NURSES' AND PATIENTS' PERCEPTIONS ON THE IMPORTANCE OF NURSE-CARING BEHAVIOURS: A STUDY AT SURGICAL WARDS OF KENYATTA NATIONAL HOSPITAL, NAIROBI

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN NURSING (CRITICAL CARE) OF THE UNIVERSITY OF NAIROBI

BY

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DECLARATION

I, Everlyne Gesare Ogugu, hereby declare that this is my original work except where otherwise acknowledged and has not been submitted either wholly or in part to this or any other university for the award of any degree or for any other award.

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CERTIFICATE OF APPROVAL

This is to certify that this is a bonafide research undertaken independently by Everlyne Gesare Ogugu under our guidance and supervision.

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DEDICATION

To my family, you are my inspiration.

To all nurses who work tirelessly in the midst of enormous challenges, your efforts don't go unnoticed.

ACKNOWLEDGEMENT

I am eternally grateful to my family and friends for their support and encouragement without which I could not have endured the demands of this program.

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OPERATIONAL DEFINITIONS

Adult patient: A patient who has attained the legal age of an adult namely, aged 18 years and above.

Carative factors: These are basic principles that guide nurses in providing nursing care to their clients in a way that promotes caring**.** They are described in Jean Watson's theory of human caring (Watson, 2002)

Caring: The provision of nursing services to patients in a way that is responsive to the patient's unique needs. Actions involved in caring are defined using Jean Watson's ten carative factors.

Nurse-caring behaviours: These are nursing attitudes, skills, and knowledge employed in the care of patients that serve to positively influence, support, or enhance nursing care. Demonstration of these behaviours is achieved through application of carative factors.

ABBREVIATIONS & ACRONYMS

CBA: Caring Behaviours Assessment

BScN: Bachelor of Science in Nursing

ECN: Enrolled Community Nurse

IV: Intravenous

KNH: Kenyatta National Hospital

KRCHN: Kenya Registered Community Health Nurse

MScN: Master of Science in Nursing

ABSTRACT

Although the importance of caring in nursing and its influence on patients' satisfaction with healthcare services has been demonstrated, there is minimal study on caring in surgical settings in developing countries. A cross-sectional descriptive study was carried out at surgical wards of Kenyatta National Hospital to compare nurses' and patients' perceptions on importance of nurse-caring behaviours.

A questionnaire based on carative factors of Watson's theory of human caring, developed by Cronin and Harrison in 1988, was used to collect data from 182 adult patients and 127 nurses selected by quota sampling that involved convenience sampling from the created strata of the 10 surgical wards. Analysis of data was done using univariate and bivariate statistics.

Results showed the most important nurse-caring behaviour as ranked by patients to be 'give me treatments and medications on time' while for nurses it was 'treat patient as an individual'. Subscales 'Human needs assistance' and 'Humanism/ faith-hope/ sensitivity' and were rated most important by patients and nurses respectively. Of the ten most important nurse-caring behaviours as ranked by the study participants only three items were common to both groups, namely, 'give patient treatments and medications on time', 'treat patient with respect' and 'know when it is necessary to call the doctor'

The results demonstrated a degree of incongruence between nurses' and patients' perception on the importance of various dimensions of caring. It is recommended that this incongruence be addressed by nurses in clinical practice, education and administration levels to enhance patients' satisfaction with nursing services. Researches in various healthcare settings to gain insight into the impact of caring on patient outcomes and healthcare costs are recommended.

CHAPTER ONE: INTRODUCTION

1.0 Background Information

The International Council of Nurses in 1973 adopted a definition of nursing written by Virginia Henderson in 1966 which states that the unique function of a nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or peaceful death) that he/she would perform unaided if he/she had the necessary strength, will or knowledge. One notes that this definition of nursing, which is the foundation of nursing, does not focus on curing clients' illnesses but on caring for them in a way that enhances their lives (White, 2005).

There are two aspects of caring, expressive behaviours and instrumental activities. Expressive (affective) aspects of care involve providing emotional support to the patient through offers of fidelity, acceptance of feelings, confidence, genuineness, hope and emotional warmth. Instrumental aspects of care refer to substantial activities, such as giving bed bath and providing medical information, promotion of physical comfort and cognitive-oriented interventions (Zamanzadeh et al, 2010).

The caring contributions of nurses in surgical settings are critical to successful patient outcomes as nurses provide supportive, physical, educational and emotional care vital to patients' wellbeing (Mizuno et al, 2005). Wolf, Miller and Devine (2003) established an association between nurse-caring behaviours and patient satisfaction in patients undergoing invasive cardiac procedures.

Caring behaviours demonstrated by nurses have been linked to high patient satisfaction with nursing care and the intent to return to a facility for care (Rafii, Hajinezhad, and Haghani, 2008). Despite caring having been established as necessary for patient satisfaction, the changes in the health care delivery systems around the world have intensified nurses' responsibilities and workloads making traditional nurse-patient relationships which emphasize on caring aspects difficult to attain (Cara, 2007). For excellence in nursing to be achieved in this context, nurses must commit themselves to finding creative means of establishing caring relationships (Taylor et al, 2008).

Caring also has an ethical and a moral component and it is an essential element in forming successful therapeutic relationships between nurses and patients where goals and satisfaction can be achieved (Sumner, 2001).

Redic (2004) and Virvan (2004) stated that the meaning of care and caring differs across cultures and for the nurse to give care in the fullest sense of the word it requires one to understand the meanings, attributes, characteristics and practices of care in the context of the client's culture. Redic (2004) emphasized that healthcare must be culturally sensitive due to the many factors which may conflict between cultures, for example, conversational style, eye contact, personal space, touch, dietary preferences, and religious customs. Many studies have shown that patient perceptions of caring may be incongruent with staff nurse perceptions, especially when the patient and nurse come from different ethnic or cultural backgrounds and hold different interpretations of concepts related to care and caring.

The patients and the nurses' interpretations of caring need to be examined since to be meaningful, the caring in nursing must be based upon mutual agreement between nurses and patients as to what constitutes important nurse-caring behaviours (Zamanzadeh et al, 2010).

1.1 Problem statement

Identification of nurses' and patients' perception on the importance of caring behaviours in nursing within the surgical care setup is the problem under study. Currently, there is limited research on caring behaviours either from the patients' or nurses' perspective in surgical settings in developing countries yet the need for evidenced-based, patient-centred care has been emphasised in promotion of quality nursing care and improved patient outcomes (Linton, 2007).

