guardians participation in the care of their hospitalized children regionally and locally, hence so in Kenyatta National Hospital. There is therefore an absence of clear indicators of how parents/guardians participation may be facilitated and supported in the institution. This necessitated the need to carry out a research in this area.

CHAPTER THREE: METHODOLOGY

3.1 Study design

This was a descriptive cross-sectional study aimed at establishing the factors that influenced parents/guardians' participation in care.

3.2 Study area

The study was carried out in Kenyatta National Hospital (KNH) pediatric medical wards. KNH has four pediatric medical wards situated at level 3 of the tower block. KNH is the largest teaching and referral hospital in the country and also serves as a primary health facility for the communities around it. It is the teaching hospital for the University of Nairobi's (UON) college of health sciences and the Kenya medical training college (KMTC). Many other institutions also send their students for practice in various areas of specialties. These are Nairobi Hospital School of nursing, Forces' memorial, Kenyatta University, Kenya Methodist University, Baraton University and The Mater hospital school of nursing among others.

3.3 Study population

The study populations were all the parents/guardians staying with admitted children and all nurses working in the pediatric medical wards. Each of the wards had an average of about 80 parents/guardians. Nursing staff in the pediatric medical wards was 80 according to information from the Assistant Chief Nurse (ACN) pediatric department.

3.4 Inclusion criteria

- Parents/guardians who had stayed with admitted children for at least 24 hours and gave consent for study.
- Nurses who had worked in the pediatric medical wards for over one month
- Parents/guardians with children under five years old.

3.5 Exclusion criteria

- Parents/guardians who declined to participate.
- Parents/guardians who had stayed in the wards for less than 24hours.
- Nurses who declined to participate in the study.
- Nurses who had worked in the wards for less than one month.

3.6 Sample size determination

Fisher's formula was used. $n = \frac{z^2 p q}{d^2}$

n= sample size (if population is more than 10000)

z= standard normal deviate at confidence level 1.96.

p= estimated prevalence, 50% was used as there was no available data.

q= 1-p

d= level of significance, which is 0.05 at 95% confidence interval.

$$n = \frac{1.96 \times 1.96 \times 0.5 \times 0.5}{0.05 \times 0.05} \\ = 384.$$

For population less than 10000,

$$nf = n / 1 + (n/N).$$

nf = desired sample size-population less than 10000.

N = desired sample size-population more than 10000.

N = estimate of population size.

$$nf = \frac{384}{1 + (384/320)} \\ = 174.5$$

A round figure of a sample of 180 subjects among the parents/guardians was targeted, however 178 fully participated. Two (2) subjects were dropped because they did not complete the interview mid way.

Sample size for the nurses $nf = 384 / 1 + (384/80) = 66$.

A sample of 54 nurses were captured in this study as some were on leave and others on night duty.

3.7 Sampling Method

Simple random sampling using the admission register was employed to assign for the parents/guardians. Each of the four wards was visited on second day post call each week because on post call day, the parents/guardians were assumed to have interacted with the nurses in the care for their children. The number of parents/guardians on the beginning of data collection was taken using the daily returns from the medical records officer and was registered as the sampling frame. Each parent/guardian was then assigned a number which was used to randomly select twelve (12) subjects in each of the four wards. With this selection mode, about forty eight subjects were chosen initially in the four wards. The individual wards were then subsequently visited on a one day post call until the required sample size was acquired. In subsequent visits, those who were randomly selected but had been interviewed before due to long stay in the ward were dropped and another number picked. Among the nurses, all those who were on duty during the period of data collection and met the selection criteria were purposefully approached and those who consented were given self administered questionnaires to fill. The questionnaires were then collected from the nurses after they had completed filling in them.

3.8 Study instruments

Two sets of questionnaires were used. One for the nurses and the other for the parents/guardians.

The questionnaires had both closed-ended and open-ended type of questions.

3.9 Pre-testing of the study instruments

The questionnaires were pre-tested in ward 4A among the nurses working there and the parents/guardians who were staying with their admitted children. Ward 4A is a pediatric surgical ward located in level 4 of the tower block. Pre-testing of the questionnaires was done in order to: assess for clarity of the instruments, assess for the time taken to administer it and look out for ambiguities or items that confuse respondents. The information obtained was used to revise the instruments as needed.

3.10 Recruitment and training of research assistants

Two research assistants were recruited from interested BscN level IV. The BscN levels IV were chosen because they were not KNH employees and therefore the element of bias when dealing with the parents/guardians would be lessened. They were trained for 2 days.

The training sessions covered the following areas;

- The objectives of the study.
- How to administer the questionnaires and the consent request to the respondents.
- Ethical issues.
- Pre-testing of the questionnaires.

3.11 Data collection, Cleaning and Entry

The data was cleaned on the day it was collected by going through the questionnaires to check for completeness and then entered into a data sheet.

The nurses were given a self administered questionnaire and requested to fill within 24 hours. The researcher and research assistants made a follow up to ensure good returns.

Data from the parents/guardians was collected mainly through a one to one interview by the researcher and research assistants guided by the questionnaires. However, those who were able and willing to fill in the questionnaires were allowed to fill the questionnaires with the assistants around for any clarification and to ensure completeness.

3.12 Data analysis and presentation

Data were analyzed using statistical package for social sciences (SPSS) version 15 and stata version 10. The SPSS was used to obtain summary statistics and undertake both univariate and bivariate analyses.

The primary outcome in this study was participation of parents/guardians in the care of their children defined by an index score ranging from 0 to 1 for each child. Five major tasks that require to be performed for children on a daily basis during admission were used to develop this index. The tasks were bed/cot making, bathing of the child, feeding the child (either orally or via nasogastric tube), oral drug administration and decision making in the care of the child. Each parent was scored based on self reported participation in each task (0 = non participation and 1 = participation). As such the

maximum score a parent could receive was 5 with the minimum score being 0. These score was divided by 5 to give the average performance score (range 0-1).

For independent variables with two exposure levels (e.g. gender) a *t*-test was conducted to compare the mean difference in participation scores (range 0-1, 0 representing nonparticipation in any task and 1 for participating in 5 major daily tasks) and one-way ANOVA test conducted to compare mean score for variables with more than two levels. Descriptive statistics was used to summarize the data. Linear regression analysis was used to perform multivariate analysis to assess the relationship between the independent variables and the parental participation in the care of their hospitalized children. Data were then presented in form of tables and figures.

3.13 Ethical considerations

Permission to carry out the research was sought from the KNH ethics and research committee and the Ministry of Education. The permission to carry out the study in KNH and access the parents/guardians and nurses was obtained from KNH management through the office of the deputy director for clinical services.

A verbal consent was obtained on request from the respondents after they were explained the objectives of the study.

3.14 Data quality control

To ensure quality data was obtained, the following were done.

- Training of research assistants on how to collect data to standardize the procedure.
- Pre-testing of the instruments.
- Supervision of data collection.
- Ensure informed consent and confidentiality.

3.15 Study limitations

The study was conducted in KNH which is a national referral and teaching hospital; however, the findings may not reflect the situation in other health institutions, therefore generalizability of the results will not be appropriate to the whole country.

CHAPTER FOUR: RESULTS

4.1. INTRODUCTION

This chapter reports on the social and demographic characteristics of parents/guardians and nurses who were enrolled in the study and interviewed using semi-structured questionnaires. The distributions of these caregivers' responses by the main study exposures and the study outcome are also presented. The bivariate analysis explored the association between the outcome (participation in care) and the individual independent variables. Linear regression was used to conduct multivariate analysis.

4.2. CHARACTERISTICS OF PARENTS/GUARDIANS

A total of 178 parents/guardians were selected in the sample. The following section presents the descriptive statistics for this sample.

4.2.1. Gender of parents/guardians.

Figure 1 shows that most (173 out of 178, 97.2%) of the respondents were female. Only 2.8% of the interviewees were male.

This is expected in most of the African set up where child care roles are more vested on the female gender.

Figure 1: Gender of parents/guardians.

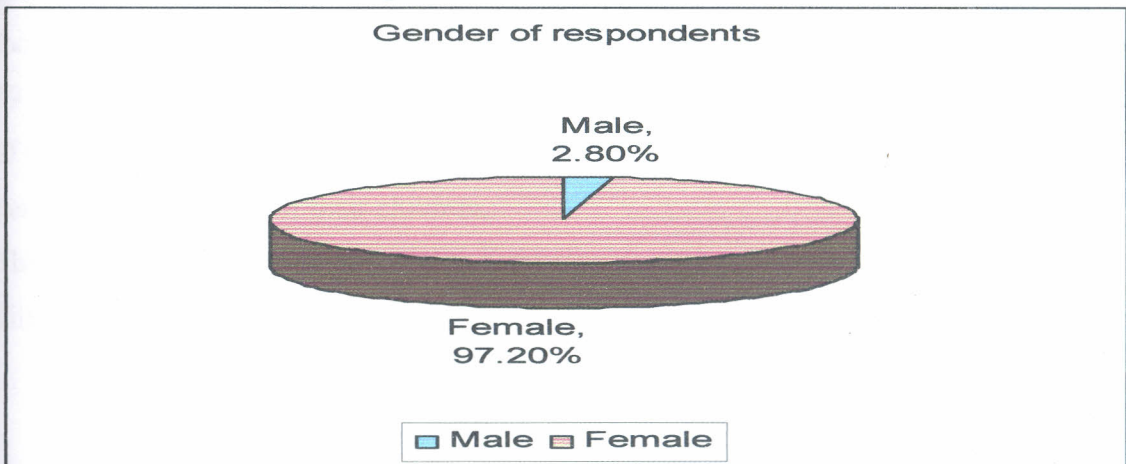


Table 1 below presents the participation of care givers in care of their children by the caregivers' gender. The median score in both groups was 1 indicating that more than 50%

of both male and female caretakers participated in all the 5 parental care activities namely feeding, bathing, decision making, bed making and drug administration. The mean score for participation in care was 0.88 for male versus 0.91 for females with a non significant difference in participation in care between males and females (mean difference 0.03, 95 % CI 0.09 to 0.14, $p= 0.62$).

Table 1: Caregivers' participation in care activities by respondent's gender.

Gender	Frequency	Mean	s.d	difference	P value
Male	5	0.88	0.18	0.03	0.62
Female	173	0.91	0.13		

4.2.2. Age group of parents/guardians.

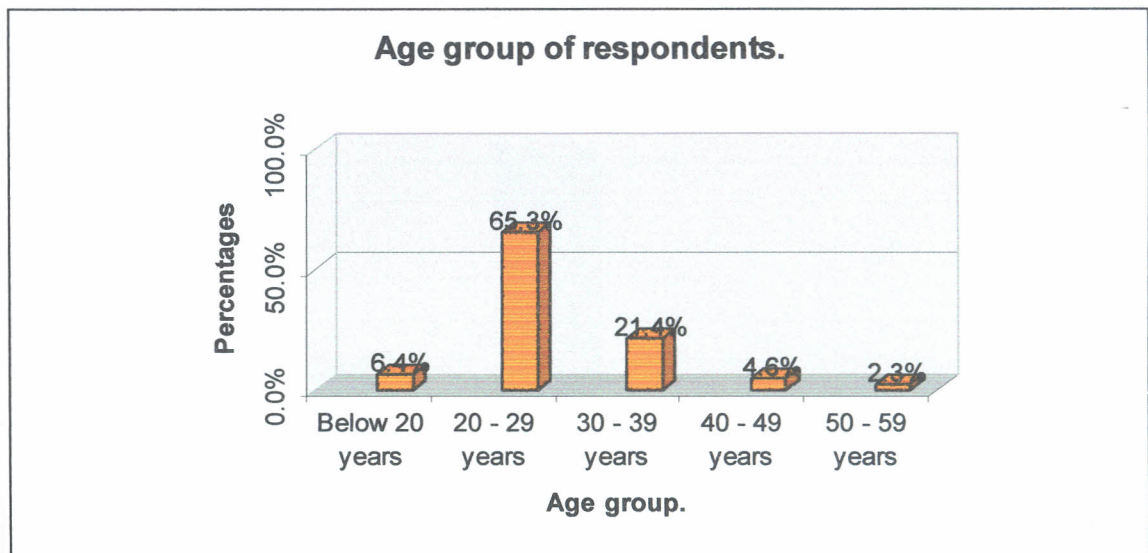
The parents/guardians age ranged between 18 and 53 years with a mean age of 27.2 years and standard deviation (sd) of 7.02.

Majority of those who responded 150 (86.7%) were of the age group of between 20 to 39 years, this is consistent with the high reproduction in this age group according to KDHS of 2003. The age group of 50 to 59 years formed 2.3% and important to note is the less than 20 years who formed 6.4% who were mothers, bringing to light the thorny issue of teenage pregnancies. Five of the respondents declined to disclose their age.

