PERCEIVED NEEDS AND LEVEL OF SATISFACTION WITH CARE BY FAMILY MEMBERS OF CRITICALLY ILL PATIENTS AT MUHIMBILI INTENSIVE CARE UNITS, DAR ES SALAAM

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By

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CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance a dissertation entitled **"Perceived Needs and Level of Satisfaction with Care by Family Members of Critically Ill Patients at Muhimbili Intensive Care Units, Dar es Salaam"** in partial fulfillment of the requirement of the degree of Master of Science Nursing (Critical Care and Trauma) of the Muhimbili University of Health and Allied Sciences.

Dr T.W Kohi
(Supervisor)

Date 18/11/2010

DECLARATION
AND
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I, **Marwa Wambura** declare that this **dissertation** is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

Signature _____ Date 18/11/2010

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Lastly but not least I wish to express my sincere gratitude to ICU staff at Muhimbili National Hospital for their tireless assistance during fieldwork.

DEDICATION

This work is dedicated to my beloved mother Bunyige Mokami (the late), my brothers James (the late) and Wambura Obogo, my wife Perucy Daniel and my daughters Lydia Bhoke and Lina.

ABSTRACT

Background: Family members of critically ill patients are affected in one way or another when their critically ill patient is admitted at ICU, taking in consideration that these family members serve as a bridge between health care providers and critically ill patients who are physiologically or psychologically compromised. However, in Tanzania no study has been documented to address the needs and level of satisfaction with care provided to themselves and their patients in ICU.

Objectives: This study aimed to assess perceived needs and level of satisfaction with care by family members of critically ill patients admitted at ICU. Two specific objectives guided the study; the first was to identify the perceived needs of family members of critically ill patients. Second was to determine the level of family members' satisfaction with care provided to them and to their critically ill patients.

Methods: A quantitative research methodology using a descriptive cross-sectional design was adopted. Perceived needs and level of satisfaction with care were assessed using structured questionnaires.

Study population was one hundred and ten family members who visited their relatives who were critically ill and admitted at ICU. Data was analyzed using statistical packages to interpret the findings. The duration of the study was two months and the results will be disseminated to relevant stakeholders.

Results: Results revealed that 72% of the family members perceived the need of having a specific person to call at the hospital when a family member is not there as the very important need. Only 23% of the respondents perceived the need of talking about the possibility of patient's death as very important. The study showed that educational background had associations with many perceived needs compared to other demographics.

The care given to the patients by nurses more satisfied the family members compared to other care, 31% was very satisfied with this care. Satisfaction with ICU environment scored the least among all cares itemized.

Conclusion: The perceived needs showed by the family members of critically ill patients and level of satisfaction with care could have serious outcome on patients' recovery in ICU. Nurses who are always nearby and taking care of these patients have to know the needs of family members and use part of their time to care for them and hence raise their level of satisfaction and hence good outcome to the patients' recovery.

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LIST OF ABBREVIATIONS

MNH	Muhimbili National Hospital
MUHAS	Muhimbili University of Health and Allied Sciences
CCFNI	Critical Care Family Needs Inventory
NMI	Needs Met Inventory
ICU	Intensive Care Unit

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

When someone is affected by acute or severe illness he needs care in ICU. This situation alters the lives of both the person who is critically ill and of family members in many aspects. Needs of the family members of critically ill patients are requirements that if not met become a demand that may produce distress in family members. In Western countries these needs have been addressed in several studies [1,2,3,4], and they have raised a growing awareness to health care providers that attending the needs of these family members is a responsibility that no health care facility can ignore. Family members serve as a bridge between unresponsive patients and health care providers [5], unfortunately family members are also vulnerable to stress, anxiety and helplessness when their relative is admitted to ICU, especially if their needs are not met. It is therefore important to assess the needs that are perceived by family members and to investigate their satisfaction with care, specifically in developing countries like Tanzania.

Satisfaction with care is related to quality of care and can provide health care facilities with the means of improvement [26,27]. In developed countries the number of patients who are admitted annually to ICU is high. For example in the United States of America more than 5 million patients are admitted to ICU annually [27]. This signifies that the number of family members with different perceived needs and satisfaction is also high.

The annual admission at Muhimbili National Hospital in 2009 / 2010 was 422 patients in general ICU and 85 patients in cardiac ICU [29]. The top ten conditions leading to admission in general ICU were peritonitis, ameloblastoma, multinodular

goitre, hypertensive stroke, cardiogenic shock, tetanus, diabetic mellitus, eclampsia, acalasia of oesophagus and renal failure. In cardiac ICU reasons for admission mainly were valvular replacement or valvectomy, patent ductus arteriosus, mitral valve repair, ventricular septal repair and atria septal repair. To the level of my knowledge the number of ICU admission could be increasing because of motor traffic accidents which have also been increasing recently.