Surgery is a stressful event to the patient and the perception of an uncaring environment in this situation can lead to increased anxiety and diminished coping abilities for the patient (Wolf, Miller and Devine, 2003). This will impact negatively on the patient's recovery process, increase cost in terms of finances and time (longer duration of hospitalization) to both the patient and the health care institution, and compromise the quality of nursing services.

A study carried out in Kenyan public hospitals on nurse-patient interactions showed that patients regarded nurses in the public hospitals as unresponsive to patients' needs (Ojwang, Ogutu and Matu, 2010). This necessitates the need for greater insight into the expectations of clients who require nursing services so that the care provided will result in client satisfaction, rather than disappointment, with nursing services.

The purpose of this study was to determine which behaviours of nurses patients perceived as important in demonstrating caring in comparison with the behaviours nurses perceived as caring

so that any incongruence could be addressed to promote provision patient-centred nursing care whose end result would be improvement in the quality of nursing services and overall patient satisfaction with health care services.

1.2 Justification of the Study

The importance of knowing what patients' perceive as caring behaviours is important since patients' satisfaction with hospital services has become an important indicator of quality of care provided by hospitals (Wolf, Miller and Devine, 2003).

According to Watson's theory, caring can be effectively demonstrated and practiced only interpersonally. Thus the nurse-patient relationship forms the basis for nursing practice (Basavanthappa, 2007). This practical approach to the concept of caring requires that both the patient's and the nurse's interpretations of caring be examined. Additionally, to be meaningful, caring in nursing must be based upon mutual agreement between nurses and patients on what behaviours are most important in demonstrating caring.

It is also important for nurses to identify and address any incongruence between their perception and patients' perceptions of important nurse-caring behaviours so that care provided meets patients' expectations thus reducing dissatisfaction with the care received.

1.3 Expected Benefits

One of the priority areas in the Ministry of Health (MOH), Kenya's health sector strategic plan is improving responsiveness of health workers to clients' needs by, among other ways, training health workers on client handling and patient-centred accountability (MOH, 2005).

Consequently, the results of this study can be used by the hospital administration and educators to design educational programs, for nurses and nursing students, addressing caring in nursing aimed at improving delivery of care in order to enhance patient satisfaction.

Nurses who work in hospitals can use the results to guide them in aligning their practice with patients' expectations thus promoting patient-centred care.

The results of this study will provide direction for educational development of nursing students and staff members in the setups where nursing services are provided.

1.4 Research Objectives

1.4.1 Broad Objective

To compare nurses' and patients' perceptions on the importance of nurse-caring behaviours at KNH Surgical wards.

1.4.2 Specific Objectives

- Identify which nurse-caring behaviours were perceived by nurses as being the most important in demonstrating caring
- Identify which nurse-caring behaviours were perceived by patients as being the most important demonstrating caring
- Find out similarities and differences between nurses' and patients' perceptions on the importance of nurse-caring behaviours

- Determine how individual characteristics influenced perception of nurse-caring behaviours

1.5 Research Hypothesis

There is no difference between patients' and nurses' perceptions on the importance of nurse-caring behaviours.

1.6 Theoretical Framework

The theoretical framework used for this study was based on Watson's theory of human caring. Watson defines caring as a moral ideal rather than task-oriented behaviour (Basavanthappa, 2007). The theory is applicable to this study because it focuses on the science of caring in nursing. According to Watson (2002) the theory constitutes ten elements of caring termed as carative factors that form the basis of nursing interventions in patient care.

The Caring Behaviours Assessment (CBA) tool, which has been used in the current study to measure perception on the importance of nurse-caring behaviours, has seven subscales based on the carative factors. These subscales outline the specific actions that constitute caring in nursing.

Watson (2002) views these carative factors as a guide for the core of nursing upon which nursing interventions related to human care should be based on. The first three carative factors form the philosophical foundation for the science of caring and the remaining seven carative factors spring from the foundation laid by these first three. These carative factors are outlined below.

Formation of humanistic - altruistic system of values: This describes satisfaction through giving and the extension of the sense of self. It is perceived as necessary to the nurse's own maturation which then promotes altruistic behaviour towards patients.

Instillation of faith-hope: It focuses on an effective nurse-patient relationship that promotes health-seeking behaviours. The nurse utilises this carative factor to promote, in a patient, a sense of well-being through beliefs which are meaningful to the individual.

Cultivation of sensitivity to self and another: This describes self-actualization process on the part of the nurse that allows the nurse to be more sensitive to others. Striving to become sensitive makes the nurse more authentic, which encourages self-growth in both the nurse and those with whom the nurse interacts.

Establishing a helping-trust relationship: This relationship is characterised by congruence, empathy and warmth. Communication includes verbal, nonverbal and listening in a manner which connotes empathetic understanding.

Promotion and acceptance of the expression of positive and negative feelings: Feelings alter thoughts and behaviour, and they need to be considered and allowed for in a caring relationship. Nurses' acceptance of patients' feelings facilitates deeper self understanding and connectedness with the patient.

The systematic use of the scientific problem-solving method for decision making: The use of nursing process brings scientific problem-solving approach to nursing care.

Promotion of interpersonal teaching-learning: Aims at encouraging the patient to provide self-care to promote personal growth and wellness. The caring nurse must focus on the learning

process as much as the teaching process. Provision of information enables the patient make informed decisions regarding health and healing.

Provision for a supportive, protective and/or corrective mental, physical, socio-cultural and spiritual environment: The nurse manipulates this environment in order to provide support and protection for the person's mental and physical well-being. The nurse provides comfort, privacy and safety as a part of this carative factor.

Assistance to meet human needs: It is based on a hierarchy of needs similar to that of the Maslow's. The patient must satisfy the lower order needs before attempting to attain higher order needs. Lower order biophysical needs include food, elimination and ventilation while lower order psychophysical needs are activity, inactivity and sexuality. Higher order needs include need for achievement and evaluation (psychosocial needs) and self actualization (an intrapersonal-interpersonal need). Each need is important for quality nursing care and the promotion of optimal health. All the needs deserve to be attended to and valued**.**

Allowance for existential-phenomenological forces*:* The nurse needs to view each person's reality through the individual's eyes. Phenomenology is a way of understanding people from the way things appear to them, from their frame of reference. Existential psychology is the study of human existence using phenomenological analysis (Basavanthappa, 2007).