Majority of caregivers below 20 years (72.7%) participated in all care giving tasks. Of those between 20 – 29 years, 56.6% participated in care and 62.2% of those between 30 – 39 years participated in care. All caregivers aged 40 years and above participated in care of their children. This implies that the elderly parents/guardians were more likely to participate in the care of their children.

The mean performance of care giving tasks was significantly different among the different caregiver age groups (ANOVA, $d.f=172$; $p = 0.039$).

Figure 2: Age group of the parents/guardians (respondents).

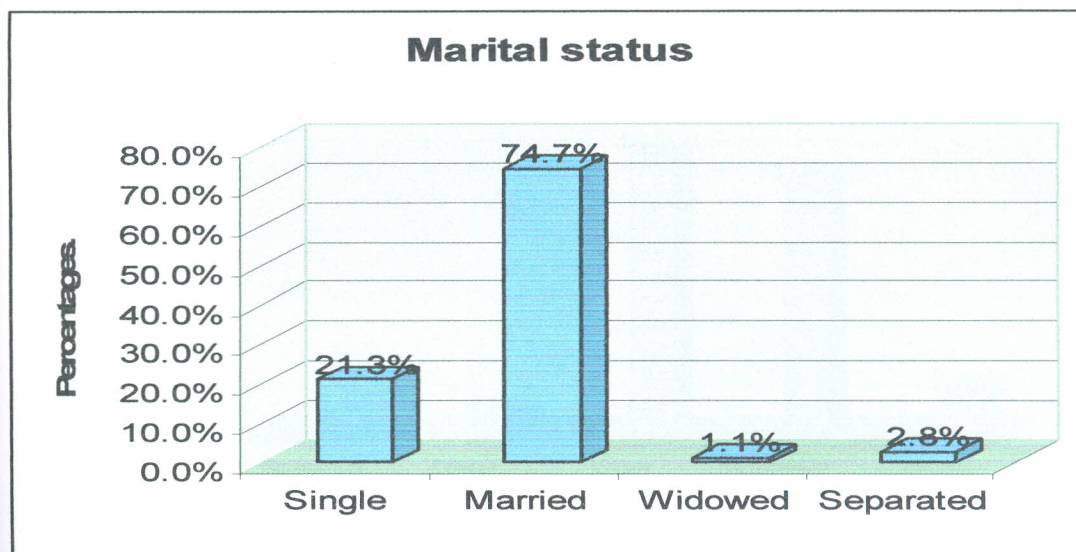


4.2.3. Marital status.

Majority of the respondents 133 (74.7%) were married and a good number 38 (21.3%) were single (Figure 3).

The proportion of those who were single and participated in all the tasks for their children was 55.3%. Approximately two-thirds (63.2%) of married respondents participated in all the care tasks for their children. All the widowed caregivers (100%) and 60% of separated caregivers were involved in all the 5 defined care giving tasks during hospitalization. One-way ANOVA results showed no statistical significance in mean participation in care by different marital status (ANOVA d.f= 174; p= 0.71).

Figure 3: Marital status of parents/guardians.

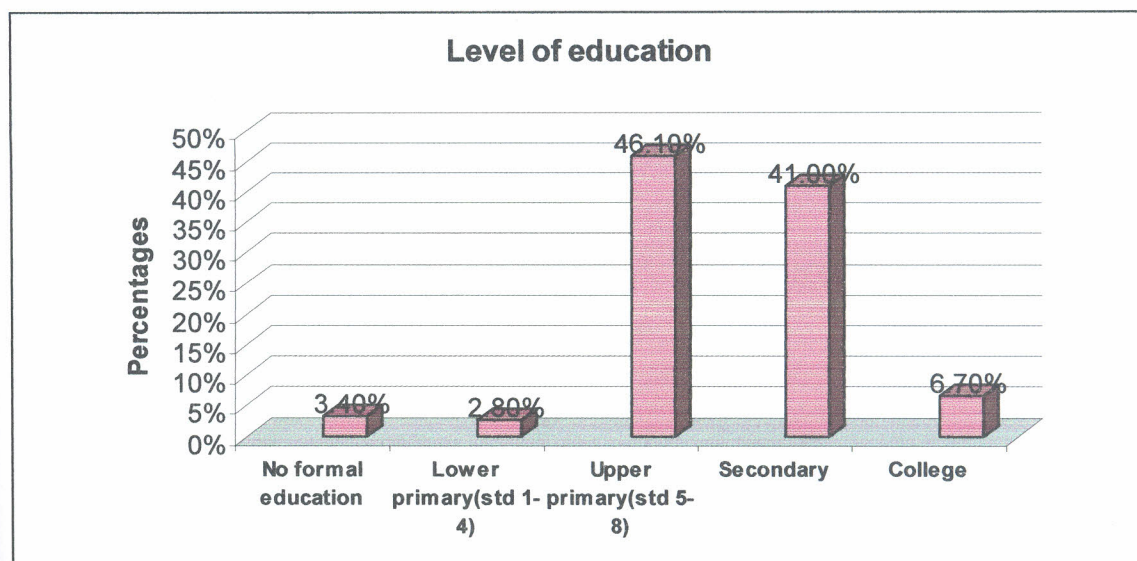


4.2.4. Level of Education.

Almost half of the respondents 82 (46.1%) had upper primary (Standard 5-8) level of education, 73 (41%) had secondary level of education, 12 (6.7%) had college level of education, 6 (3.4%) respondents had no formal education and 5 (2.8%) had lower primary level of education. This is shown in figure 4.

The respondents' level of education was associated with participation in care. Among the parents with a college education 83.3% participated in care as opposed to 33.3% among those with no formal education. These findings presented in table 2 were statistical significant in the one-way ANOVA ($d.f= 177$; $p = 0.014$) implying that the mean participation in care differed significantly for parents with different education levels.

Figure 4: Level of education of the respondents.

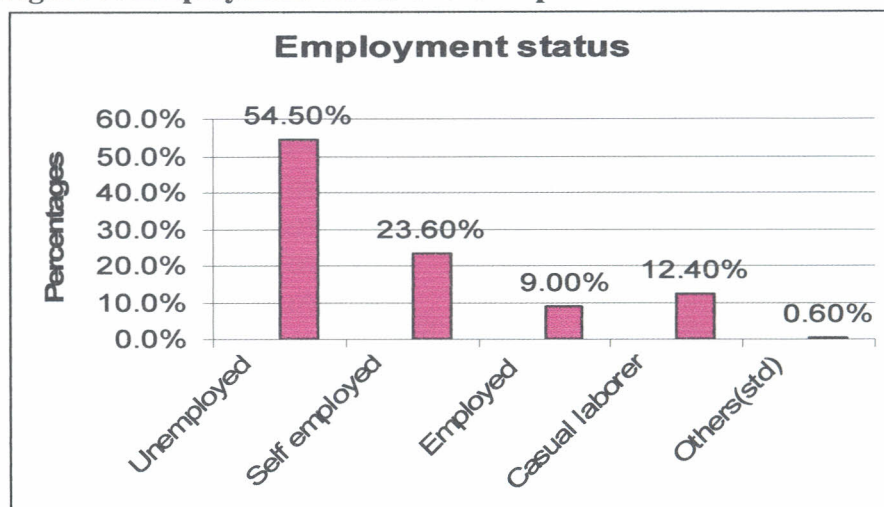


4.2.5. Employment status

More than half of the respondents 98 (55.1%) were unemployed. Those who were employed, 42 (23.6%) were self employed in small scale businesses and 22 (12.4%) were casual laborers (figure 5). These results clearly show that those parents/guardians taking care of children either married or single are dependent on other people for their own survival. This reflects the unemployment status in the country in which majority of the individuals are not employed.

The proportion of those who were unemployed and participated in all the care giving tasks was 60.8%. Among the self employed respondents 59.5% participated in care, 81.3% of those who were employed participated in care, casual laborers had 59.1% of them participating in care while the student never participated in care. Results of the ANOVA test did not provide sufficient evidence of association between employment status and participation in care. (d.f=175; $p = 0.46$) This showed that employment status of the parents/guardians did not influence the level of participation in the care of their children.

Figure 5: Employment status of the respondents.

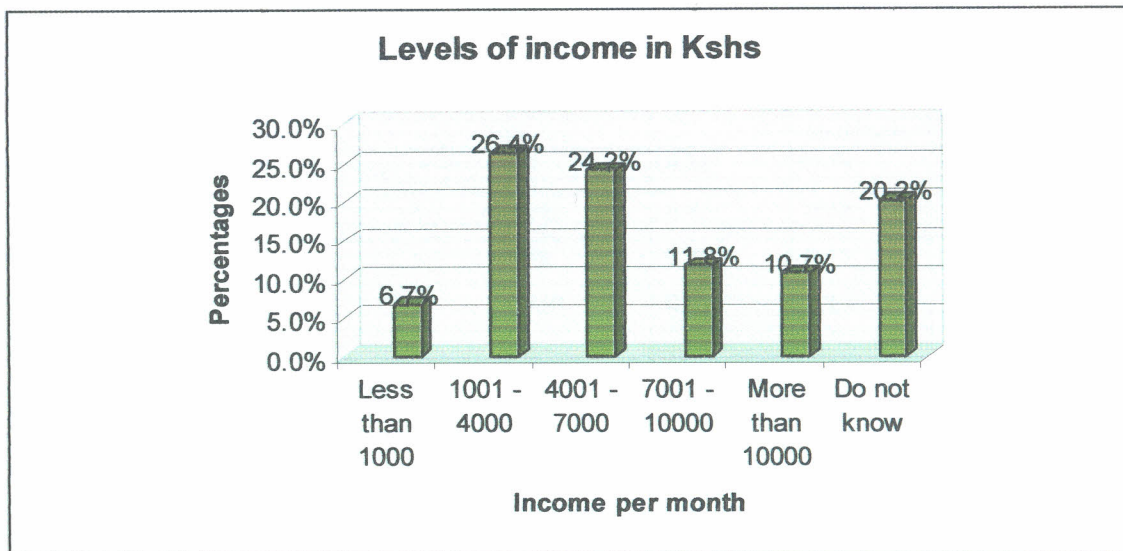


4.2.6. Level of income.

The majority of the respondents 123(69.1%) earned less than Kshs.10, 000.00 per month. Thirty six (20.2%) who were mothers did not know or estimate how much their husbands earned most of whom would be in the category of less than Kshs.10, 000.00 per month. Only 19 (10.7%) earned more than Kshs. 10,000.00 a month as shown in figure 6. These findings depicts that most were of low income group and lived a dependency life which could influence child care practices.

In ANOVA test (Table 2), the parents/guardians who earned less than Kshs.1000 per month had a proportion of 41.7% participating in all the care giving tasks. The proportions of care givers with similar participation in other groups were 66% for those who earned Kshs.1001 – 4000 participated, 53.5% of those in the bracket of Kshs.4001 - 7000 and 63.2% of those who earned more than Kshs.10000. The findings were not statistical significant (ANOVA, d.f=141; p = 0.25).

Figure 6: Levels of monthly incomes of the respondents in Kenya shillings.



4.2.7. Relationship to admitted child.

Most of the parents/guardians, 164 (92.1%) who were staying with the admitted child were mothers to the children. Four (2.2%) were fathers, 9 (5.1%) were grandmothers and one (0.6%) was a cousin to an admitted child (Figure 7).

Majority (60.4%) of the mothers were shown to participate in all the five defined care giving activities. The proportion of fathers with similar participation was 75% and 88.9% of the grandmothers participated in care. The relationship of the parents/guardians to the child did not influence their participation in care (ANOVA, d.f=173; p= 0.44) as shown in Table 2.

Figure 7: Relationship of the parent/guardian to the admitted children.