Critical care nurses have to extend their responsibilities beyond the patients in ICU to include the family members of these patients. The needs of family members differ, and ICU nurses must be knowledgeable to these needs and acquire the skills to direct their interventions more appropriately to meet these needs. Such knowledge is essential for the planning for ICU related services for critically ill patients and their family members to be able to meet perceived needs and optimize their satisfaction.

1.2 Statement of the Problem

Critical illness often occurs without warning, leaving little time for patients and their family members to prepare [1]. In the past critical care nursing has concerned primarily with the individual patients, focusing intentionally on the physiological and the psychological impact of life threatening illnesses on the patient. The fact that critical illness may also lead to changes in family system was ignored [1, 2]. In the critical care environment, family members often serve as the spokesperson if the patient is physiologically and psychologically compromised, and because critical illness occurs without warning family members may feel vulnerable and helpless with no clear knowledge of what to expect from health care system on regard to illness or prognosis [5].

The challenge for the critical care nurse is to provide care to the critically ill patients while attending to the needs of family members [6]. Nurse family relationship in

critical care setting is very important; especially if a family is compromised by the patient's illness [5]. It is the family member who can know the past history of unresponsive patient like medical, social and allergic history.

As cited by Maxwell [6], 75% of all patients are unable to participate at the time when difficult decisions about the goals of treatment are made. Hence doctors and nurses must rely on family members to speak for the patient, consent for complicated treatment and procedures, or approve for termination of life support efforts. Needs of the family members should be known and met so that they can give support to the health care providers and hence positive outcome to the critically ill patients.
If holistic approach is to be considered and practiced the family needs must be considered together with those of the patient.

The needs of families of critically ill patients have been addressed in several studies. In recent studies nurses and families perceptions about the needs of these families have been found to differ [3,9,10]. For example, during brief visiting periods, nurses often provided routine responses and made interventions that were not adequate, frequently basing on their perceptions of the needs of family members. The needs of family members tended to be underestimated by ICU nurses in some aspects, such as having certain kinds of information, feeling accepted by staff, feeling hope and being informed of changes in patient's condition [2,20]. Family members always give priority to the welfare of their loved one in ICU and in their confused state they don't get around to paying attention to themselves [20].
Most of the studies on the needs of families and the level of satisfaction with care have been carried out in Western countries.

In Tanzania no study is documented on the needs and level of satisfaction of families of critically ill patients despite the fact that the number of critically ill patients has increased in recent years. Because knowledge of the perceptions of family members

about their needs and satisfaction is an initial step in being able to provide appropriate care for both family members and the patient, this study will assess the perceived needs and level of satisfaction by family members of critically ill patients.

1.3 Objectives of the Study

The main objective of the study was to assess the perceived needs and level of satisfaction with care by family members of critically ill patients admitted at ICU.

1.3.1 The Specific Objectives were;

1. To identify the perceived needs of family members of critically ill patients.
2. To determine the level of family members' satisfaction with care provided to their critically ill patients.

1.4 Rationale

This study was expected to indicate the way family members of critically ill patient perceive their needs and their level of satisfaction with care they receive in ICU, and therefore the study will be able to help critical or intensive care nurses and other health care providers to assess the methods they are using to attend the needs of families of critically ill patients so that to provide family centered care and hence deliver quality nursing care. By identifying the level of satisfaction with care by the family members the health care providers and other stakeholders will have a big picture about the health care services, i.e. if the level of satisfaction is high they will need to maintain the quality of care, and if the level is low quality of care will have to be improved or changed.

Defining the needs of family members of critically ill patients in ICU may help raise awareness of the health care providers about this issue, hence increase the capability in helping the health care providers in making appropriate decisions for the patients.

1.5 Research Questions

1. What are the perceived needs of family members of critically ill patients?
2. What is the level of satisfaction with care of family members in ICU?

1.6 Definition of Terms

For the purpose of this study key terms are operationally defined as follows:

Family Member. A partner or spouse, parent, grandparent, adult child, adult grandchild (older than 18 years), or identified adult significant other who visits the patient in the ICU

Critically Ill Patient: A person admitted to ICU because of life threatening or potentially life-threatening physiological alterations.

Perceived Need: A requirement of family members that if not met becomes a demand that may produce distress in family members.

Level of Satisfaction: Is a measure of how services provided by health facility meet clients' expectations.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 General Overview

Admission to ICU for a critical illness is normally viewed as a crisis for the patient and his relatives but most of the staff's energy is used to attend the patient and little time is left to assist the family. Needs of families of critically ill patients for the first time were explored and ranked by Molter [3].

Leske [9] conducted a follow up study and developed Molder's 45 identified needs into a tool called the Critical Care Family Needs Inventory (CCFNI). The content validity of the instrument was supported by results from 55 family members in three different hospitals.