Neil (2002) noted that Watson's theory is more about being than about doing and it must be thoroughly internalized by the nurse to be actualized in practice. Watson (2002) admits that caring is a complex phenomenon that is challenging to measure but because it is so important to clinical practice, continued research to help operationalize caring is necessary. She adds that

such measurement is only a manifestation of something deeper. Consequently, research on caring aims to point nursing towards caring and not necessarily define caring in nursing exhaustively.

In Taylor et al (2001) Madeline Leininger, the nurse theorist, stated that human caring is a universal phenomenon, but the expressions, processes and patterns vary among cultures. She suggested that perceptions of caring may vary with one's cultural background. Redic (2004) and Virvan (2004) also pointed out that society, culture, values and gender have an influence on caring perceptions and practices. This indicates that various factors influence how one perceives caring.

In the present study, various nurse and patient factors that could have influence on individuals' perception of caring in nursing were studied. The nurse factors focused on in this study included age, gender, professional qualification and work experience. The patient factors included age, gender, level of education, and peri-operative status. These variables were studied to determine how they influenced perception of caring behaviours.

1.7 Conceptual Framework

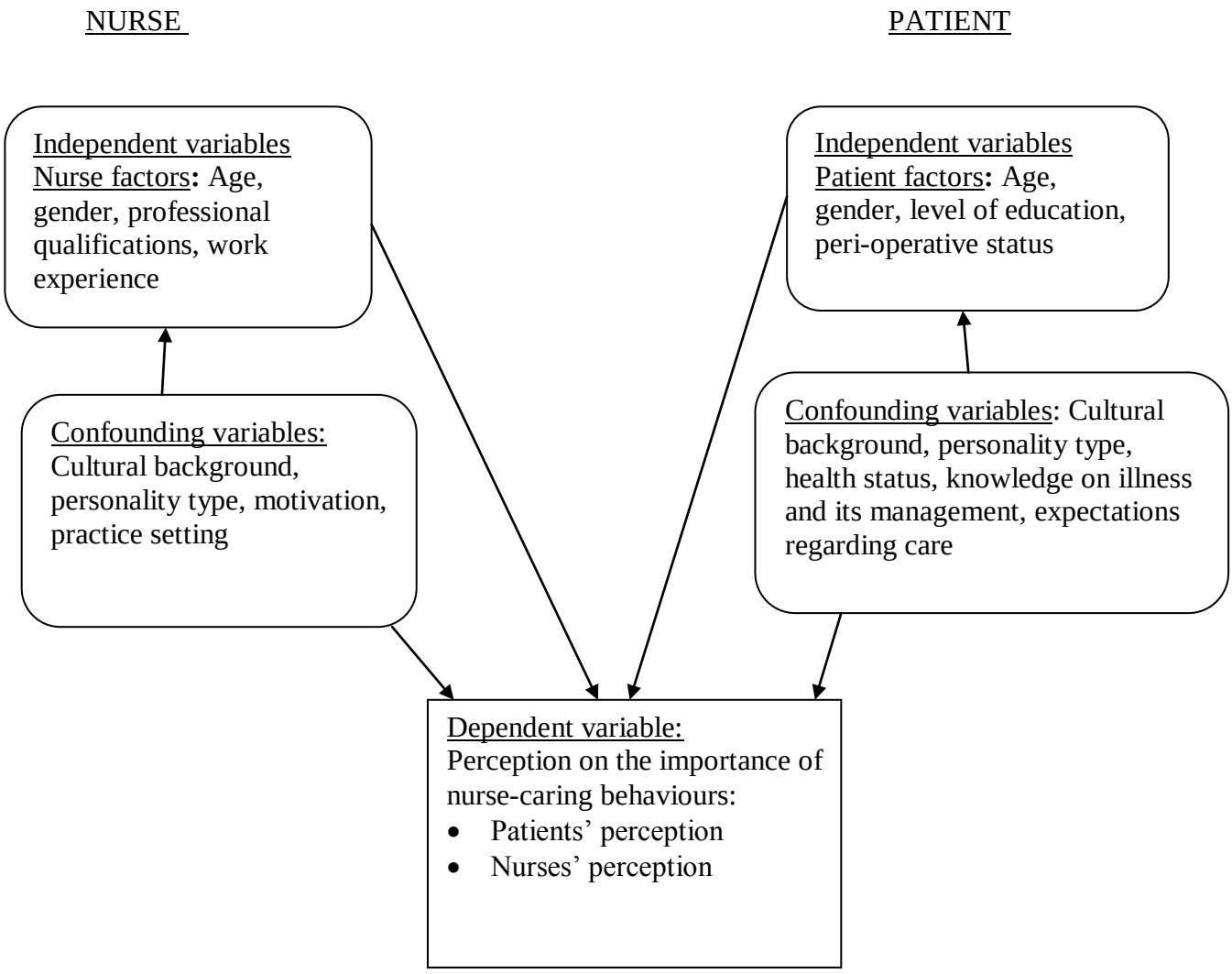

Figure 1: Conceptual Framework

1.8 Research Questions

The research questions were as follows:

- What nurse-caring behaviours were perceived by the patients as being most important?
- What nurse-caring behaviours were perceived by the nurses as being most important?
- What differences were noted between patients' and nurses' perception of caring behaviours?
- How did individual characteristics influence perception of nurse-caring behaviours?

1.9 Assumptions of the Study

This study was undertaken with the assumption that:

- The answers the nurses and patients would give were based on their true perception of nurse-caring behaviours because the concept of the research had been explained to the subjects and they verbalised understanding of the concept.
- Perceptions of caring behaviours could be measured.

CHAPTER TWO: LITERATURE REVIEW

2.0 Nurses Practice of Caring

Caring is central to the themes of nursing care, nursing knowledge and nursing practice (Neil, 2002). Nurse theorist Jean Watson in Taylor et al (2008) emphasizes that clinical nursing care should be holistic, promote humanism, health and quality of living and this is best achieved by caring.

White (2005) outlines four steps that can be used by nurses to communicate a caring attitude to clients. These include connecting with the client through eye contact, appreciating the client and situation by active listening, responding to client needs promptly, and empowering the client by working with him/her to develop a plan of care that promotes client autonomy.