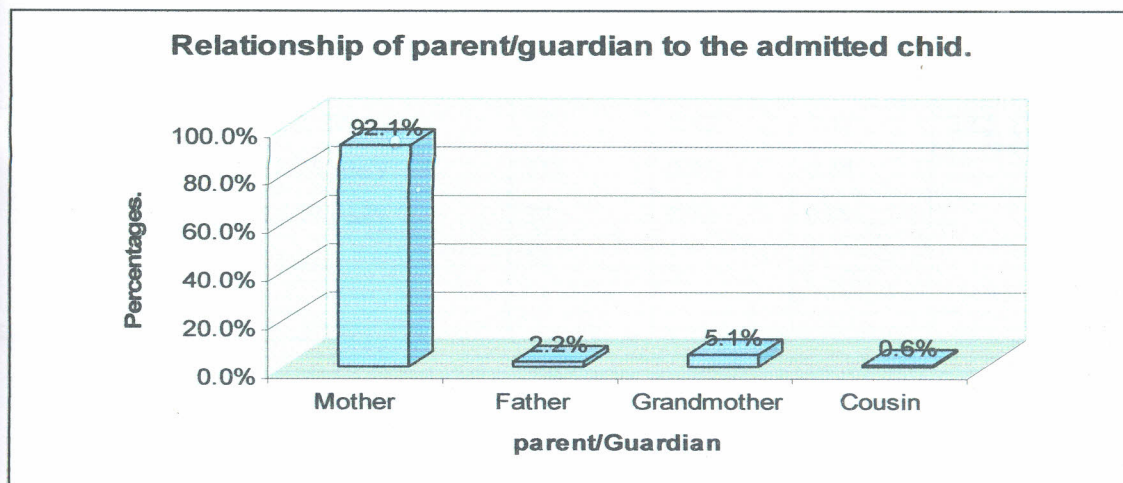


Table 2: ANOVA analysis for parents/guardians characteristics and their performance of care giver duties

Independent Variables		Frequency	Mean	Standard deviation	F statistic	P-value
Gender	Male	5	0.88	0.18	0.24	0.62
	Female	172	0.91	0.13		
Marital status	Single	38	0.89	0.13	0.47	0.71
	Married	130	0.91	0.13		
	Widowed	2	1.0	-		
	Separated	5	0.92	0.11		
Level of education	No formal education	6	0.93	0.10	3.24	0.014
	Lower pri. (std 1-4)	5	0.88	0.18		
	Upper Pri. (std 5 -8)	82	0.92	0.13		
	Secondary	73	0.92	0.11		
	College	12	0.78	0.16		
Employment status	Unemployed	93	0.90	0.13	0.93	0.46
	Self employed	39	0.92	0.09		
	Employed	16	0.95	0.11		
	Casual laborer	22	0.89	0.16		
	Other (student)	4	0.85	0.10		
Level of income	Less than 1000	12	0.81	0.19	1.36	0.25
	1001 – 4000	47	0.91	0.14		
	4001 – 7000	43	0.90	0.11		
	7001 – 10000	21	0.87	0.14		
	More than 10000	19	0.91	0.12		
Relationship to child	Mother	160	0.90	0.13	0.82	0.44
	Father	4	0.90	0.2		
	Other	10	0.96	0.08		
Age group	Below 20 years	11	0.92	0.13	2.85	0.039
	20 – 29 years	113	0.89	0.14		
	30 – 39 years	37	0.92	0.09		
	40 years+	14	1	-		

4.3. Results of Multivariate analysis

Linear regression was used to conduct multivariate analysis. The factors influencing parents/guardians' participation in care were included in the linear regression model (cut off P value ≤ 0.05) along with the main study variables. Approximately 10% of the total variability in the model was explained by these variables. ($r^2 = 0.096$; d.f=130) The results of linear regression show that there was no linear relationship between either age group ($p=0.212$) or level of education ($p=0.195$) and participation in care. (Table 3) However, there was a linear relationship between a child's age and parental participation in care after adjusting for the effect of the other variables in the model. Caretakers' participation in care increased by 0.002 for every unit increase in child's age. ($p=0.038$) The other child specific characteristics did not show a linear relationship with participation in care. This means there was no significant relationship between the children's characteristics and participation in care. (Table 3)

Table 3: Linear regression analysis of main study variables against participation in care.

Variable	Coefficient	95% confidence interval		p value
child's age	0.002	0.000	0.003	0.038
caretaker's education level	-0.014	-0.047	0.019	0.403
monthly income	0.014	-0.007	0.035	0.195
caretaker's age	0.003	-0.002	0.007	0.212
caretaker's employment	-0.001	-0.022	0.019	0.891
caretaker's relationship with child	-0.006	-0.076	0.064	0.869
child's sex	-0.009	-0.058	0.039	0.704
constant	0.842	0.669	1.015	0.000

* $r^2 = 0.096$

4.4. CHARACTERISTICS OF CHILDREN.

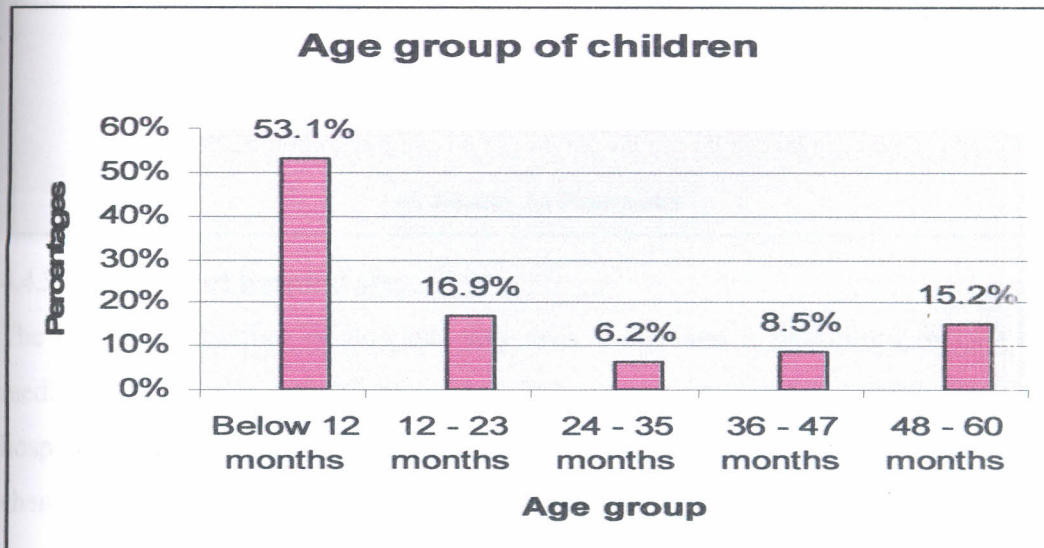
4.4.1. Age group.

Majority of the admitted children, 95 (53.1%) were below 12 months of age, 30 (16.9%) were between 12 to 23 months of age, 11 (6.2%) were of age between 24 to 35 months, 15 (8.5%) were of the age of between 36 to 47 months and 27(15.2%) were 48 to 60 months of age shown in figure 8.

The infants are the most vulnerable age group and represent the highest morbidity and mortality rates (KDHS 2003).

Parents/guardians to those children who were less than 12 months had a proportion of 54.3% of them likely to participate in all the 5 care giving tasks. The proportions of care givers with similar participation were 67.7% of those with children in the 12-23 months and 36-47 months and 77.8% for those with children at 48- 60 months of age. There was weak evidence of difference in mean participation in care by child age groups. (ANOVA, $P=0.06$).The mean difference in participation in care was however not statistically significant across the different age groups.

Figure 8: Age groups of the admitted children in months.

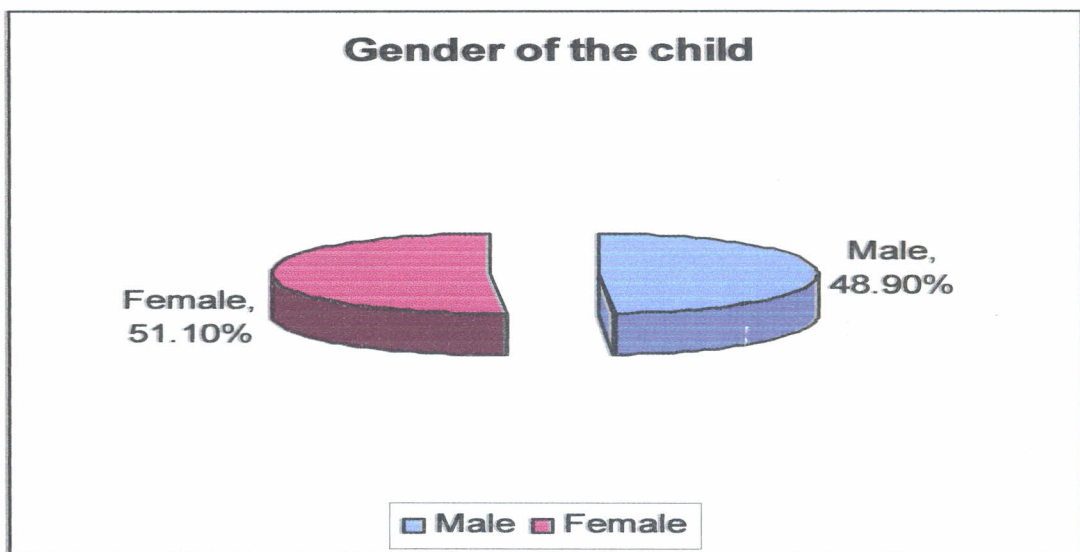


4.4.2. Gender

There were almost equal number of children admitted in terms of gender, 91 (51.1%) were females while 87 (48.9%) were males. (Figure 9). It is common knowledge that females are always more than males by far; this must have been a rare occasion.

The caregivers of the 87 male children had a mean score of 0.91 in participation in care giving activities compared to a mean score of 0.9 for the 88 caregivers of female children. Gender of the admitted children did not seem to influence the parents/guardians' participation in the care of their children as there was no statistical significance in their relationship (mean difference 0.001 95%CI -0.04 to 0.04, P= 0.95).

Figure 9: Gender of the children admitted in the wards.



4.4.3. Duration of hospital stay.

The minimum number of hospital stay was 1 day and a maximum of 270 days. The median was 10 days with sd of ± 50.9 . This shows a skewed distribution of duration of hospital stay. Those children who had stayed longer were those who were on chemotherapy for chronic illnesses like the oncology conditions.

The analysis shows that the parents/guardians of children who had stayed for 7 days or less, had 54.8% of them participate in all the defined care giving tasks, 69.8% of those who had stayed for 8-14 days were likely to participate in care and those who had stayed

for over 30 days had 65.9% of them likely to participate in care. The mean participation in care giving duties among the different groups based on length of stay was not statistically different (ANOVA, $p = 0.22$). (Table 4). A study by Neill (1996) indicated that parents who experienced short hospital admissions found participation in their child's care difficult, however, in this study there were no differences.

Table 4: ANOVA analysis for children's characteristics and caregivers' performance of care giver duties

Independent Variables		Frequency	Mean	Standard deviation	F statistic	P-value
Gender	Male	87	0.91	0.12	<0.001	0.95
	Female	88	0.90	0.14		
Age Group	0-11 months	95	0.88	0.15	2.26	0.06
	12-23 months	30	0.93	0.09		
	24-35 months	11	0.94	0.09		
	36-47 months	15	0.93	0.09		
	48-60 months	27	0.94	0.11		
Duration of Hospital stay.	7 days & below	73	0.88	0.15	1.49	0.22
	8 – 14 days	43	0.93	0.11		
	15 – 30 days	18	0.91	0.12		
	31 days & days	44	0.92	0.10		

4.4.4. Medical diagnoses of admitted children.

One hundred fifty (150) of the 178 children had single morbid condition and the remainder 28 had co-morbid conditions. The majority were infectious diseases. This is consistent with the Integrated Management of childhood illnesses (IMCI) strategy where children are assessed and managed for various conditions at the same time.

The leading cause of hospitalization was pneumonia with 34.9%, followed by meningitis and gastroenteritis at 14.6% each, haematological conditions with 6.2%, malaria (3.9%) , PEM which is one of the IMCI conditions was surprisingly low at 1.1%.(table 5).

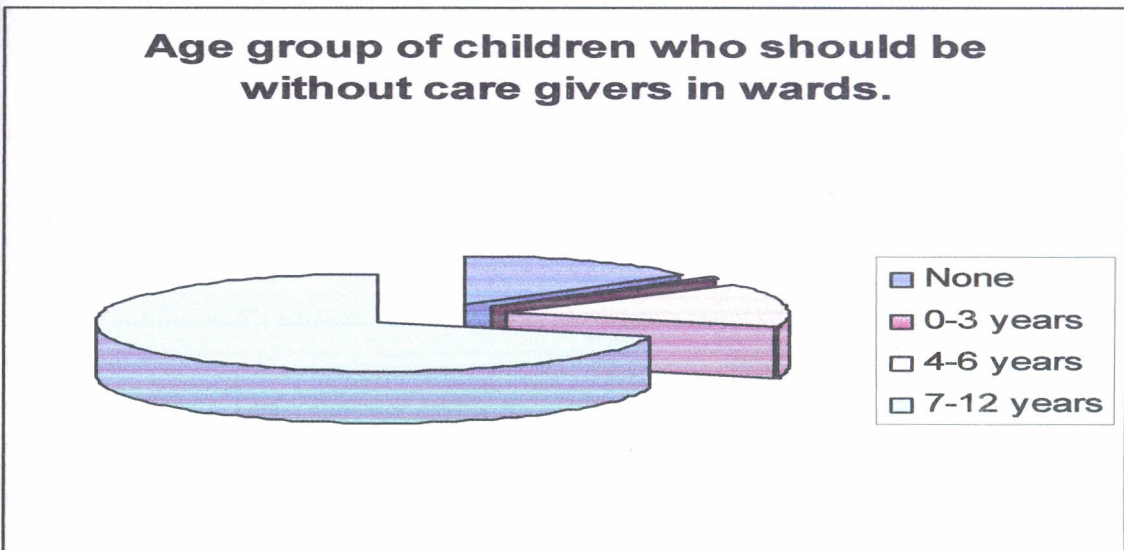
Table 5: Diagnoses of admitted children.