In another study conducted by Leske [7] on the internal psychometric properties and factor analysis of the CCFNI tool with 667 family members for 9 years, and after factor analysis the CCFNI was found to contain 5 dimensions: support, comfort, information, proximity and assurance. As cited by Maxwell[6], supporting the family helps with coping and stress relief, augments family resources and hence maintains strength to support the patient. Providing comfort for families assists to reduce anxiety and stress. Providing information brings the foundation for decision making, reduces anxiety and provides a sense of control. Providing proximity to the patient helps family members maintain relationship, remain emotionally close and therefore give support to the patient. Providing assurance for hope about the patient's outcomes promotes confidence, security and freedom from doubts about the health care providers and system.

A study done by Warren[8] further addressed the needs of family members of critically ill patients by asking whether the needs were perceived as being met once identified.

Warren assessed the perceived needs of family members and the level of importance of these needs 18-24 hours after admission to ICU. The Needs Met Inventory (NMI) was used to determine the extent the identified needs were perceived as met 36-48 hours after admission to ICU. The NMI consisted of a 4- point Likert's scale in the following format: 1, never met; 2, sometimes met; 3, usually met; and 4, always met. Findings of this study showed that assurance, support, and comfort were perceived as the most important needs that were being met.

In a phenomenological study done by Warren[11]. The critical care families categorized the perceived caring nursing behaviors as informing, enhancing, touching and spiriting. Therefore nurses must continually assess the family and may form a bond with the family by use of these caring behaviors, which will finally benefit the family, nurse and the patient [11].

The study done by Mendonca and Warren [12], which replicated the original study of family needs using CCFNI and NMI provided data that supported that the most important perceived needs of the family were assurance, proximity and information, and these needs were perceived as being met by the family.

The worst situation for close relatives in an ICU is when they do not receive enough information about the critically ill patient's condition and prognosis [14,15]. It is a fact that many people will either personally experience a critical illness or be impacted by a critical illness by a friend or family member [13]. The family remains the most important social context to consider when determining interventions which positively influence patient prognosis. The nurse must continuously assess and provide care basing on the assessment of the needs of the patient and family.

Findings from several studies differ regarding perceived family needs [2, 3,10]. The study done by Sophie and Maindal [18], nurses strongly agreed that family members are valuable source of information and communication between the two sides which is beneficial to the family members and the patient. It was also agreed that the more

comfortable family members feel in the ICU, the more they are able to support the patient.

Nurses must be knowledgeable to individual needs of both relatives and patients to be able to provide proper care and support for both [12,18]. Critical care nurses as advocates of critically ill patients serve as the eyes, ears and voice of those at risk [19] and in order to provide intentional, meaningful sensory stimulation the nurse must collect data from any person who knows the patient and who is available to give information. Therefore family and friends need instruction and encouragement about approaching the unresponsive patient.

2. Perceived Needs of the Family Members of a Critically Ill Patients

Several studies have focused on the needs of the family members of the patients in ICU. Molter [3] study which led to the formation of CCFNI identified 10 needs as the most important to families.1. Feel there was hope; 2. Feel hospital personnel cared about the patient; 3. Have a waiting room near the patient; 4. Be called at home about changes in the patient's condition; 5. Know the prognosis; 6. Have questions answered honestly; 7. Know specific facts about the patient's prognosis; 8. Receive information about the patient once a day; 9. Have explanations given in understandable terms; and 10. Be allowed to see the patient frequently.

Leske [7] in a later study basing on the work of Molter [3] validated and categorized the needs into five domains of needs: support, comfort, proximity, information and assurance.

Lam and Beaulieu in their study verified that information, assurance and proximity to the patient were the primary family needs observed [22].

The cognitive research done by Lopez-Fagin [23] to examine specific problems occurring in certain ICUs under study. The problems cited included; lack of visiting hours guidelines, lack of dissemination of information to families regarding patient's

condition and treatment, lack of peaceful atmosphere in waiting rooms, lack of understanding of family needs, and lack of distraction materials such as books.
The study conducted by Kosco and Warren [4] to investigate the effect of not meeting family needs indicated that stress and sense of disorganization that family members experience may reduce the capability in helping the health care providers in making appropriate decisions for the patients.

The other study conducted using CCFNI to the family members of patients with severe traumatic brain injury who were admitted to ICU [14,] showed that family members are extremely vulnerable since this condition is one that usually occurs suddenly with a very uncertain outcome, and it revealed the following four family needs; the need to know, the need for consistent information, the need for involvement in care and the need to make sense of experience. The researchers pointed out that health care providers had it in their control to meet most, if not all, of these needs.