A number of studies have been done to determine nurses practice of caring. Pre-testing of a maternal CBA tool in Kenya and Bangladesh in different types of facilities revealed wide variations in the amount and types of caring behaviours provided to patients. Caring behaviours categorised as attending to the women's emotional needs were the most frequently observed in both countries. Observing and talking to patients were the most common caring behaviours performed by providers in Kenya. Touching of patients in demonstrating caring was more common in Bangladesh (Moore et al, 2002).

Advising patients on their breathing and positions of comfort, under the category of "inform, explain, instruct", was the second most common behaviour in both countries. These behaviours were also rated among the most important and easiest to perform by nurse-midwives in both countries. Behaviours from the two categories 'Incorporate cultural context' and 'Involve the

family', which are both well documented in the literature as essential elements of patient-perceived quality of obstetric care, were infrequently observed in both country settings (Moore et al, 2002).

In the surgical setting, safe and competent nursing care requires assessment of and provision for the physical and psychological needs of surgery patients (Mulligan et al, 2005). Rosen et al (2010) carried out a study to describe patients' experiences and perceived causes of persisting discomfort following day surgery. The results showed that patients suffered from remaining discomforts like pain and wound problems with effects on daily life up to three months post-surgery. Among patients' perceptions on factors leading to discomfort included wrongful or suboptimal treatment and care, type of surgery, or insufficient access to healthcare provider/information. These findings underscore the need for nursing interventions that will help patients handle the hospitalisation and recovery period better thus promoting better outcomes.

2.1 Nurse-Caring Behaviours: The Nurse's Perspective

Two studies focusing on caring behaviours from critical care nurses' perspective were done by Beeby (2000) and Wilkins and Slevin (2004) on nurse-caring behaviours. From Beeby's study, the themes 'being involved' and 'sustaining' emerged. 'Being involved' equated to being present in the moment to meet the needs of the patient and family, being empathetic and treating each member as an individual with separate and distinct needs. 'Sustaining' described the physical, supportive and technical aspects of caring, the knowledge, skills and attitudes necessary to maintain patient physiologic stability in addition to catering to the patient and family's need for information and emotional support.

Wilkins and Slevin (2004) also analysed what caring meant to nurses working in a critical care unit. Nurses described caring behaviours as being empathetic, comforting, touching and caring for the patient and those who care about the patient. Family members or significant others were considered an integral part of caring for the patient. Nursing skills and knowledge enabling nurses to take appropriate actions in intervening on the patients' behalf to maintain or regain a stable state were considered vital to caring. Caring integrated the technology of care with the emotional aspects.

On factors influencing nurses' perception of nurse-caring behaviours, correlation was discovered between the experience of the nurse and the perception nurse-caring behaviours. Nurses with less work experience tended to place less emphasis on nurse/family interactions. Experience also seemed a determinant in the ability of the nurse to provide emotional support. Investigation revealed that the less experienced nurses focussed on developing expertise in physical caring of the patient first before dealing with emotional care of the family (Beeby, 2000).

2.2 Patients' Perspective on Nurse -Caring Behaviours

A number of researchers have identified factors that influence patients' perception of nurse-caring behaviours. Factors identified include age, gender, level of education, and type of illness among others.

Baldursdottir and Jonsdottir (2002) conducted a non-experimental, descriptive study to explore importance of nurse-caring behaviours as perceived by patients who received care in an emergency department at a university hospital in Iceland using the CBA tool. Women rated higher all carative factors subscales except 'Humanism/faith-hope/sensitivity' and 'Expression of

positive/ negative feelings'. Older patients rated nurse-caring behaviours as more important. People who had low education level rated higher the subscales 'Human needs assistance', 'Teaching/learning', 'Humanism/faith-hope/sensitivity', and 'Expression of positive/negative feelings'. The most important caring behaviour from the patients' perspective was 'know what they are doing'.

Different patient groups have shown variations in satisfaction with nursing care and perception of caring behaviours during care as demonstrated in research studies by Rafii, Hajinezhad, and Haghani (2008) and Dorsey, Phillips, and Williams (2001).

Rafii, Hajinezhad, and Haghani (2008) carried out a study to determine the relationship between patients' reports of nurse-caring and patient satisfaction with nursing care in Iran among patients who had been hospitalized because of medical conditions or surgical procedures. Results indicated that male patients were more satisfied with nursing care than female patients. Admission to the hospital during the last five years was positively correlated with patients' perceptions of nurse-caring and satisfaction with nursing care.

Dorsey, Phillips, and Williams (2001) conducted a descriptive correlation study to explore differences in African American adult patients' perceptions of nurse-caring behaviours between a group of patients with sickle cell disease (SCD) and a group of patients with general medical conditions. A modified version of the CBA tool was used to identify patients' perception of the degree to which caring behaviours were demonstrated by healthcare providers. Adults with SCD reported a lower perception of nurse-caring behaviours than adults with other medical conditions. Men with SCD reported a greater perception of nurse-caring behaviours than women with SCD.

2.3 Nurses versus Patients Perception of Nurse-Caring Behaviours

A study by Chang et al (2005) explored differences in the perceived importance of nurse-caring behaviours between patients with cancer pain and oncology nurses, and the relationship between level of pain intensity and the importance of various nursing caring behaviours. The study included 50 matched cancer patient-staff pairs from oncology inpatient units of 3 hospitals in northern Taiwan. Results revealed that patients ranked 'being accessible', 'monitors and follows through', and 'anticipates' as being the most important nursing caring behaviours. The nursing staff ranked 'being accessible', 'explains and facilitates' and 'monitors and follows through' as being the most important behaviours.

No correlations were found between the patients and staff rankings of the perceived importance of various caring behaviours. The self-reported level of pain intensity by patients was positively correlated with the patient rating of the 'anticipates' and 'monitors and follows through' behaviours, and negatively correlated with the 'explains and facilitates' behaviour. Staff perception of a patient's level of pain intensity was positively correlated with staff rating of the 'being accessible' behaviour. Results demonstrated that greater patient-staff communication was needed for staff to more accurately provide caring interventions to make patients with cancer pain feel cared for.