Diagnoses	Frequency	Percentage
Haematological conditions.	11	6.2
Asthma	2	1.1
Chicken pox	1	0.6
Convulsive disorder	2	1.1
Gastroenteritis/ Dehydration	26	14.6
Liver disease	4	2.2
Malaria	7	3.9
Meningitis	26	14.6
Neuropathy	3	1.7
Oncology	17	9.6
Protein Energy Malnutrition	2	1.1
Pneumonia	62	34.9
Poisoning	2	1.1
Renal disease	3	1.7
Rickets	2	1.1
Septicemia	2	1.1
Spina bifida	1	0.6
Tuberculosis	2	1.1

4.4.5. Opinions of parents/guardians on children to be left in wards without care givers.

Most of the respondents, 122 (70.1%), were of the opinion that children of age 7 to 12 years could be left in wards without parents/guardians. This is the period in which the child would have developed independence according to the psychosocial theory by Erikson. Twenty six (15.2%) said those of 4-6 years could be left, 24 (14%) thought none should be left and 1 (0.6%) thought those of 0-3 years could be left alone in wards. (Figure 10). Majority of the parents/guardians were of the opinion that the child could be left alone without them only if the child can take care of themselves.

Figure 10: Parents/guardians' opinion on age group of children who should be left in wards without parents/guardians.



4.5 PARENTS/GUARDIANS' CARE ACTIVITIES

4.5.1. Parents/guardians' opinion on issues regarding their children's management.

Table 6. below highlights the feelings of respondents on various aspects regarding their participation in care. About 60% of the respondents felt their role in the wards was clear while 38.55 thought otherwise. 71.1% said they were involved in the medical decision making of their children and 28.9% felt they were not involved. Over 80% felt there was positive staff attitudes towards them, their role were to provide support and reassurance to their children, they were not a substitute for lack of staff, their experiences in child care were being utilized and that they could provide care to their children even in frightening situations when given a chance.

Table 6: Parents/guardians' feelings on some issues regarding their children's management.

		Yes	No
My role in the ward is unclear	Freq.	67	107
	%	38.5	61.5
Am involved in the decisions about my child's care	Freq.	123	50
	%	71.1	28.9
There are positive staff's attitudes towards parents' participation in child care.	Freq.	160	14
	%	92	8
My role is to provide support and reassurance for my child.	Freq.	172	3
	%	98.3	1.7
My role is as a substitute for lack of qualified staff.	Freq.	30	142
	%	17.3	82.1
My experience in child care is being utilized by staff.	Freq.	151	22
	%	87.3	12.7
Can provide care to my child in frightening situations e.g. during invasive procedures/resuscitation.	Freq.	142	32
	%	81.6	18.4

4.5.2. Care activities that parents/guardians participate in.

All parents/guardians participated in giving basic care of bed/cot making and bathing the child. Most parents/guardians (64.3%) did not participate in feeding their children via NG tube. This could be explained by the fact that nasogastric feeding is considered a technical skill hence parents/guardians were afraid of doing it. It could also be reasoned that the children did not require nasogastric feeding since could feed orally.

A good number (33.5%) of the parents/guardians did not participate in the decision making of their child's management. These parents/guardians may have felt inferior due to lack of adequate knowledge and therefore feared or they were not given a chance by the health workers. (Table 7).

Table 7: Care activities that parents/guardians participate in.

		Yes	No
Bed / cot making	Freq.	178	0
	%	100	0
Bathing the child	Freq.	178	0
	%	100	0
Feeding the child orally	Freq.	169	1
	%	99.4	0.6
Feeding the child via nasogastric tube.	Freq.	41	74
	%	35.7	64.3
Oral drug administration	Freq.	164	8
	%	95.3	4.7
Decision making of the child management	Freq.	117	59
	%	66.5	33.5

4.5.3. Parents/guardians opinion on nurses' performance of some roles.

On the roles shown on Table 8, over 25 % of the parents/guardians felt that the nurses were not performing their expected roles. This shows that a good number of nurses are not performing their roles in the promotion of parents/guardians participation in the care of their children. It also shows there were little positive nurse-parents/guardians interactions in the management of hospitalized children.

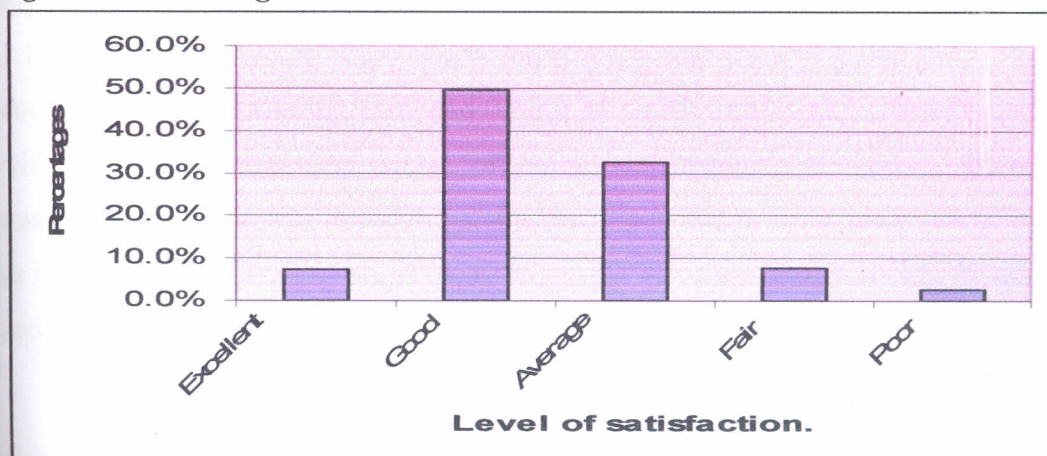
Table 8: Parents/guardians opinion on whether nurses perform some specified roles

		Yes	No
Nurses help understand what is done to my child.	Frequency	124	53
	percentage	70.1	29.9
Teach me how to give care to my child.	Frequency	120	57
	percentage	67.8	32.2
Make me feel valued/important as a parent/guardian.	Frequency	127	51
	percentage	71.3	28.7
Include me in discussions when making decisions.	Frequency	97	81
	percentage	54.5	45.5
Help me understand child's reactions/condition.	Frequency	95	81
	percentage	54	46
Respond to my concerns/ worries.	Frequency	125	52
	percentage	70.6	29.4
Provide good care to my child.	Frequency	151	25
	percentage	85.8	14.2

4.5.5. Parents/guardians' level of satisfaction.

On the level of satisfaction in care of their children, only 7.3% rated it as excellent, 49.4% of the parents/guardians rated it as good, 32.6% rated it as average, 7.9% rated it fair whereas 2.8% thought it was poor.

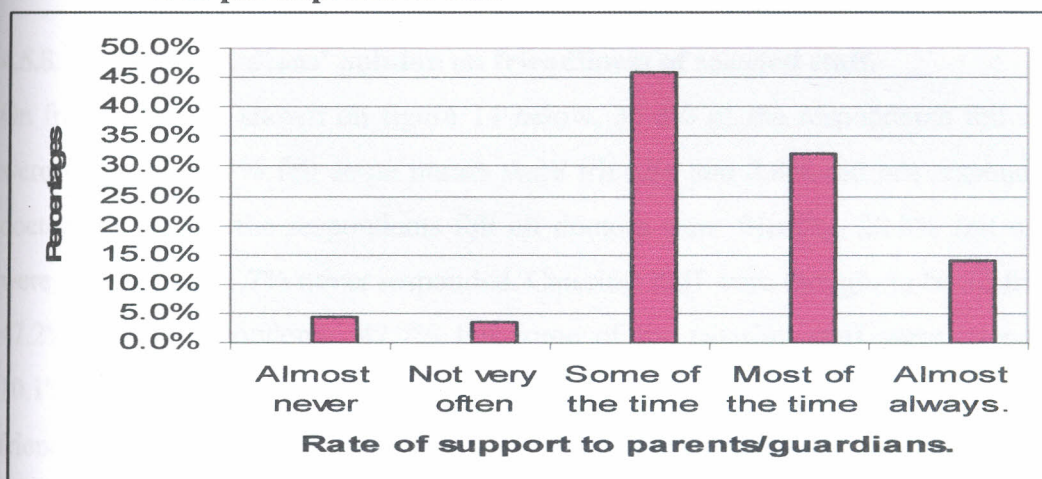
Figure 11: Parents/guardians level of satisfaction in the care of their children.



4.5.6. Rate of support to parents/guardians by nurses.

The respondents were asked how often they received support from the nursing staff to allow them participate in the care of their children, 4.5% said had almost never received support, 3.4% said not very often, 45.8% said they received support some of the time, 32.2% said they received support most of the time and 14.1% said they received support almost always. The parents/guardians were positive that they received support from nurses in a good number of times.

Figure 12: The frequency of parents/guardians receiving support from nurses in their participation in care



4.5.7. Parents/guardians' opinion on rudeness of selected staff.

Figure 13 depicts parents/guardians' opinion on the attitudes of some selected staff. Only 1.1% felt nurses were all rude, 63.5% felt some nurses were rude compared to 20.2% of doctors, 42.7% of catering staff and 37.6% of public health staff. Nurses interact a lot with patients/guardians by virtue of being with patients all round. Therefore any misunderstanding in dealing with parents/guardians due to work load will be interpreted as rude. Most respondents shied away from this question because it was in the negative and may be thought it would jeopardize the treatment of their children.

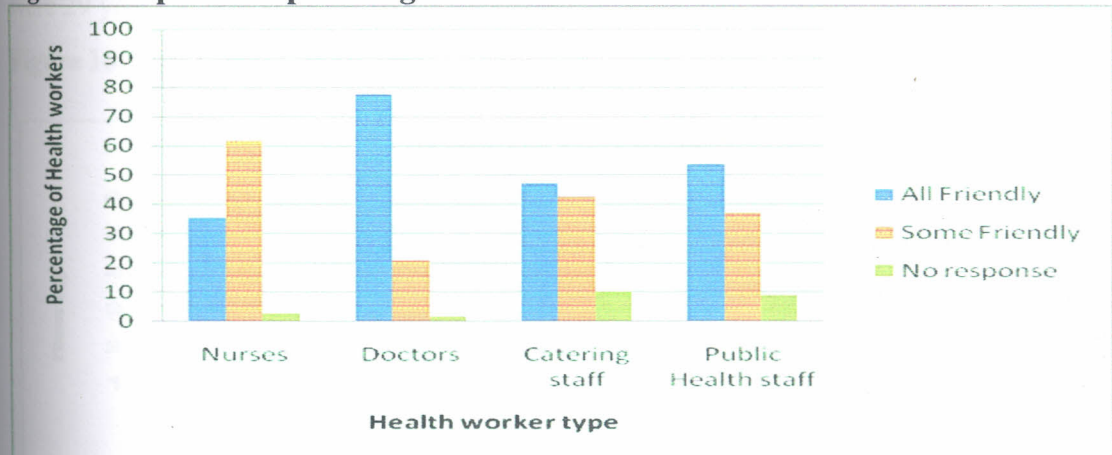
Figure 13: Opinion of parents/guardians on rudeness of selected staff.



4.5.8. Parents/guardians’ opinion on friendliness of selected staff.

On friendliness as shown on figure 14 below, 35.4% of the respondents felt all nurses were friendly, 61.8% felt some nurses were friendly and 2.8% did not respond. For the doctors, 77.5% of the respondents felt all doctors were friendly, 20.8% felt only some were friendly and 1.7% never responded. Catering staff were thought to be all friendly by 47.2% of the respondents, 42.7% felt some of the catering staff were friendly while 10.1% declined to respond to this issue. The public health staff was thought to be all friendly by 53.9% of the respondents, while 37.1% felt some of them were friendly and 9% never responded. In comparison, nurses were the least said to be friendly. This has an impact on the promotion of parents/guardians participation in the care of their hospitalized children.

Figure 14: Opinion of parents/guardians on friendliness of selected staff.



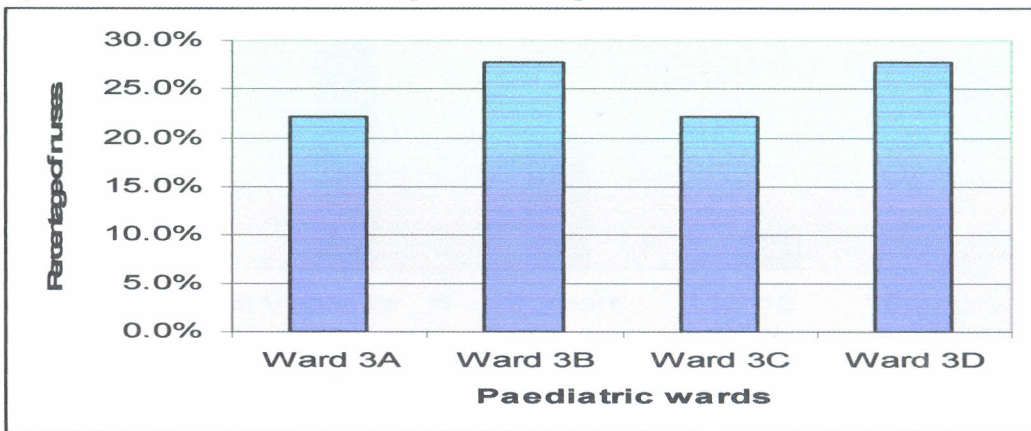
4.6 NURSES' CHARACTERISTICS

A sample of 54 nurses were selected. The following section presents the descriptive characteristics of this sample.