3. Satisfaction with Care by Family Members

Needs of family members are very important but meeting them or not meeting them does not correlate with either satisfaction or dissatisfaction. The study conducted to measure family members' satisfaction with the care of patients in six ICUs in University hospitals indicated that most family members were highly satisfied with the care provided both to them and to their critically ill patients [23]. Nursing skills and competence and the compassion provided the greatest satisfaction, while the waiting room environment and the frequency of physician communication provided the least satisfaction.
In order to increase satisfaction with medical services, Wasser et al [24] developed the critical care family satisfaction survey to measure patients' satisfaction. This survey based on CCFNI with 5 domains; proximity, assurance, support, information, and comfort. Supporting the family helps with coping and stress relief, augments family

resources and hence maintains strength to support the patient. Providing comfort for families assists to reduce anxiety and stress. Providing information brings the foundation for decision making, reduces anxiety and provides a sense of control. Providing proximity to the patient helps family members maintain relationship, remain emotionally close and therefore give support to the patient. Providing assurance for hope about the patient's outcomes promotes confidence, security and freedom from doubts about the health care providers and system. Therefore this survey measured patient's satisfaction on the five domains. The domains are very important in patients' recovery if they are met and therefore increase their level of satisfaction.

Backman and Waither[25] noticed how much information was lost by both the patient and the family members concerning a patient's stay in ICU. Family members are frequently upset and under severe stress because the patient is almost always sedated and experiences either partial amnesia or unpleasant recollection. It is difficult to put together a coherent recollection of what has happened. These gaps in memory, even for those patients with a successful recovery, leave patients and their families with dissatisfied and incomplete feeling about ICU experience. To improve this situation, staff in ICU discovered to keep a notebook diary for each patient's progress. The diary has proven successful in increasing satisfaction because it addresses directly the most basic needs of patients and relatives by providing information on what has happened.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Design

The descriptive, cross sectional design was applied to assess the perceived needs and level of satisfaction with care. The study design was chosen because of limited time given to collect data (about two months). In a descriptive, cross-sectional study data are collected only at one point in time in order to describe an event, phenomenon or help define a set of attitudes, opinions or behaviours that are observed or measured at a given time and in a given environment.

3.2 Setting

The study was conducted at MNH in Dar es Salaam. MNH is a tertiary and large referral hospital in Tanzania. It is a University teaching hospital with general and cardiac ICUs. General ICU has 8 beds, while cardiac ICU has 4 beds. More than 500 patients were admitted in both ICUs in 2009/ 2010 [29]. MNH was conveniently chosen because it is among the tertiary hospitals where most critically ill patients and cardiac cases are admitted in Tanzania. Open heart surgery is done in MNH.

3.3 Study Population

The study involved family members of critically ill patients who were admitted at the ICU. These family members were contacted when they were visiting their relatives who were critically ill and admitted at ICU in MNH.

3.4 Sample Size

The exact sample size was calculated from the following formula [29]

$n = 4\sigma^2/\varepsilon^2$

n = sample size, σ = standard deviation, ε = maximum likely error (0.59).

The standard deviation was calculated after interviewing 16 family members, and was found to be 3.8.

The outcome variable were the scores, the total score for 15 individuals was

calculated and found to be 52 scores.

n =4x3.8x3.8/ 0.59x0.59= 165.9

Therefore sample was 166 family members.

3.5 Inclusion Criteria

Family members (18 years and above) of critically ill patients visiting the patients admitted at ICU in MNH.

3.6 Exclusion Criteria

Family members of critically ill patients who are under 18 years.

3.7 Sampling

The study units were selected through convenient sampling guided by preset inclusion and exclusion criteria. Family members visiting their relatives admitted in ICU for more than 24 hours at the time of data collection were interviewed. At most three relatives were interviewed for each patient.

3.8 Data Collection.

Data were collected from family members of critically ill patients admitted in ICU for more than 24 hours by using a structured questionnaire which was developed by the researcher (see Appendix I). The instrument was translated in Swahili language which is a language for most study participants (see Appendix II).

The first part of the instrument included questions pertaining to demography to collect information regarding to age, education, gender and relationship of the family members to the patients. The second part of the tool asked questions about the perceived needs and they were ranked on a Likert scale from 1 (not important) to 4 (very important). The last part asked questions about the level of satisfaction with care. Items were also ranked on a Likert's scale from 1(no satisfaction) to 4(complete satisfaction).

All questions in this study were read loudly by the researcher to avoid inconsistency

in obtaining information from participants and answers were marked in the questionnaires by the researcher. Data were collected from participants who met inclusion criteria of the study after seeking their consent (see Appendices III and IV) for English and Kiswahili versions respectively.

3.8.1 Pre-testing

A pilot study was conducted to 16 family members of critically ill patients admitted at ICU to pretest the instrument's capability i.e. to check if the instrument was able to collect relevant information as desired. Sixteen participants in the pilot study were not included in the main study. Unclear questions were modified or removed accordingly after being assessed by the researcher to see if they were understood by the participants in the pilot study before actual data collection.