Zamanzadeh et al (2010) conducted a research in an Iranian oncology centre on oncology patients' and professional nurses' perceptions of important nurse-caring behaviours. The results showed that both groups considered the same order of importance of caring. They ranked highly 'Monitors and follows through' and 'Being accessible', and ranked low "Comforts" and "Trusting relationships". Additionally, patients rated 'Being accessible' and 'Explains and

facilitates' higher than nurses. The oncology patients and nurses perceived the instrumental aspects of caring as very important.

For caring to be meaningful, it needs to be based on mutual agreement between nurses and patients on what constitutes important nurse-caring behaviours. As a result of having this insight, nurses in clinical practice can enhance patients' satisfaction with nursing care by providing caring that is informed by patients' needs (Zamanzadeh et al, 2010).

2.4 Summary

Although the process of nursing care and its influence on patient care has been demonstrated, there has been minimal study on perceptions of nurse-caring behaviours in surgical settings in both the developed and developing countries. Consequently, it is important for scholars to ascertain nurses' and patients' perceptions of caring behaviours in different health service areas and in different cultures so as to promote provision of culturally competent evidence-based nursing care. Comparative studies investigating the perceptions of nurses and patients simultaneously in the surgical setting using the same instrument may produce more conclusive results that will promote more evidence-based care.

CHAPTER THREE: MATERIALS AND METHODS

3.0 Study Design

This was a cross-sectional descriptive study whose aim was to provide an accurate portrayal of perception of nurse-caring behaviours among patients and nurses.

3.1 Variables under study

The following variables were studied in order to achieve the objectives of the study:

Independent variables

The two types of groups under study were nurses and patients. Nurse factors and patient factors were the independent variables. Identified independent variables among nurses include age, gender, level of education and work experience. Identified independent variables among patients include age, gender, level of education, and peri-operative status. These variables were defined as outlined below.

Nurse factors

Chronological age: This was defined as the number of complete years the nurse had lived since birth. It was assessed by recording the age of the respondent in years.

Gender: This was defined as biologically being male or female. It was assessed by recording the respondent's gender.

Professional qualification: This was defined as the highest level of nursing qualification the nurse had achieved. It was assessed by recording the staff's qualification.

Work experience: This is the length of time the nurse had been working, or worked in the occupation of nursing and within the surgical setup. It was assessed by recording the duration in years.

Patient factors

Chronological age: This was defined as the number of complete years the client had lived since birth. It was assessed by recording the age of the respondent in years.

Gender: This was defined as biologically being male or female. It was assessed by recording the respondent's gender.

Level of education: This was defined as the highest level of qualification the patient had achieved through formal training. It was assessed by recording the highest level of education the patient had attained.

Peri-operative status: This was defined as the patient's current level of management surgically. It assessed by indicating whether the patient was preoperative (had not undergone surgery yet) or postoperative (had undergone surgery).

Dependent variable

Nurses' and patients' perception on the importance of nurse-caring behaviours was the dependent variable of the study.

Nurses' perception on importance of nurse-caring behaviours: This was defined as the importance nurses assigned to specific nurse-caring behaviours. Measurement involved the nurse participant indicating how important each of the nurse-caring behaviour (as outlined in the CBA tool) was in making the patient feel cared for.

Patients' perception on importance of nurse-caring behaviours: This was defined as the importance patients assigned to specific nurse-caring behaviours. Measurement involved the patient participant indicating how important each of the nurse-caring behaviour (as outlined in the CBA tool) was in making the patient feel cared for.

Table 1: Variables under Study

Independent variables	Dependent variable
Nurse **Nurse factors :** gender ,age, professional qualification, work experience	Nurses' perception on importance of nurse-caring behaviours
Patient **Patient factors**: age, gender, level of education, peri-operative status	Patients' perception on importance of nurse-caring behaviours

3.2 Study Area

The area of study was ten Kenyatta National Hospital (KNH) surgical wards namely Cardiothoracic surgical ward, Neurosurgical ward, Orthopaedic surgical wards (3), General surgical wards (2), and General surgical Private Wing wards (3).

KNH is the largest referral hospital in East and Central Africa and the main medical professionals training institution in Kenya. It is located along Ngong' Road in Nairobi next to Kenya Medical Training College and University of Nairobi (UON).

KNH, being the leading public referral and teaching hospital offers services to a variety of patients from the East and Central Africa and this enabled study of patients from different cultural socioeconomic backgrounds.

3.3 Study Population

The study population included:

- Nurses working in the surgical wards.
- Adult patients admitted to the surgical wards.

3.4 Inclusion and Exclusion criteria

3.4.1 Inclusion criteria

- All nurses in the surgical wards involved in care of patients.

- All adult patients admitted in the surgical wards that had the capacity to give informed consent.

3.4.2 Exclusion criteria

- Any eligible patient or nurse who declined to participate in the study.
- Patients who were unable to give informed consent and answer the questionnaire items namely, those who were mentally handicapped, very ill, or those not fully conscious (not fully oriented to person, time and place).
- Patients who verbally or nonverbally indicated discomfort/pain related to illness that prevented them from participating in the study.

3.5 Sampling

3.5.1 Sampling Frame

The sampling frame for patients was all adult patients admitted to the KNH surgical wards namely Cardiothoracic surgery, Neurosurgery, Orthopaedic surgery, General Surgery, General surgery Private Wing. The number was 348 patients. This estimate was based on the bed capacity of the wards as assessed on 28th March 2011.

The sampling frame for nurses was all nurses involved in care of patients in the KNH surgical wards namely Cardiothoracic surgery, Neurosurgery, Orthopaedic surgery, General surgery, General surgery Private Wing. The number was 190 nurses. This estimate was from records of nurses' staff duty lists in the wards on 28th March 2011.

3.5.2 Sample Size Calculation

The Fisher formula (Mugenda and Mugenda, 2003) was used in calculation of the sample size:

$$n = \frac{Z^2pq}{d^2}$$

Where:

n= desired sample size

Z= standard normal deviate at the required confidence level of 1.96

P= proportion in the target population that is estimated at 50%

q= 1-p (1 is standard figure) = 1- 0.5= 0.5

d= confidence limit of prevalence (p) at 95% confidence interval

1-0.95= 0.05 hence degree of accuracy desired set at 0.05

$$n = \frac{(1.96)^2 x 0.5 x 0.5}{0.05^2} = 384$$

The final sample estimate (nf) was estimated as follows:

nf= n/ (1+n)/N

Where:

nf= the desired sample size (when the population is less than 10,000)

n= the desired sample size (when population is more than 10,000)

N= the estimate of population size: Nurses working in surgical wards = 190. Patients admitted in surgical wards = 348.