4.6.1. Nurses distribution by ward.

The distribution of nurses was similar across the four paediatric ward in the hospital (3A,B,C, and D).The proportion of interviewed nurses working in wards 3B and 3D was similar (27.8% for each ward). The remaining 44.8% of respondents worked in wards 3A and 3C (22.2% from each ward). (Figure 15 below).

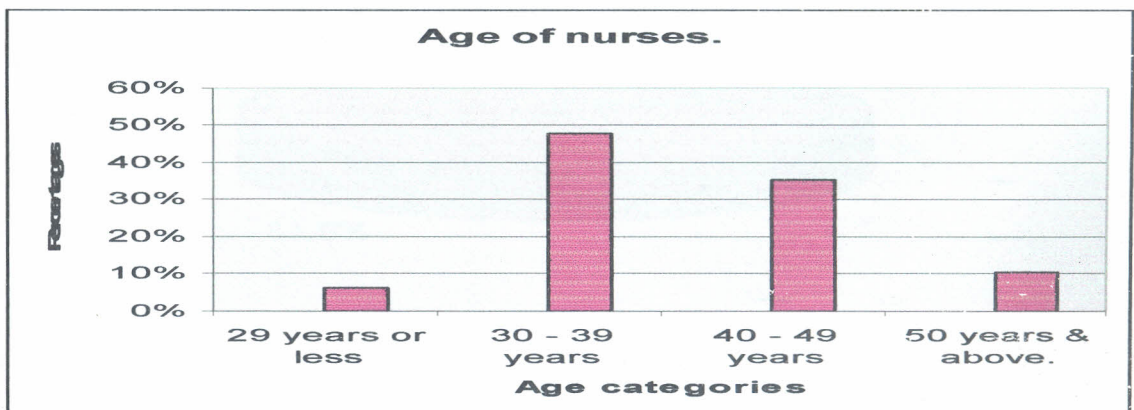
Figure 15: Distribution of sampled nurses per ward.



4.6.2. Age group.

The nurses' age ranged between 28 and 52 years with a mean of 33.7 years. (sd =5.2). Majority (47.9%) of the nurses were in the age category of 30-39 years, 35.4% were in the 40-49 years age bracket, those who were 50 years and above were 10.4% while 6.3% were 29 years or less.(Figure 16).

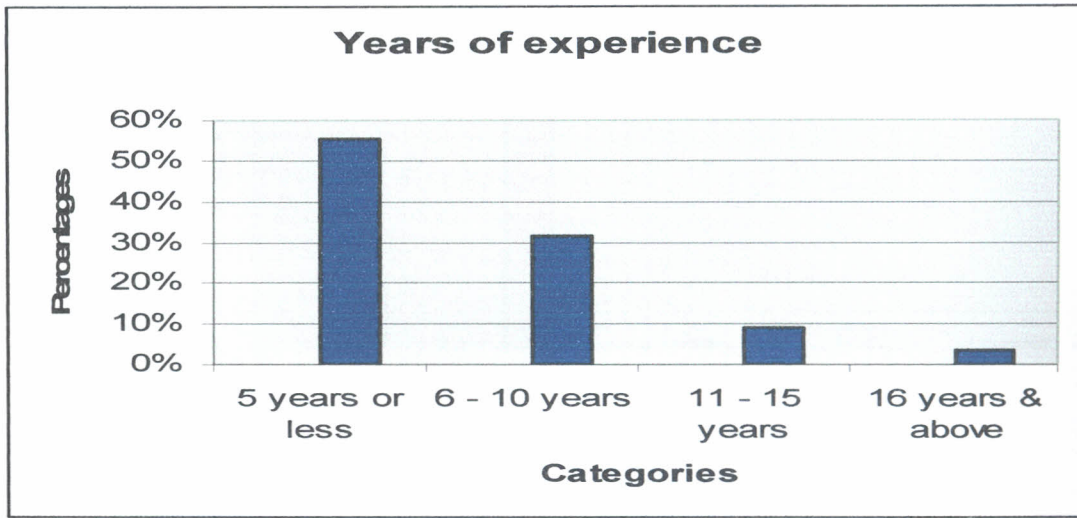
Figure 16: Age Group of Nurses.



4.6.3. Years of experience.

The nurses who had worked in the paediatric medical wards for 5 years or less were 55.6%, 31.5% had worked for 6-10 years, 9.3% had worked for 11-15 years and 3.7% had worked for 16 years or more.(Figure 17). More experienced nurses were found to have more accepting attitude towards parent participation in the care of their children. (Guzzeta 2006).

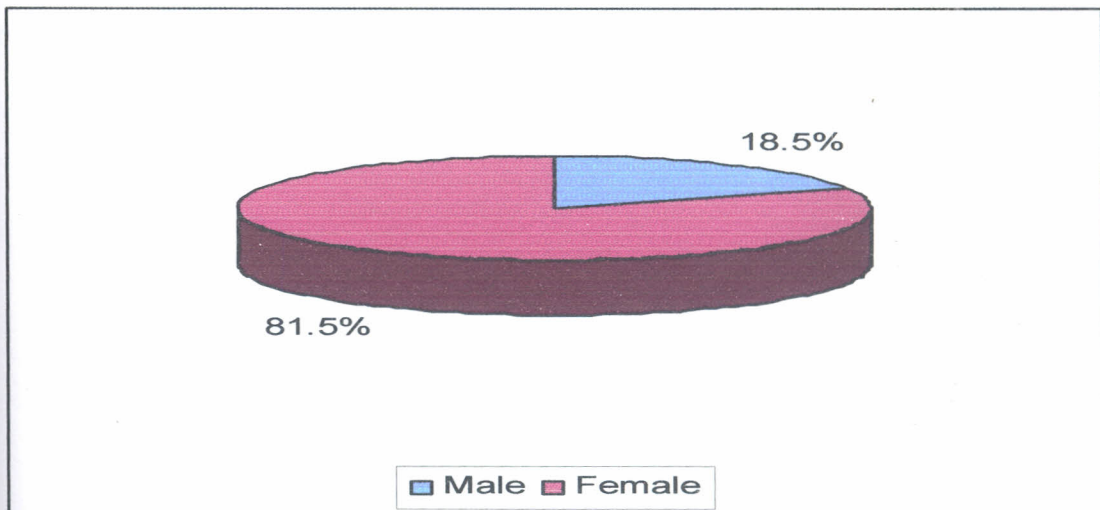
Figure 17: Years of Experience.



4.6.4. Gender of nurses.

The nursing profession remains a female dominated profession as 81.5% of the nurses were females while males constituted 18.5%. Nationally we have more females than males according to the KDHS (2003).

Figure 18: Gender of Nurses.

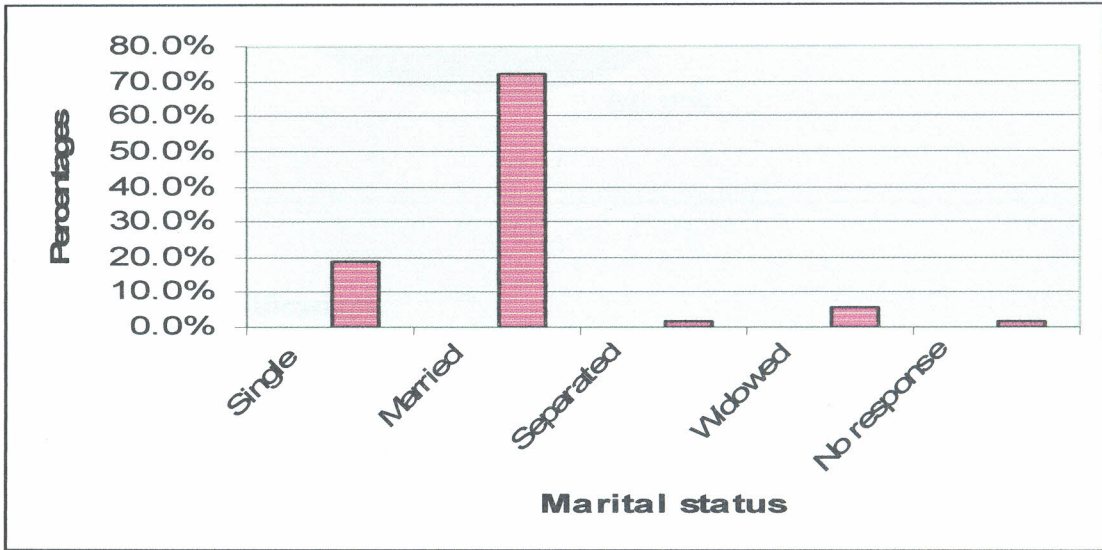


4.6.5. Marital status.

Majority (72.2%) of the nurses were married, 18.5% of them were single, 1.9% were separated, and 5.6% were widowed while 1.9% did not respond to this item.(Figure 19).

Nurses who were married were found to have positive attitude towards parent participation in care of their children.(Guzzeta 2006).

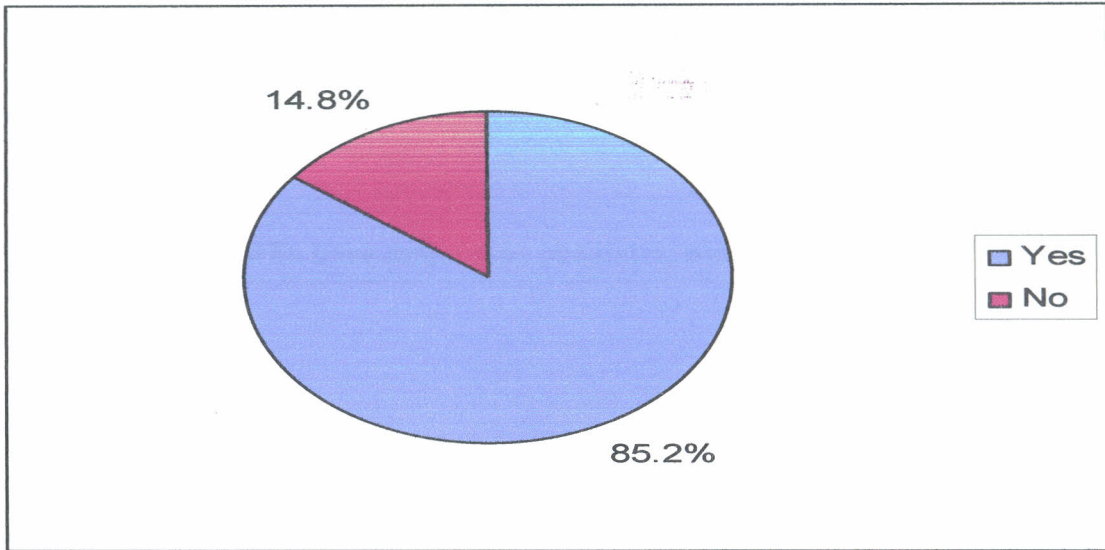
Figure 19: Marital status of Nurses.



4.6.6. Nurses with children.

Most of the nurses, 85.2% had children while 14.8% had no children.(Figure 20). In the study by Guzzeta (2006), nurses with children promoted parents participation in the care of their hospitalized children.

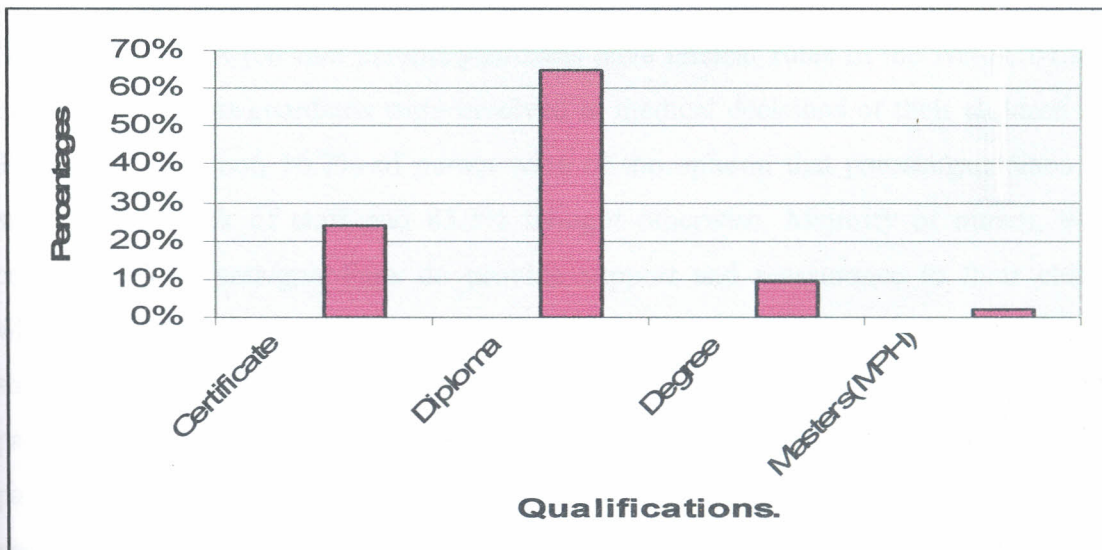
Figure 20: Proportion of nurses with children.