3.8.2 Validity

The content validity of the instrument was examined by two experienced intensive care nurses working at ICU and students doing Masters in Critical Care. After examining the instrument discussion was held with the researcher to look into issues of clarity and specificity. They checked if the instrument had covered the objectives, literature and whether the questions were clear. They also checked the time taken to attempt the questions in the instrument. The instrument covered the important aspects of the study.

3.8.3 Reliability

The test retest method was used to estimate the reliability of the instrument. This is the dependability with which an instrument measures an attribute or variable to establish if the participants in the study will be able to understand the instruction, the items and respond correctly to the instrument. The Cronbach's alpha was calculated to evaluate internal consistency of the instrument. Cronbach's alpha was found to be 0.86. Cronbach's alpha is the reliability coefficient which is commonly used as a

measure of the internal consistency where by the instrument is administered on the same participants twice and the correlation their score is estimated [31].

3.9 Data Analysis

Data were analyzed using descriptive and inferential statistics. Data entry and analysis were conducted using SPSS (version 13.0) software package. Frequency distributions of family members' profiles mean scores for all items and associations among some characteristics were calculated using the same SPSS version.

3.10 Ethical Considerations

All participants were thoroughly informed about the study, their written consent was sought and consent form was signed upon agreement of participation (see Appendix II in English and appendix III in Kiswahili). Confidentiality was maintained through anonymity. No names were used to identify participant, only numbers were used for identification. All rights of the participants such as freedom to participate or not, withdraw from the study, freedom of not answering some questions were addressed and observed. Ethical clearance was obtained from the MUHAS Research and Publication Committee before the start of data collection (see Appendix V).Permission to conduct the study at MNH was requested and granted from the hospital administration (see Appendix VI)

3.11 Dissemination of the Findings

It is intended that the results of this research reach many readers and stakeholders; hence the results will be disseminated to;

- School of Nursing –MUHAS
- Muhimbili National Hospital - MNH
- Ministry of Health and Social Welfare
- Academic journals

CHAPTER FOUR

4.1 RESULTS

Introduction

This chapter presents the findings of the study that was carried out at ICUs in Muhimbili National Hospital, Dar es Salaam region. The chapter starts with analysis of participants' profile such as age, sex, relationship to the patients and their level of education. The second part of this chapter describes analysis of data pertaining to the perceived needs of family members of critically ill patients, and the last part describes the analysis of data on level of satisfaction with care by these family members.

Demographic Characteristics.

Table 1: Demographic Characteristics of Family Members of critically Ill Patients (n=110)

Variables	Number (n)	Percent (%)
Gender		
male	51	46.4
female	59	53.6
Age		
18_27	21	19.1
28_37	39	35.5
38_47	27	24.5
48_57	16	14.5
58_67	6	5.5
68_77	1	0.9
Level of Education		
primary or below	66	60
secondary	30	27.3
college_ not degree	10	9.1
degree	4	3.6
Relationship		
parent	12	10.9
brother/sister	51	46.4
spouse	9	8.2
Child	10	9.1
others	28	25.4

A total of number of 110 family members of the critically ill patients admitted to ICU in Muhimbili National Hospital were enrolled into the study between May and June

2010. Among the study population 51 (46.4%) were males and 59 (53.6%) were females. The mean age of the study population was 49.6 years. Among the 110 family members, 12 (10.9%) were parents of admitted critically ill patients, 51 (46.4%) were brothers/sisters, 9 (8.2%) were spouses, 10 (9.1%) were children and 28 (25.4%) were others.

Majority of the family members 60% had primary school education or below, 27.3% had secondary school education. Post secondary school education was observed to be low, 12.7% (see table 1).

Needs of Family Members of Critically Ill Patients

Table 2: Frequency Distribution of Family Members' Need of Having a Specific Person to Call at the Hospital when a Family Member is Not at the Hospital.(n=110)

Specific person to call		Number (n)	Percent (%)
	Not important	5	4.5
	Less important	6	5.5
	Important	20	18.2
	Very important	79	71.8
	Total	110	100.0

Most of the respondents 79 (71.8%) perceived the need of having a specific person to call at the hospital when a family member is not at the hospital as the very important need, 18.2% of the respondents perceived this need as an important one (See table 2).

Table 3: Frequency Distribution of Family Members' Need to Talk about the Possibility of the Patient to Die. (n=110)

To talk about possibility of patient's death	Number (n)	Percent(%)
Not important	42	38.2
Less important	23	20.9
Important	20	18.2
Very important	25	22.7
Total	110	100.0

The need to talk about the possibility of the patient's death was perceived as the least important need, 22.7% of the respondents perceived this need as very important and 18.2% said the need was important. The total percentage of the respondents who perceived the need as not important and less important was 59.1% (see Table 3).