Nurses: nf =384/ **(**1+ (384/190) = 127 nurses.

Adults patients: nf = 384/ (1+ (384/348) = 182 patients.

3.5.3 Sampling Method

Nurses

Nurses in the ten surgical wards were sampled using quota sampling procedure. Since the population from which the sample was drawn did not constitute a homogenous group because they work with different groups of patients, stratification was done according to surgical practice setting namely, Cardiothoracic surgery, Neurosurgery, Orthopaedic surgery, General surgery, and Private Wing General surgery.

The list of nurses obtained from the Senior Nursing officers (SNOs) of the surgical wards was stratified according to each specific practice setting. The number of nurses from each stratum was proportionate to the size of each specific stratum. Convenience sampling was then used to select nurses from each stratum until the desired sample size was achieved.

Proportionate allocation formula was used to achieve the proportionate sample size as follows:

Size of proportion = (n1/n2) nf

n1 = number of nurses in each ward

n2 = total number of nurses in the surgical area of study which was 190

nf = minimal sample size calculated was 127

Orthopaedic surgery (3 wards) had 22 nurses each: Size of proportion= (22/190) x127 = 15 nurses each ward.

General surgery (2 wards) had 20 nurses each: Size of proportion= (20/190) x127 = 13 nurses each ward.

General surgery Private Wing (3 wards) had 18 nurses each: Size of proportion = (18/190) x 127 = 12 nurses each.

Neurosurgical and Cardiothoracic surgery wards had 15 nurses each: Size of proportion = (15/190) x 127 = 10 nurses each.

Total sample size was 127. Total estimate population was 190. Therefore the sample was 67% of the total population.

Patients

Quota sampling of adult patients admitted in the surgical wards was done. Stratification was done according to the surgical ward the patient was admitted in namely, Cardiothoracic surgery, Neurosurgery, Orthopaedic surgery, General surgery, and Private Wing General surgery. This was done to promote representativeness of the different patient conditions. Convenience sampling was then used to select patients from each stratum until the desired sample size was achieved.

Proportionate allocation formula was used to achieve the proportionate sample size as follows:

Size of proportion = (n1/n2) nf

n1 = number of patients in each ward (based on the bed capacity of each ward)

n2 = total number of patients in the area of study, 348

nf = minimal sample size, 182

Orthopaedic surgery (3 wards) with 60 patients each: Size of proportion = (60/348) x 182 = 32 patients each

General surgery (2 wards) with 34 patients each: Size of proportion = (34/348) x 182 = 18 patients each

Neurosurgical, Cardiothoracic surgery ward, General surgery Private Wing (3 wards) with 20 patients each: Size of proportion = (20/348) x182 = 10 patients each

Total sample size was 182. Total estimate population was 348. Therefore the sample was 52% of the total population.

3.6 Data Collection

3.6.1 Data Collection Instrument

Two types of semi- structured questionnaires were used in this study, one for nurses and the other for patients. The first part of nurses' questionnaire provided information on gender, age, marital status, professional qualifications, duration of practice as a nurse, and duration of practice in surgical setting. The first part of the patients questionnaire elicited demographic information including age, gender, nationality, marital status, education level, employment status, household income, religion, number of admissions to hospital in the last five years, duration in hospital, current status of care (whether preoperative or postoperative), and perceived level of knowledge concerning their condition and management modalities.

The second part of the questionnaire contained an instrument to measure the perceived importance of nurse-caring behaviours. This part of the questionnaire comprises a CBA tool developed by Cronin and Harrison in 1988 and is based on Watson's ten carative factors (Baldursdottir & Jonsdottir, 2002). After receiving permission from the authors, Cronin and Harrison's CBA tool was used to collect data.

Since the CBA tool in its original form is designed for patients' responses, the question statements were modified for the nurses' questionnaire to be applicable to them. For the patients' questionnaire, the CBA tool was used in its original form except where modifications were made after pretesting to make the tool more understandable to respondents.

The 63-item CBA tool identifies seven subsets of questions that encompass all ten carative factors. The seven subscales include (1) Humanism/faith-hope/sensitivity (2) Helping/trust, (3) Expression of positive/negative feelings, (4) Teaching/learning, (5) Supportive/protective and corrective environment, (6) Human needs assistance, (7) Existential/phenomenological spiritual forces. The sixth carative factor, 'Systematic use of the scientific problem-solving method for decision making' is implicit in all the caring statements included in the instrument, therefore is not measured as a separate subscale (Cronin and Lee, 2009).

The CBA was developed to assess the relative contribution of identified nursing behaviours to the patient's sense of feeling cared for. Reliability for each of the seven subscales of the questionnaire has been reported and consists of Cronbach coefficient alpha scores ranging from .66 to .90. Face and content validity were established by a panel of four content specialists familiar with Watson's conceptual model (Cronin & Lee, 2009).

The items were rated on a 5-point Likert scale to reflect their relative importance in making the patient feel cared for. A score of 1 corresponded to 'not important at all' and a score of 5 corresponded to 'very important'.

The questionnaire for patients had an open-ended question asking "Is there anything else that nurses could do or say to make you feel cared for?" This qualitative item allowed patients to further individualize their responses to provide further insight into patients' perception of nurse-caring behaviours. Additionally an open-ended question asking "What else can the nurse do to make the patient feel cared for?" formed part of the questionnaire for nurses. This qualitative item allowed nurses to further individualize their responses to provide further insight into what nurses perceived as nurse-caring behaviours.

3.6.2 Pretesting of Tool

The data collection tool was pretested at KNH's Gynaecology ward among 5 nurses and 8 patients. The feedback was used to make the required modifications before the full implementation of the study.

3.6.3 Field Procedures

Data collection was done by the principal investigator and two research assistants who were nurses working in KNH who had been trained by the principal investigator on the data collection procedures. Data collection was conducted for a period of nine weeks (between April and June, 2011) from the identified study areas.

Eligible participants were identified by convenient sampling and the study purpose and procedures explained to them. The instrument pack containing consent explanation, consent form and CBA questionnaire was reviewed by the study participants, questions answered as required and informed consent obtained for those who agreed to participate in the study. The response rate from the study participants was 100%.