4.6.7. Nurses' Qualifications.

As illustrated in figure 21, majority of the nurses had qualifications at a diploma level constituted 64.8%, certificate level nurses were 24.1%, and those with degree qualification were 9.3%, while one nurse (1.9%) had a master's degree in public health. Higher education level has often been linked with increased acceptance to parents/guardians participation in care.(Guzetta 2006).

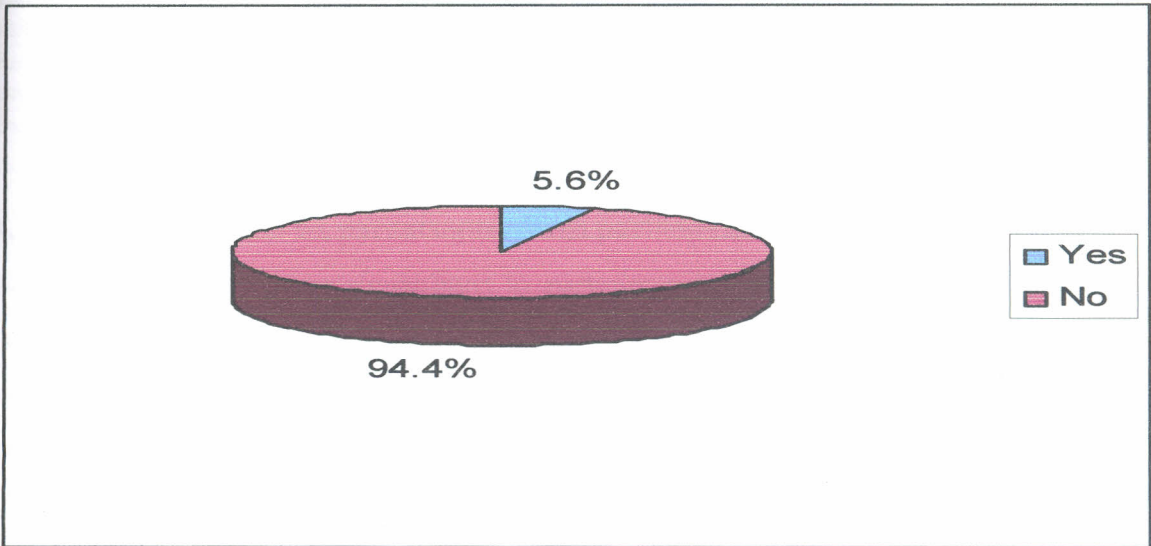
Figure 21: Nurses Qualifications.



4.6.8. Nurses with specialty in paediatric nursing.

Only 5.6% of the nurses working in the paediatric medical wards had a paediatric nursing specialty. Promotion of parents/guardians participation in care can be enhanced greatly by nurses who understand the details of paediatric nursing, therefore specialization is important.

Figure 22: Nurses who have undergone paediatric nursing course.



4.7 NURSES' OPINION

4.7.1. Nurses' feelings on issues regarding parents/guardians participation in child care.

Half of the nurses felt that parents/guardians have unclear roles in the wards, 67.9% of nurses said parents/guardians were involved in medical decisions of their children while 32.1% said they not, 16.7% of nurses were of the opinion that parents/guardians are a substitute for lack of staff and 83.3% thought otherwise. Majority of nurses, 94.4%, conquer that parents/guardians do provide support and reassurance to their children, while 5.6% thought the opposite. Most nurses comprising 63% felt parents/guardians should not be free to participate in care during frightening situations and 37% felt parents/guardians should be allowed, more than half of the respondents felt the parents/guardians experiences in child care was utilized while 40% of the nurses thought parents/guardians experiences in child care was not utilized by the nurses.(Table 9).

Table 9: Nurses feelings on selected issues regarding parents/guardians participation in child care.

		Yes	No	N
The role of parents/guardians in the wards is unclear.	Freq.	26	26	52
	%	50	50	
Parents/guardians are involved in medical decisions on their child's care.	Freq.	36	17	53
	%	67.9	32.1	
Role of parents/guardians is to substitute for lack of qualified staff.	Freq.	9	45	54
	%	16.7	83.3	
Parents/guardians role is to provide support and reassurance to their child.	Freq.	51	3	54
	%	94.4	5.6	
Parents/guardians should be free to participate in the care of their child during frightening situations.	Freq.	20	34	54
	%	37	63	
Parents/guardians experience in child care is often utilized.	Freq.	31	21	52
	%	59.6	40.4	

4.7.2. Nurses' opinion on parents/guardians participation on care activities.

Most nurses expect parents/guardians to participate in basic care activities of bed/cot making, bathing of the child and feeding the child orally. 58.5% of the respondents expect parents/guardians to give their children oral medications and 41.5% said the parents/guardians should not, 22.2% of nurses expect the parents/guardians to feed their children via NG tube if need be while 77.8% disagreed, this may be due to the fact that nasogastric feeding is a technical activity. On decision making, 55.8% of the nurses felt that parents/guardians should not participate in making decisions on their child's management. This may be interpreted that this proportion does not include the parents/guardians in decision making of their child's management.(Table 10).

Table 10: Care activities nurses expect parents/guardians to participate in.

Care Activities.		YES	NO	N
Bed/cot making.	Freq.	41	11	52
	%	78.8	21.2	
Bathing the child	Freq.	53	1	54
	%	98.1	1.9	
Feeding the child orally	Freq.	54	0	54
	%	100	0	
Feeding the child via N.G tube	Freq.	12	42	54
	%	22.2	77.8	
Giving the child oral medications	Freq.	31	22	53
	%	58.5	41.5	
Decision making on the child's management	Freq.	23	29	52
	%	44.2	55.8	

4.7.3. Analysis of nurses' perceptions on care givers' care activities.

The ANOVA analysis did not show significant relation between the nurses' characteristics and their perceptions on parents/guardians participation in care activities in the hospital.

Table 11: ANOVA analysis of nurses' perceptions on care givers participation in care activities.

	n	perception on caretaker participation	Standard deviation	ANOVA		
				F statistic	df	P value
Sex						
male	9	0.78	0.23	0.23	52	0.63
female	44	0.74	0.2			
Marital status						
single	11	0.75	0.18	1.76	52	0.18
married	39	0.76	0.2			
widowed	3	0.53	0.31			
Qualification						
enrolled nurse	13	0.72	0.25	0.34	53	0.8
KRCHN	35	0.75	0.19			
BScN	5	0.8	0.24			
MScN	1	0.6				
Experience						
less than 5 yrs	25	0.76	0.23	0.52	50	0.67
5 to 9 years	17	0.72	0.17			
10 to 14 years	7	0.83	0.21			
15 years and above	2	0.7	0.14			
Paediatric nursing training						
yes	3	0.67	0.12	0.6	52	0.44
no	50	0.76	0.21			

CHAPTER FIVE: DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS.

5.1 DISCUSSION

5.1.1 Introduction

This chapter presents a discussion of the study findings. This includes respondents' views on parents/guardians participation in the care of their hospitalized children.

5.1.2. Parents/guardians' participation in the care of hospitalized children.

The concept of parents participation lacks a clear definition in the literature (Darbyshire 1993) and has been variously represented by terms such as "parent involvement" (in care and/or decision -making), "partnership-in-care", "mutual participation", "care-by parent" and involvement of the family as a unit of care" (Coyne, 1996). The aim of parent participation is to provide optimal care to the child, but it may also be beneficial to the parent/guardian. For purposes of this survey, parental participation was defined as the care giving activities performed by a parent/guardian for a child in the hospital setting in which they share or take part in the care of their child across the entire hospital episode.

Parents/guardians' participation in the care of their hospitalized children is a fundamental aspect in paediatric nursing and the wellbeing of the child.

Parent participation in the hospitalized child's care has been increasingly promoted in paediatric nursing for many years because it ameliorates the adverse aspects of hospitalization, avoids parental separation and contributes to quality care for sick children. (Coyne 2008).

Majority of the parents/guardians in this study were willing to participate in the care of their children and 81.6% said could provide care to their children even in frightening situations. Similar results were reported in a Mozambique study by Soderback & Christensson (2008), in which most parents or family care givers had a desire to be involved in the care of their hospitalized child. Most parents in a study by Lam (2006) had a strong desire for participation in care and viewed accompanying their hospitalized child and participation in care as an unconditional aspect of being a parent. The findings are consistent with those in this study in which over 90% of the parents/guardians were in favor of participating in care of their children.

5.1.3. Parents/guardians' characteristics.

Most of the parents/guardians in the study were found to be women (mothers to the child). This is similar to findings in a study by Seid et al (2001) on parents' perceptions of primary care in which majority (77%) of the respondents were females. This is because most of the children were in their breastfeeding ages as seen from their socio-demographic characteristics in the results section. Child care a mother's role in most African setup, these mothers were majority unemployed hence they were available to stay with the child in the hospital. Most of the parents/guardians, who were staying with the admitted child, were mothers to the children. These findings can be explained by the fact that fathers are the bread winners in most families while child care activities are mainly left to the mothers. When the mother is busy the child care activities are transferred to the grandmothers or cousins.

Majority of the parents/guardians were of the age group of 20 to 29 years, mean age was 27.2 years with a standard deviation (sd) of ± 7.02 . In their level of education many were of the upper primary and secondary levels of education at 46.1% and 41% respectively and more than half of the respondents were unemployed.

Parents/guardians with more than a high school education were significantly more likely to report participation in decision making, $p=0.014$. The age of the child did not affect reports of parents/guardians participation in care. These findings are similar to those of a study by Tarini et al (2007), in which it was reported that parents with less than a high school education were significantly less likely to report participation in decision making, and in the same study the age of the child did not affect parental reports of participation in care. Similar findings were reported by Wen-lin (2005).

The respondents' level of education was associated with participation in care. Among the parents with a college education 83.3% participated in care as opposed to 33.3% among those with no formal education. These findings were statistical significant in the one-way ANOVA ($p = 0.014$) showing that there was a linear relationship between parents/guardians' education level and participation in care after controlling the effects of other variables.

This shows that the more educated the parents/guardians were, the more likely they were to participate in the care of their children. Similar findings were shown in a study by

Heyman et al (1999) in which parents who were more educated were more available and willing to participate in the care of their hospitalized children.

5.1.4. Care Activities.

Most of the parents/guardians participated in basic care activities namely bed/cot making, bathing of the child, feeding the child orally and oral drug administration. Some said they could perform minor technical care activities like feeding the child via NG tube when instructed. In the Brazil study by De lima et al (2001), it was reported that simpler activities namely bathing and feeding were allocated to the mothers. Other activities that the mothers performed were giving medicine by mouth, therapeutic baths, nebulization and physiotherapy. This shows that the parents/guardians can do a lot of care activities if given adequate knowledge and instructed to perform under the nurse's supervision. This will ease on the overburdened small work force.

In this study 66.5% of parents/guardians reported to be involved in medical decision making, this is low compared to findings by Tarini et al (2007) in which 86% of parents agreed that they had participated in their child's medical decision making. These low findings could be attributed to understaffing in which the nurses were overworked and therefore did not have adequate time to involve the parents/guardians.

There were agreed opinions between nurses and parents/guardians regarding care activities like bathing the child and feeding the child orally. However, there were dissimilar opinions with regard to other care activities. Majority of nurses reported that bed/cot making was done by parents/guardians while all the parents/guardians reported to be doing bed/cot making. Just above half of the nurses expected parents/guardians to administer oral medications while 95.3% of parents/guardians reported to have participated in this care activity. With regards to feeding the child via NG tube which is a technical care activity, fewer nurses expected parents/guardians to perform this than parents/guardians who reported they participated in or would participate in if need arose. Only 44.2% of the nurses expected parents/guardians to participate in their child's medical decision making versus 66.5% of the parents/guardians who reported to have participated in. The differences in opinion could be attributed to lack of guidelines in the involvement of parents/guardians participation in care. Many nurses felt the parents/guardians should not be involved in decision making, drug administration especially intravenously, tube feeding, oxygen regulation and nebulization.