Table 4: Summary of the Ten Most Important Family Members' Needs (n=110)

Rank in order of importance	Need	Mean score	SD
1	To have a specific person to call at the hospital when not there	3.66	.691
2	To be called at home about changes in the patient's condition	3.61	.582
3	To see the patient frequently	3.61	.730
4	To have questions answered properly and explanations given in understandable terms	3.59	.691
5	To have someone concerned with family members' concerns	3.50	.776
6	To know how the patient is being treated	3.43	.760
7	To be assured that the best possible care and treatment are being given to the patient	3.30	.811
8	To receive information about the patient once per day	3.06	.964
9	To know about the type of staff taking care of the patient	2.95	1.092
10	To talk with the nurse each day	2.83	1.092

Table 5: Summary of the Ten Least Important Family Members' Needs (n =110)

Rank in Order of Less Importance	Need	Mean score	SD
1	To talk about the possibility of the patient's death	2.26	1.215
2	To be told about transfer plans	2.47	1.190
3	To feel accepted by the hospital staff	2.47	1.070
4	To have directions regarding what to do at the bedside	2.48	1.190
5	To have friends nearby for support	2.58	1.049
6	To have explanations of the environment and machines around the patient	2.64	1.070
7	To help with the patient's physical care	2.71	1.155
8	To have visiting hours or restrictions changed for special conditions	2.76	1.093
9	To talk with the doctor each day	2.79	1.112
10	To know the prognosis	2.80	1.152

Mean scores of needs of family members of critically ill patients ranged from 2.26 to 3.66. The ten top important needs and the ten least important needs, with their means, standard deviation and their numerical ranking are illustrated in tables 4 and 5. The higher the arithmetic mean of the need the more the importance of the need. The mean score for each item was calculated using SPSS version 13.0.

The least important need among the twenty needs was the need to talk about the possibility of patient's death with mean score of 2.26, as shown in table 5 above. The table also indicates the ten least important family members' needs in ranking order of less importance.

Table 6: Association between Age and the Need of having Explanations about the Environment and Machines around the Patient. (n=110)

Explanation about environment and machines					
Age	Not important	less important	important	very important	Total
18_27	4(20%)	8(40%)	6(30%)	2(10%)	20
28_37	11(28.2%)	6(15.4%)	11(28.2%)	11(28.2%)	39
38_47	3(11.1%)	4(14.8%)	16(59.3%)	4(14.8%)	27
48_57	1(6.3%)	3(18.8%)	5(31.3%)	7(43.8)	16
58_67	3(50.0%)	0(0.0%)	2(33.3%)	1(16.7%)	6
68_77	0(0.0%)	0(0.0%)	0(0.0%)	1(100%)	1
Total	22(20.2%)	21(19.3%)	40(36.7%)	26(23.9)	109(100%)

X^2 =26.46, df=15, P< 0.05

Table 7: Association between Gender and the Need of Having Explanations about What to Do at the Patient's Bed Side.

Explanation about What to Do at Patient's Bed side						
Gender		not important	less important	important	Very important	Total
	male	18(36.0%)	10(20.0%)	5(10.0%)	17(34.0)	50
	female	12(20.3%)	18(30.5%)	16(27.1)	13(22.0%)	59
Total		30(27.5%)	28(25.7%)	21(19.3%)	30(27.5%)	109

X^2=9.1, df=3, P<0.05

Association among the selected demographic characteristics using Chi square tests were significant between age and the need of having explanations of the environment and machines around the patient(x^2=26.46, df=15, P< 0.05), gender and the need of having explanations about what to do at the patient's bed side (X^2=9.1, df=3, P<0.05) as shown in Tables 6 and 7. Other associations which were statistically

significant were level of education and prognosis (x^2=17.82, df=9, P<0.05), level of education and the need of receiving information about the patient once daily (x^2=19.38, df=9, P<0.05), level of education and the need of knowing about the type of the staff taking care of the patient (x^2=21.58, df= 9, P<0.01), level of education and the need of talking about the possibility of dying (x^2=22.54, df=9, P<0.01), level of education and the need of knowing the transfer plans (x^2=18.85, df=9, P<0.05).

Relationship to the patient was statistically significant with the following needs; knowing how the patient was being treated (x^2=17.58, df=9, P<0.05), knowing the prognosis (x^2=17.87, df=9, P<0.05), knowing the transfer plans (x^2=19.88, df=9, P<0.05),and talking with the doctor each day (x^2=17.22, df=9, P<0.05) . Otherwise, there were no other associations which were statistically significant.

The findings indicated that more females perceived the need of having explanations about what to do at the bed side as the important one. In total 49% of the females perceived this need as either an important or very important compared to 44% of the males who had the same views.