Study procedures involved self administered questionnaires for nurses since their official language of communication was English. For patients, a self-administered questionnaire was used for those who were able to respond to the questionnaire items in English language without any hindrance. Interviews in Kiswahili language using the questionnaire were conducted for patients who were more fluent in Kiswahili than English language for them to adequately respond to the items. Once they gave their responses the same were recorded on the questionnaire by the researcher/research assistant. Additionally, the researcher and research assistants interviewed and recorded responses for patients who were unable to use the dominant upper limb to write down responses because of surgery or injury.

3.6.4 Data Management and Analysis

Obtained data was edited and numerically coded to facilitate analysis. A statistician was engaged to analyse the data in consultation with the principal investigator. Data obtained was edited then computed and analysed using Statistical Package for Social Sciences (SPSS) software package.

Univariate and bivariate statistics were used in analysis of the data. Univariate statistics were used to describe the sample. The demographic profiles of the participants in the nurses' and patients' groups were presented in frequencies and percentages. Mean scores and standard

deviations were calculated for each CBA item to determine the ranking of nurse-caring behaviours by nurses and patients and find out item variability. All items were then grouped into subscales and the overall means for each of the subscales were also calculated to determine the rank distribution of the subscales.

Bivariate nonparametric and parametric statistical tests were used to compare responses to the CBA by nurses and patients, and analyse the responses in relation to the identified nurse factors and patient factors.

3.7 Study Limitation

The first limitation is the reduced ability to generalize these results to all surgical inpatient settings in Nairobi or Kenya since only KNH and adult patients were surveyed. Additionally, convenience selection of sample from the created strata (quota sampling) which is a nonprobability sampling method contributed to the reduced generalizability of results. However, creation of strata before sampling was used to capture subjects in various surgical inpatient settings thus increasing representativeness of the sample.

Interviewer bias based on the interviewer recording what they perceived the respondent was saying and not exactly what the respondent said was expected but this was minimised by training the research assistants on the study objectives, tools and procedures. Additionally, the principal investigator regularly did field checks to monitor data collection and clarify any issues related to data collection procedures.

The data collection tool was lengthy (it took an estimated time of 20 to 45 minutes to complete) and response burden was noted on those whom the interview method was used. The respondents

were informed that they could take a few minutes break as necessary during the completion of the questionnaire. A few minutes break when required were taken during completion of the questionnaire.

3.8 Ethical Considerations

Approval of the study was obtained from the KNH/UON-Ethics and Research Committee and National Council for Science and Technology.

Only autonomous individuals (18 years and older, oriented to person, time and place, not in any obvious physical/emotional distress) who were capable of understanding and weighing the benefits and risks of the study and were competent to give consent were included in the study.

Before obtaining informed consent, a consent explanation that described the purpose of the study, potential risks/benefits, right to confidentiality, and right to withdraw from study was distributed and explained to all respondents. Participation in the study was on voluntary basis upon obtaining informed consent.

The respondents were informed at the beginning of data collection that they had a right to determine which information to give or not give. For those respondents who did not wish to answer a particular questionnaire item their wishes were respected. There was no victimization for non-participation or dropping out of the research at any time. No incentives or payments were given to participants for participation in the study.

Anonymity and confidentiality of the respondents was maintained by ensuring their individual responses were not linked to their names (coded numbers instead of names were used in the questionnaires) and by allowing for optional signing of consent form.

Since data collection procedures involved completion of self-administered questionnaires or participation in interview there was minimal risk to the subjects compared with the potential benefits of the study since the results of the study can be utilised in nursing practice to improve quality of nursing services.

The researcher declares no conflict of interest since this study is in part fulfilment of a master's degree course.

Researcher's contact was stated in the consent explanation form given to participants in order to contact the researcher for any issues they would have wished to verify during or after study.

CHAPTER FOUR: RESULTS

The study participants included 127 nurses working within the surgical wards at KNH and 182 adult surgical patients admitted within the same wards between April and June 2011. Descriptive analysis of both nurse and patient characteristics are presented in the following section.

4.0 Demographic Characteristics of Nurses

The average age of nurses was 39.3 years with a modal age of 40 years. The youngest nurse recruited into the study was aged 28 years and the oldest nurse was 56 years old. Most (51.2%) of the nurses were aged between 34 and 44 years. This age group was followed by that of nurses between 28 to 34 years who accounted for 26.8% of the participants and those aged 45 years and above comprising 22% of participating nurses.

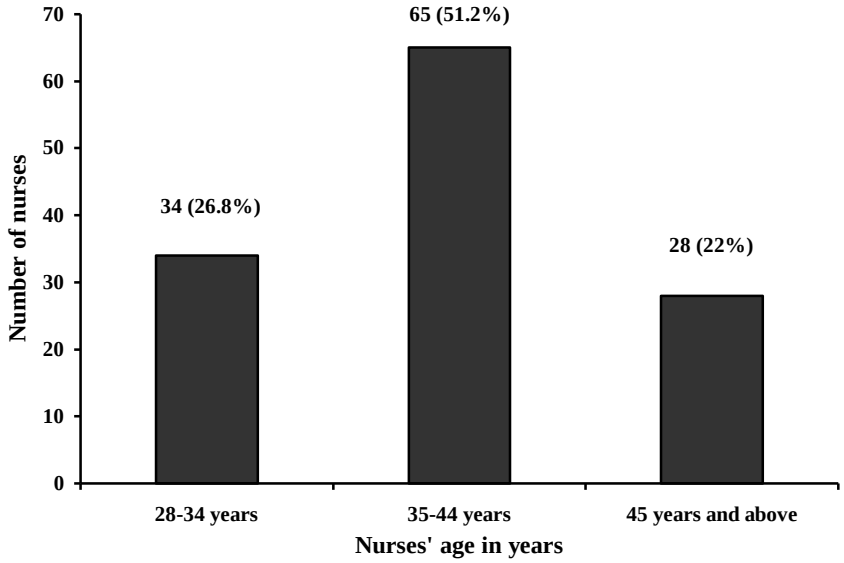

Figure 2: Age Distribution of Nurses

The other demographic characteristics of the nurses enrolled in the study are summarised in table 2 below. As shown in the table below, female nurses constituted the majority (80.3%) of the participants. Majority (88%) of the nurses stated that they were married. The highest level of qualification for most nurses in this study (60.6%) was Kenya Registered Community Health Nurse (KRCHN). Majority (79.5%) of the nurses had practiced nursing for 10 years and above and more specifically, 68.5% of the participants had practiced in surgical wards for duration of 3 years and above.