5.1.5. Characteristics of children.

Most of the children admitted were infants. This is a vulnerable group susceptible to infections due to their immature immunity. The infants represent a trend of highest morbidity and mortality rates (KDHS 2003).

The children's diseases followed the IMCI pattern of diseases. Pneumonia was found to be the leading cause of admissions. This is consistent with the trends in the KDHS, 2003. Similar findings were found in other studies by Sullivan (2004) on documentation on global child health and Magadi (1997) in a local study in Nyanza.

Parents of children in poor health or with chronic conditions typically report lower quality of care for their children than other parents. (AHRQ 2008). In a study by Mack et al (2008) it was reported that parents of children with chronic conditions report fewer care related problems than parents of children in poor health without chronic conditions. This may be due to the more frequent health care interactions and better continuity of care experienced by children with chronic conditions. In this study most nurses felt that parents/guardians of breastfeeding, critically ill and chronically ill children should stay with children in hospital for health education and supervision of care activities.

5.1.6.Characteristics of nurses.

Nurses are important players who may significantly influence parents/guardians participation in the care of their hospitalized children.

Majority of the nurses were aged between 30-39 years and females constituted majority of the nursing staff similar to findings by Makworo (2006). Most of the nurses working in the paediatric medical wards had diploma level of nursing training as opposed to 3 years ago (2006) where majority of the nurses had certificate level of nursing training. This can be attributed to the fact that many certificate level nurses are increasingly upgrading to diploma level. The increase in upgrading programs, the need by the Nursing council of Kenya (NCK) to face out certificate nurses and the increase thirst for knowledge by nurses may contribute to this. The trend for degree nurses is also changing, whereas the degree nurses constituted 6.4% in the study by Makworo, they were 9.3% in this study. This trend may be explained by increase in diploma-degree conversion programs in which nurses have enrolled for higher education and the employment of fresh graduate nurses in the hospital.

There is also a positive move towards specialization in paediatric nursing. In this study the nurses with special training in paediatrics were 5.6% up from zero 3 years ago as reported by Makworo's study. Modern nursing practice is evidence based through specialization; therefore more nurses are equipping themselves with current knowledge in specialty areas of nursing.

Regarding the importance of parents' participation in care relating to nurses' years of work in hospital, there were significant differences in other studies. The more years of experience nurses had, the more important they considered parental participation, and the older the nurses were the more important they thought the parental participation in care was.(Evagelou 2006). In this study however, there was no statistical significance between nurses' age, years of experience and their perception on parents/guardians' participation in care.

5.1.7.Nurse-Parent/guardian Interactions.

It is desirable that majority of the nurses depicted positive attitude towards parents/guardians participation in the care of their children. The involvement of parents in planning the care of children has been emphasized both locally and globally.(Duke and Tamburlini 2003). According to Mwanda(2004), involvement of parents in key decision-making processes is of paramount importance particularly because parents will continue to care for the child after discharge. However, involvement was not uniform as evidenced by the divergent views from the nurses. This could be attributed to the lack of guidelines which would standardize such important element in child care. Majority of the nurses felt that parents/guardians should be involved so that they can continue proper care after discharge and it relieves workload on health care workers.

There was a general agreement between the parents/guardians and nurses' on some issues, that the parents/guardians were involved in decision making, parents/guardians provide support and reassurance to their children and that parents/guardians are not a substitute for lack of qualified staff. Dissimilar opinions however arose on other issues. Half of the nurses had the opinion that parents/guardians' role in the wards was not clear and only 38.5% of the parents/guardians thought so. These divergent views may be due to the lack of guidelines that govern parents/guardians participation in care of their hospitalized children.

Majority of the parents/guardians said their experience in child care was utilized by nurses while just over half of the nurses felt they had utilized the parents/guardians' experiences in child care. Most of the parents/guardians said they could provide care to their children in frightening situations example during invasive procedures although only 37% of the nurses expected parents/guardians to be involved in this. There was therefore some discrepancy on this issues between the parents/guardians and nurses and even amongst nurses. This could be attributed to the lack of knowledge on either parties on these issues and the lack of guidelines or policies in the wards that would guide nurse-parent interactions and parents/guardians participation in care.

Discrepancies between what parents want to do and what they actually do for their hospitalized children or in expectations of parents by health care professionals is critical. It was reported as one of the factors that increased the risk of parental dissatisfaction and potential for conflict between parents and staff (Blower & Morgan 2000).

In the study by Coyne (2008), it is quoted that "nurses controlled the nature of parents' participation and parents had to 'toe the line'". The parents were expected to stay with their child, behave properly and be involved in care. When parents did not adhere to these norms, they caused disruption to the order and routine of the ward. The nurses' dependence on parents' active participation in the organization and delivery of work suggests that parent participation as was practiced is clearly about administrative efficiency, not consumer empowerment (Coyne 2008). In this study nurses were seen by the parents/guardians as uncooperative and too busy to talk to the parents/guardians and so they did not give enough support to parents/guardians. One of the parent/guardian's quote was, "*I tried to give my opinion regarding my child's management and I was put off.*" Other parents/guardians were concerned that results were not interpreted to them even when requested and were not informed of how their child was fairing.

2 CONCLUSIONS

Parents/guardians were in general willing to participate in care of their hospitalized children. Their participation in care however, was influenced by the parents/guardians' level of education and age group and by their level of income to a less extent. The employment status, gender, marital status and relationship of the parents/guardians to the child did not influence their participation in care.

Many of the parents/guardians were of low education level, unemployed or employed with low income levels.

The gender and duration of hospital stay of the child did not statistically influence parents/guardians participation in care. However, the age of the child significantly influenced the parents/guardians' participation in care after adjusting for other variables. The hospitalized children were mostly less than 12 months of age with pneumonia, gastroenteritis and meningitis as the leading causes of hospitalization.

Majority of the nurses had a diploma qualification of nursing training and very few of them had specialized training in paediatric nursing.

There were discrepancies on opinion between parents/guardians and nurses, and among the nurses on care activities such as nasogastric tube feeding and oral drug administration process. The role of parents/guardians in the hospital was not clear to most nurses and some parents/guardians.

The results show that some parents/guardians' characteristics influence their participation in care. The null hypothesis that there is no relationship between parents/guardians' characteristics and their participation in care is therefore not accepted.

The study was conducted in one institution (KNH) which is a referral hospital; therefore the findings cannot be generalized to other institutions in the country.

5.3 RECOMMENDATIONS

Parents/guardians participation in care of their hospitalized children has been universally shown to improve quality of care of the children. To enhance parents/guardians participation in care the following are recommended.

1. Health education on the importance of parents/guardians participation in the care of their hospitalized children to both the parents/guardians and nurses should be enhanced. The education programmes should focus on the roles of both the parents and nurses that would improve their relationship to enhance parents/guardians participation in the care of hospitalized children.
2. Formulation of guidelines/policies on parents/guardians participation in care to standardize care activities and the role of parents/guardians to remove the discrepancy among the nurses and parents/guardians is needed.
3. Nurses working in the paediatric wards should specialize in paediatric nursing to enhance their skills in their area of work.
4. Further research that would include other institutions in a wider scope is recommended to give more comprehensive results of this concept.

REFERENCES

Agency for health care research and quality (2008), report.U.S.A.

Blower K, & Morgan E (2000). Great expectations? Parental participation in care, *Journal of child health care*, **4**: 60-65.

Britt Marie Ygge (2006). Hospital staff perception of parental involvement in hospital care, *Journal of advanced nursing*, **53**(3), 5-34.

Central Bureau of Statistics (CBS) [Kenya], Ministry of Health (MOH) [Kenya] and ORC Macro. Kenya Demographic Health Survey 2003, Calverton, Maryland: CBS,MOH and ORC Macro,2004: 140-146.

Corlett J, Twycross A., (2006). Negotiation of parental roles within family centered care, *Journal of Clinical Nursing*, **15** (10), 1308-1316.

Coyne, I., (2007), Disruption of parent participation: nurses strategies to manage parents on children's wards, *Journal of clinical nursing*, **17**(23), 3150- 3158.

Coyne Imelda (2007). Partnership in care: parents' views of participation in their hospitalized child's care. *Journal of clinical nursing*, **4** (2), 71-79.

Coyne, I.T., (1996). Parent participation: A concept analysis. *Journal of Advanced Nursing*. **23**: 733-740.

Coyne I., (2008). Disruption of parent participation: nurses' strategies to manage parents on children's wards. *Journal of clinical nursing*.**17** (23), 3150-3158. [link](#).

Cushing A., (2005). Parent participation in care-Bridging the gap in the paediatric Intensive Care Unit, *Newborn and infant nursing reviews*, **5** (4), 179-187.

Daily Nation 14th December 2007 page 2.

De Lima, R.A.G., Rocha, S.M.M, Scoch, C.G.S, Callery, P (2001). Involvement and fragmentation: A study of parental care of hospitalized children in Brazil, *Pediatric nursing*, **27**(6), 559-564

Derbyshire,P., (1993). Parents, nurses and paediatric nursing: a critical review. *Journal of Advanced Nursing*, **18**: 1670-1680.

Duke,T and Tamburlini, G., (2003). Improving the quality of paediatric care in peripheral hospitals in developing countries. *The paediatric quality care group archives of disease in childhood*. **88**: 563- 565.

Evagelou E, Iordanou P, Lemonidou Ch et al (2006). Parental participation in their hospitalized child's physical and psychological care: Nurses' perceptions.

[http://www.nursing.gr/protected articles/nursing staff.pdf](http://www.nursing.gr/protected%20articles/nursing%20staff.pdf).

Guzzeta, C.E., (2006). Healthcare providers' attitudes towards parent participation in the care of the hospitalized child, *Journal for specialists in pediatric nursing*, **19** (3), 217-223.

Heyman,S.J, Toomey,S & Furstenberg,F., (1999).Working parents: What factors are involved in their ability to take time off from work when children are sick? *Archives of paediatrics and adolescent medicine*.**153**(8),870-874.

Hong-Gu H, Polkki T, Anna-Maija P., (2005).A survey of Chinese nurses' guidance to parents in children's post operative pain relief, *Journal of clinical nursing*, **14** (9), 1075-1082.

Kyle Terri and Kyle Theresa (2007). Essentials of Pediatric Nursing. Lippincott Williams & Wilkins. Philadelphia.

Lam W, Chang M, Morrissey J., (2006). Parents' experiences of participation in the care of hospitalized children: a qualitative study, *International Journal of Nursing Studies*, **43** (5), 538-543.

- Latour J, Van Goudoever J, Hazdzt J., (2008). Parent satisfaction in the paediatric Intensive Care Unit. *Pediatric clinics of North America*, **55** (3), 779-790.
- Mack J.W, Co J.P, Goldmann D.A et al (2007). Quality of health care for children: role of health and chronic illness in inpatient care experiences. *Archives of paediatric and adolescent medicine*, **161**(9), 828-834.
- Magadi,M.A., (1997).Status of women and infant/child health in Kenya with particular reference to the high mortality zone in Nyanza Province,U.O.N-Nairobi. 1-12.
- Makworo,D.G., (2006). Quality of nursing care of children aged 0-5 years with acute treatable and preventable medical conditions admitted at Kenyatta National Hospital. MScN Thesis, U.O.N.
- Marilyn H., (2005). Wong's essentials of pediatric nursing.7th edition, Mosby, Inc.St Louis, Missouri.
- McCubbin, M., (2001).Hospitalized children with chronic illness: parental care giving needs and valuing parental expertise, *Journal of pediatric nursing*, **16**(2), 110-119
- Mwanda.O., (2004) Kasili's synopsis of management of paediatric cancers in Kenya (Unpublished work).
- O'Haire S, Blackford J., (2005). Nurses' moral agency in negotiating parental participation in care, *International journal of nursing practice*, **11** (6), 250-256.
- Paliadelis P, Cruirshank M, Wainohu D et al (2005). Implementing family centered care: An exploration of the beliefs and practices of paediatric nurses, *Australian Journal of Advanced Nursing*, **23** (1), 31-35.
- Polkki, T., (2002). Parental views on participation in their child's pain relief measures, *Journal of pediatric nursing*, **17**(4), 270-278.