Level of Satisfaction of Family Members with Care given at ICUs

Table 8: Frequency Distribution of Family Members' Level of Satisfaction with Care Given by Nurses. (n=109)

Satisfaction with Care Given by Nurses	Number (n)	Percent (%)
Not satisfied	2	1.8
Less satisfied	26	23.6
Satisfied	47	42.7
Very satisfied	34	30.9
Total	109	99.1

Many of the respondents were satisfied with care given to the patients by nurses (very satisfied 30.9%, satisfied 42.7%) compared to other levels of satisfaction with other care given to the family members of critically ill patients. (see Table 8).

Table 9: Frequency Distribution of Family Members' Level of Satisfaction with ICU Environment in General. (n=110)

Satisfaction with Environment	Number (n)	Percent (%)
Not satisfied	12	10.9
Less satisfied	26	23.6
Satisfied	48	43.6
Very satisfied	24	21.8
Total	10	100.0

Only 21.8% and 43.6% of the respondents were very satisfied and satisfied respectively with ICU environment in general. This is few % compared to levels of satisfaction with other care given at ICU (see Table 9)

Table 10: Summary of Level of Satisfaction with Care (n=110)

Rank	Item	Mean score	SD
1	Level of satisfaction with care given to the patient by nurses	3.04	.796
2	Level of satisfaction with care given to the patient by doctors	3.02	.773
3	Level of satisfaction with information given to the family member about patient's progress	2.98	.761
4	Level of satisfaction with the way the family member was cared in ICU	2.93	.794
5	Level of satisfaction with communication between family member and staff about patient's condition	2.89	.835
6	Level of satisfaction with care given to other family members by ICU staff	2.81	.855
7	Level of satisfaction with orientation about ICU	2.79	.843
8	Level of satisfaction with reception received in ICU	2.79	.843
9	Level of satisfaction with visiting hours	2.77	.973
10	Level of satisfaction with ICU environment in general	2.76	.926

Mean scores of level of satisfaction with care of family members of critically ill patients ranged from 3.04 to 2.76. The Level of satisfaction with care given to the patient by nurses scored the highest while the Level of satisfaction with ICU environment in general scored the lowest (see Table 10).

The mean score of satisfaction ranged from 3.04 to 2.76. Satisfaction with the care given by ICU nurses got the highest level of satisfaction while satisfaction with ICU environment scored the lowest (see Table 10).

Associations among demographic characteristics using Chi square tests were

significant between gender and the following levels of satisfaction; level of satisfaction with orientation about ICU (x^2=9.37, df=3, P<0.05), the level of satisfaction with the way the family members were cared in the ICU (x^2=9.45, df=3, P<0.05) and level of satisfaction with the communication between family members and staff about patient's condition. Other demographic characteristics showed no associations which were statistically significant.

Relationship to the patient showed no statistically significant association with all levels of satisfaction with care.

CHAPTER FIVE

5.0 DISCUSSION

This chapter begins with discussion of the study findings followed by discussion on the study limitations.

Family members of critically ill patients serve as a bridge between health care providers and critically ill patient who is physiologically and psychologically compromised. To provide holistic care to the critically ill patient and their relatives, the needs and level of satisfaction with care of family members have to be known to health care providers.

Needs of Family Members of Critically Ill Patients

The need of having a specific person to call at the hospital when a family member is not at the hospital was perceived as the highest by the family members, while the need of talking about the possibility of patient's death was perceived the lowest.

The findings of this study showed that majority of the family members perceived the need of having a specific person to call at the hospital as the very important need. This was followed by the need of being called at home about changes in patient's condition, to see the patient frequently, having questions answered properly and in understandable way, having someone concerned with family members' concerns etc. Generally information and assurance needs figured highly as in previous studies by Norris et al on needs of family members of critically ill patients[2] . Families wanted to know the patient's current condition and progress.

Families in this study needed to know how the patient was being treated and the type of staff who was taking care of the patient. Families wanted to have assurance that their patient was in safe treatment and hands of caring.

Most family members did not want to talk about the possibility of their patient's death. This is similar to other studies[1 ,3,14,22]. In all these study the family members saw the need of talking about the possibility of patient's death as not important.

This study has shown that the ten top most important needs of family members of critically ill patients were congruent as other studies[1,3,6,7], although ranking order differed slightly. For example the 10 most important family needs were to have questions answered properly, to know the prognosis, to talk with the nurse each day, knowing how the patient was being treated, to know why things were done to the patient, to be called at home about change in patient's condition, to receive information daily, to be assured that the most possible care was being given to the patient, to have explanations in understandable terms and to feel that there was hope [6].

There was a significant association between need of having explanations of the environment and machines around the patient, this could probably be contributed to the fact that many adults in the study had below or primary education so could not read explanations and other directions in ICU and on the machines which are normally written in English. In Tanzania English is the second language after Swahili and it is used from the secondary level of education. This finding does not correlate with previous studies [1,8,9].