- Power N, Frank L., (2008). Parent participation in the care of hospitalized children, *Journal of Advance Nursing*, **62** (6), 622-624.
- Pyke-Grimm K, Stewart J, Kelly K & Degner L., (2006). Parents of children with cancer: factors influencing their treatment decision making roles, *Journal of Pediatric nursing*, **21** (5), 350-361.
- Roden J (2005). The involvement of parents and nurses in the care of acutely-ill children in a non-specialist paediatric setting, *Journal of child health care*, **9** (3), 222-240.
- Rosen P, Stenger E, Bochkoris M et al (2009). Family-centered multidisciplinary rounds: Enhance the team approach in pediatrics, *Paediatrics*, **123** (4), 603-608.
- Seid, M. Varni J.W, & Bermudez L.O., (2001). Parents' perception of primary care: measuring parents' experiences of paediatric primary care quality. *Paediatrics*, **108**:264-270.
- Sullivan, P.B., (2004). Global child health, *Archives of diseases in childhood. BMJ publishing group & Royal College of paediatrics and childhood*. **89**: 397.
- Soderback M, Christensson K., (2008). Family involvement in the care of a hospitalized child: a questionnaire survey of Mozambican family care givers, *International Journal of Nursing Studies*, **45** (12), 1778-1788.
- Tarini B, Christakis D, Lozano P., (2007). Toward family-centered in-patient medical care: the role of parents as participants in medical decisions, *Journal of Paediatrics*, **151** (6), 690-695.
- Wen-Lin C., (2005). Nurses' and parents' attitudes toward pain management and parental participation in post operative care of children, A thesis for masters of applied science at Queensland University of Technology, School of nursing, Australia.

Wigert H, Hellstrom A, Marie berg M (2008). Conditions for parents' participation in the care of their child in neonatal intensive care- A field study, *BMC Paediatrics*, **8** (3), 1128-1131.

Yvnee Pongjaturanit, Rosanne, C. Harrigan (2003). Parent participation in the care of hospitalized child in Thailand and western cultures. *Issues in comprehensive pediatric nursing*, **26**:183-199.

Zengerle-levy K., (2005). Nursing the child who is alone in hospital, *Pediatric nursing*, **32**(3), 226-231.

APPENDIX I: QUESTIONNAIRE FOR THE PARENTS/GUARDIANS

Enumerator.....Ward.....Code.....

Date.....

Parents/Guardians factors.

1. Age group

1	2	3	4	5
15 – 24 years	25 – 34 years	35 – 44 years	45 – 54 years	Above 54 years

2. Sex (1) Male (2) Female

3. Marital status

1	2	3	4	5
Single	Married	Widowed	Separated	Divorced

4. Number of children under care.

1	2	3	4
None	1 – 3	4 – 6	7 and above.

5. Level of education..

1	2	3	4	5
No formal education	Lower primary (Class 1- 4).	Upper primary (Class 5- 8)	Secondary	College

6. Employment status

1	2	3	4	5
Unemployed	Self employed	employed	Casual laborer	Others (specify)

7. Level of income per month in kshs.

1	2	3	4	5
Less than 1000	1001 – 4000	4001 – 7000	7001 – 10000	More than 10000

8. What is your feeling on the following issues regarding the management of your child?

	YES	NO
My role in the ward is unclear		
Am Involved in the decisions about my child's care.		
There are positive staff's attitudes towards parents' participation in child care.		
My role is to provide support and reassurance for my child		
My role is as a substitute for lack of qualified staff.		
My experience in childcare is being utilized by staff.		
Can provide care to my child in frightening situations for example during invasive procedures/resuscitation.		

Child health factors.

9. Age of the child in years

1	2	3
0 - 3	4 - 6	7 - 12

10. Relationship to the admitted child.

1	2	3
Mother	Father	Others specify.....

11. Child diagnosis.....

12. Number of days in the ward.

1	2	3	4	5
1 - 4	5 - 7	8 - 10	11 - 13	> 14

13. At what age do you feel children should be left in wards without parents/guardians?

1	0 - 3 years
2	4 - 6 years
3	7 - 12 years
4	Choices 1 & 2 above
5	All the above

Comments.....

Care activities

14. Do you participate in the care of your child? YES / NO.

15. If NO, give reasons.....

16. If YES which of the following activities do you participate in?

Activities	YES	NO
Bed / cot making		
Bathing the child		
Feeding the child – Orally		
Feeding the child via N G tube		
Oral drug administration		
Decision making of the child management		

17. Comments on your experience on the above activities you undertook.....

.....

18. Do you feel you need to participate in the care of your child? YES / NO

Give reasons for your answer.....

.....

19. How would you rate the level of satisfaction in the care of your child?

1	2	3	4	5
Excellent	Good	Average	Fair	Poor

Nursing factors/Other staff

20. How is your interaction between you and the following staff?

		All	Some
Nurses	Rude		
	Friendly		
	Others (specify)		
Doctors	Rude		
	Friendly		
	Others (specify)		
Catering staff	Rude		
	Friendly		
	Others (specify)		
Public health staff	Rude		
	Friendly		
	Others (specify)		

21. Indicate by ticking in the YES or NO spaces whether nurses perform the following roles.

Nursing roles	YES	NO
Help understand what is done to child		
Teach how to give care to child		
Make me feel important as parents/guardian		
Include me in discussions when making decisions		
Help me understand child's behaviors/reactions		
Respond to my worries or concerns		
Allow me to be involved in child's care		
Provide good care to my child		

22. Rate the amount of nursing support received from nursing staff.

1	Almost never
2	Not very often
3	Some of the time
4	Most of the time
5	Almost always

APPENDIX II: Questionnaire for the nurses

Enumerator.....Ward.....Code.....

Date.....

1. Age group in years.

1	2	3	4	5
15 – 24	25 – 34	35 – 44	45 – 54	55 & above

2. Sex (1) Male (2.) Female

3. Religion

1	2	3	4
Muslim	Catholic	Protestants	Others specify.....

4. Marital status

1	2	3	4	5	6
Single	Married	Separated	Divorced	Widowed	Others specify...

5. Do you have child/children? YES / NO

6. Highest nursing qualifications.

1	2	3	4
Enrolled	KRCHN	KRCHN-BscN	MscN

7. Years of experiences in pediatric medical wards.

1	2	3	4	5
< 2	3 – 4	5 – 6	7 – 8	> 8

8. Do you have a specialty in pediatric nursing? YES / NO.

9. What are your feelings on the following issues regarding parents/guardians participation in child care?

	YES	NO
Role of parents/guardians in the ward is unclear		
Parents/guardians are involved in decisions on their child care		
Role of parents/guardians is to substitute for lack of staff		
Parents/guardians role is to provide support and reassurance for their child		
Parents/guardians should be allowed to care for their child in frightening situations eg.during resuscitation, invasive procedures		
Parents/guardians experience in child care is often utilized		

10. What care activities do you expect parents/guardians to participate in?

Care activities	YES	NO
Bed /Cot making		
Bathing the child		
Feeding the child orally		
Feeding the child via N.G tube		
Oral drug administration		
Decision making on the child management		
Others specify.....		

Comments on the above care activities.....

11. What care activities do you feel parents/guardians should not participate in?

.....

12. Which age group(s) of children do you feel should not stay with parents/guardians in the ward?

1	< 3 years
2	4 – 6 years
3	7 – 12 years
4	1 & 2 above
5	All the above

13. Besides age as a factor, what situations/conditions of the child do you feel parents/guardians should be present in the ward?

.....

.....

.....

.....

14. Which are your roles as a nurse in parents participation in the care of their hospitalized children?

- (1) Care giver
- (2) Advocate
- (3) Educator
- (4) Communicator
- (5) Manager

APPENDIX III: Consent Explanation Form

Dear Participant.

Introduction.

I am Mwaswere Juma Rama, a post graduate student in the School of Nursing, University of Nairobi. I am conducting a survey which will enable me acquire a masters degree on its successful completion.

Purpose.

The purpose of the study is to establish factors influencing parents/guardians participation in the care of their hospitalized under five years old children in the paediatric medical wards of Kenyatta National Hospital.

Procedure.

You have been selected by chance and that is the reason for requesting you that you allow us your time we talk to you. The researcher/research assistants will ask you some questions regarding the survey and the responses will be recorded in the questionnaire. The questions touch on how you relate to the nurses/parents, how you help/would like to be helped regarding the management of the child. Some questions may be personal; however, where you feel uncomfortable you will not be coerced to respond. We therefore ask for your honest response to the questions that will be asked.

Risks and Discomforts.

There are no risks involved to you and/or your child. You are only required to respond to the questions that you will be asked. In case you feel a question is too personal or uncomfortable with you, you will not be obliged to respond.

Benefits.

You and/or your child may not directly benefit from the study. The results will however, be useful in coming up with strategies/guidelines to better the nursing services. This will benefit others in future. By participating in this survey, you will be contributing to its realization.

Privacy /Confidentiality.

The information you provide is totally confidential and will only be used for research purposes. Your name will not be required on the questionnaire and so the information you provide will not be linked to you and will not be shared other than for the intended purpose.

Rights to Refuse or Withdraw.

Your participation is voluntary. You are free to refuse or withdraw from participation in this study. Your refusal or withdrawal from participation will not in any ways affect the treatment that you and /or your child are receiving or will receive in future.

Persons to contact.

For any complains about this study, please do not hesitate to write to or call:

1. Mwaswere Juma Rama on cell phone number **0722247831**.
2. Chairman KNH/UON-ERC Box 20723,00202 KNH, Tel 2726300-9,ext 44102.

INFORMED CONSENT FORM.

I.....hereby provide informed consent to take part in this study. I have understood the nature of the study and its purpose. The risks and benefits of participating in this study have fully been explained to me.

Name of respondent.....Signature.....

Name of interviewer.....Signature.....

Date.....

APPENDIX IV: Letter of Approval



KENYATTA NATIONAL HOSPITAL

Hospital Rd. along, Ngong Rd.
P.O. Box 20723, Nairobi.
Tel: 726300-9
Fax: 725272
Telegrams: MEDSUP, Nairobi.
Email: KNHplan@Ken.Healthnet.org
21st May 2009

Ref: KNH/UON-ERC/ A/225

Mr. Mwaswere Juma Rama
Dept. of Nursing Sciences
School of Medicine
University of Nairobi

Dear Juma

Research proposal "Factors influencing parents/guardians participation in the care of their Hospitalized under 5 years old children at Kenyatta National Hospital Paediatrics Medical wards" (P75/3/2009)

This is to inform you that the Kenyatta National Hospital Ethics and Research Committee has reviewed and **approved** your above revised research proposal for the period 21st May 2009 –20th May 2010.

You will be required to request for a renewal of the approval if you intend to continue with the study beyond the deadline given. Clearance for export of biological specimen must also be obtained from KNH-ERC for each batch.

On behalf of the Committee, I wish you fruitful research and look forward to receiving a summary of the research findings upon completion of the study.

This information will form part of database that will be consulted in future when processing related research study so as to minimize chances of study duplication.

Yours sincerely

DR. L. MUCHIRI
AG. SECRETARY, KNH/UON-ERC

c.c. The Chairperson, KNH/UON-ERC
The Deputy Director CS, KNH
The Dean, School of Medicine, UON
The Chairman, Dept. of Nursing Sciences, UON
Supervisors: Dr. Blasio Osogo Omuga, Dept. of Nursing Sciences, UON
Mrs. Margaret Muiva, Dept. of Nursing Sciences, UON
Prof. Aggrey Wasunna, Dept. of Paediatrics & Child Health, UON

APPENDIX V: Research Authorization Letter

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123
Fax: 254-020-2213215, 318245, 318249
When replying please quote

P. O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Date: **20th July 2009**

Our Ref: **NCST/5/002/R/645/4**

Mr. Mwasere Juma Rama
University of Nairobi
P. O. Box 30197
NAIROBI

Dear Sir

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Factors influencing parents/guardians participation in the care of their hospitalised under five year old children at Kenyatta National Hospital, Paediatric medical wards ", I am pleased to inform you that you have been authorized to undertake your research at the Kenyatta National Hospital and Nairobi West Hospital for a period ending **3rd December 2009**.

You are advised to report to the **Director, Kenyatta National Hospital and the Director, Nairobi West Hospital** before embarking on your research project.

Upon completion of your research project, you are expected to submit two copies of your research report/thesis to our office.

A handwritten signature in black ink, appearing to read 'S. A. Abdulrazak', written over a printed name and title.

PROF. S. A. ABDULRAZAK Ph.D, MBS
SECRETARY

Copy to:
The Director
Kenyatta National Hospital
The Director
National West Hospital

APPENDIX VI: Research Permit

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PAGE 3

THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss. MWASWERE
JUMA

of (Address) UNIVERSITY OF NAIROBI
PO BOX 30197 NAIROBI

has been permitted to conduct research in.....
KNH AND NAIROBI WEST HOSPITAL Location,

NAIROBI District,

NAIROBI Province,

on the topic FACTORS INFLUENCING PARENTS

GURDIANS PARTICIPATION IN THE CARE

OF THEIR HOSPITALISED UDER FIVE YEAR

YEARS OLD CHILDREN AT KENYATTA

NAT. HOSPITAL PAEDIATRIC WARDS.

for a period ending 31ST DECEMBER, 2009

Research Permit No NCST/5/002/R/645

Date of issue 20.07.2009

Fee received SHS 1000



Juma Mwaserwe
Applicant's
Signature

Juma Mwaserwe
Secretary
National Council for
Science and Technology