There was also a significant association between gender and the need of having explanation about what to do at the patients' bed side. Forty nine percent (49%) of the 59 female said it was important and very important to have explanations about what to do at the patients' bed side compared to 44% of the 50 males who had the same views. In Tanzania the wife or mother is the one who takes care of the household especially children care and health of family members to the great extent. Hence probably most females wanted to assist the critically ill patients at the bed side during their visit compared to males.

The results showed associations between level of education and the need of knowing the prognosis, receiving information daily, knowing the type of the staff taking care of the patient, talking about the possibility of dying and knowing the transfer plans. The results revealed that as the level of education increases the need importance increases.

Level of Satisfaction of Family Members with Care given at ICUs

The care given to the patients by nurses led in the levels of satisfaction compared to other levels of satisfaction with other care given to the family members of critically ill patients. Nurses are the care givers who spend most of their time with patients and are the ones who always meet with the families of critically ill patients during their visits to ICUs. Their care can directly be assessed by these family members and hence easily satisfy or dissatisfy them.

In general the ICU environment scored the least level of satisfaction among the ten items of care. There is no waiting room in ICU for the family members during their visits. This could be one of the reasons as to why the family members were less satisfied with ICU environment. This finding is not similar to other studies done in Western countries [23] . Most of the ICUs in these countries are spacious with waiting rooms for family members.

There were associations between gender and level of satisfaction with orientation about ICU ($P<0.05$), the level of satisfaction with the way the family members were cared in the ICU ($P<0.05$) and level of satisfaction with the communication between family members and staff about patient's condition ($P<0.05$). In all cases male family members were more satisfied with the care received on these three items than females. No study has been documented to associate the same variables.

Relationship to the patient showed no statistically significant association with all levels of satisfaction with care. At this moment it not easy to predict the reason as to why there was no any association between relationship to the patient and level of satisfaction with care. There is no previous study which has been found to document the same issues.

Limitations of the Study

Family members of critically ill patients were interviewed at the hospital environment and the information obtained probably was not very reliable due to their worry and fear about their patients' condition and prognosis. The interview method

which involved face to face interview and time constrain made it impossible to get the minimum sample size required. Convenient sampling method was used where by family members who visited their relatives admitted at ICU were interviewed, interview was conducted on come first basis, this could be a source of sample bias.

CHAPTER SIX

6.0 Conclusion.

This study aimed to assess the perceived needs and level of satisfaction with care by family members of critically ill patients is the first study to the best of my knowledge to be conducted in Tanzania.

This study has shown that family members of critically ill patients perceived the need of having current information about patients' condition and progress as the very important need. Level of education was associated with most of the perceived needs in this study.

This study has also shown that the need of talking about the possibility of patient's death was perceived by the family members as the least need. Most family members perceived this need as not important. They did not want to talk about the death of their beloved critically ill relative who was admitted in ICU.

Family members of critically ill patients were more satisfied with the care given by ICU nurses and less satisfied with ICU environment compared to other types of care provided in ICU. Gender showed associations with level satisfaction with orientation about ICU, the level of satisfaction with the way the family members were cared in the ICU and level of satisfaction with the communication between family members and staff about patient's condition. In all cases male family members were more satisfied with the care received on these three items (orientation, care of family members and communication) than females.

6.1 Recommendations

The need of having current information on patients' conditions and progress was given the first priority by family members of critically ill patients. This calls for creating means of imparting information by ICU staff to these family members and may be this information will assist to calm family members down and reduce their stress, so as to make sure that these family members will provide relevant information concerning the critically ill patients leading to appropriate diagnosis, management, treatment and quality care.

Generally perceived needs reflected the educational background of family members; this brings implication on better ways of attending the needs of family members of critically ill patients with lower education background.

Family members were more satisfied with care given by ICU nurses but less satisfied with ICU environment.

The researcher recommends the following issues to be implemented in ICU so as to provide quality care to both patients and their family members.

1. To allocates a nurse specifically for talking to and counseling family members of critically ill patients.
2. To allocate or construct a waiting room for family members.
3. To improve the means of disseminating information about the ICU including wall papers, magazines etc, in Swahili which is spoken and well understood by most people in Tanzania.
4. To introduce ICU diaries because this is important not only to the patient after recovery but also to the family members to recall after discharge or death of their relatives.
5. Further research is needed to explore the means of providing these perceived needs and improve level of satisfaction with care of family members of critically ill patients in ICU.

6.2. Implications to Nursing Practice.

Nurses in ICU are within the capacity of giving quality family centered care in ICU. Family members are major source of information concerning the patient in ICU so to be comfortable their needs should be known and met so that they can be satisfied. Nurses in ICU have also to assess the methods they are using to attend the needs of families of critically ill patients so that to provide family centered care and hence deliver quality nursing care.

If these needs are not known and therefore not provided by nurses and leading to dissatisfaction or less satisfaction with care, this will have important implications such as family members' anxiety and poor recovery and poor prognosis.

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