Table 2: Demographic Characteristics of Nurses

	Frequency, n	**Percent (%)**
Gender		
Male	25	19.7
Female	102	80.3
Marital Status		
Married	112	88
Single	15	12
Professional qualification		
ECN	22	17.3
KRN	11	8.6
KRCHN	77	60.6
BScN	17 (13.5)	13.5
Duration of practice		
Less than 5 years	4	3.2
5-9 years	22	17.3
10-14 years	42	33
15-19 years	26	20.5
20 years and above	33	26
Length of practice in		
0-2 years	40	31.5
3-6 years	51	40.2
7-10 years	26	20.5
11years and above	10	7.8

4.1 Demographic Characteristics of Patients

The most common age group among patients was 25-34 years representing 38% of the patients. This was followed by the age group, 18-24 years and 35-44 years which accounted for 25.3% (n = 46) and 20.3% (n = 37) of the participating patients, respectively. The age range was 18 years to 76 years.

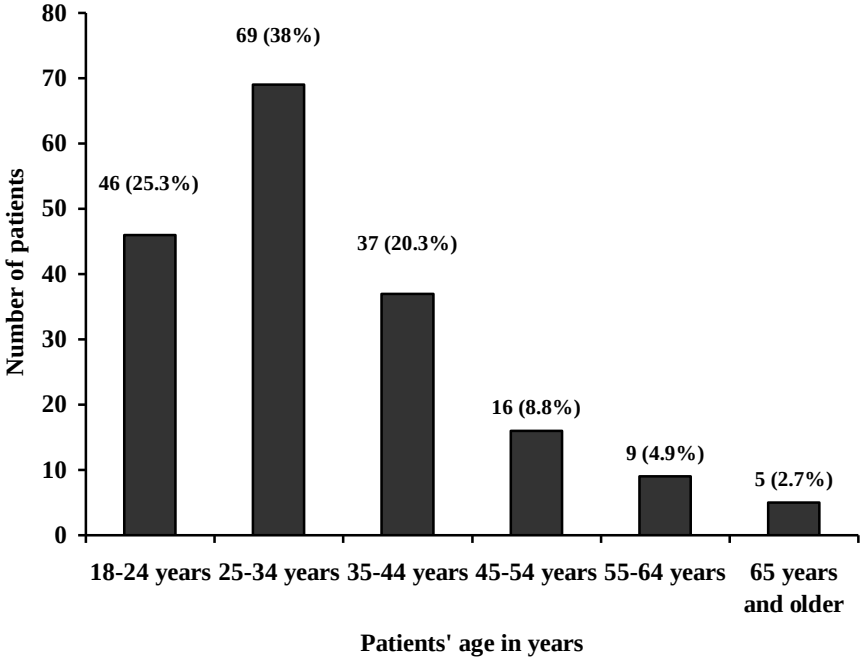

Figure 3: Age Distribution of Patients

As shown in table 3, the ratio of female patients to male patients in the study was 1: 2.4, representing a total of 53 (29.1%) female patients and 129 (70.9%) male patients. 52.8% of the patients were single and 45.1% were married. 44% of the respondents stated that their highest level of education was O level. The other demographic characteristics of the patients who participated in the study are summarised in table 3.

Table 3: Demographic Characteristics of Patients

	Frequency, n	Percent (%)
Gender		
Male	129	70.9
Female	53	29.1
Marital status		
Married	82	45.1
Single	96	52.8
Other	3	1.7
Not stated	1	0.8
Formal education		
Primary	43	23.6
O level	80	44
A level	23	12.6
Tertiary education	36	19.8
Religion		
Protestant	98	53.8
Catholic	72	39.6
Muslim	6	3.2
Other	6	3.2
Employment Status		
Employed	39	21.4
Self employed	65	35.7
Unemployed	47	25.8
Casual worker	19	10.4
Retired	6	3.3
Other	6	3.3

4.2 Information Related to Current Medical/Surgical Status of Patients

Patients admitted into orthopaedic surgical and general surgical wards accounted for 52.7% and 19.8% of the participants respectively. At the time of the study 84 patients (46.2%) had already undergone a surgical procedure while a similar number (n = 84) were waiting to undergo surgery. Most of the patients reported that they had sufficient (30.8%) or some (43.4%) knowledge concerning their condition.

Table 4 shows that around one-quarter (24.2%) of patients were in the wards for at least two months.

Table 4: Information Related to Current Medical/Surgical Status of Patients

	Frequency (n)	**Percent (%)**
Type of ward		
Private surgical	30	16.5
Orthopaedic surgical	96	52.7
General surgical	36	19.8
Cardiothoracic surgical	10	5.5
Neurosurgical	10	5.5
Surgical care		
Awaiting surgery	84	46.2
Already had surgery	84	46.2
No surgery planned currently	14	7.6
Knowledge concerning condition		
Sufficient	56	30.8
Some	79	43.4
Not sure	27	14.8
No knowledge	18	9.9
Not stated	2	1.1
Length of stay in ward		
1 to 9 days	53	29.1
10 to 29 days	46	25.3
1 to 2 months	39	21.4
Over 2 months	44	24.2

4.3 Nurses' Perception of Nurse-Caring Behaviours

The nurse participants assigned a score to each CBA item. The 63 items, which comprise nurse-caring behaviours, were rated on a 5-point Likert scale to reflect their relative importance (from the nurse's perspective) in making the patient feel cared for. The possible scores ranged from a

score of 1 corresponding to ‘not important at all’ to a score of 5 which corresponded to ‘very important’.

The means (SD) for the CBA items ranged from a high of 4.85(0.46) for item ‘treat patient as an individual’ ‘to a low of 2.80 (1.14) for item ‘visit the patient if the patient moves to another ward/unit’. There were 54 items whose means were ≥ 4 which shows that the items were perceived as ‘very important’ or ‘important’.

The ten most caring behaviours (those that had the highest mean scores) from the nurses perspective in the order from the most important were as follows: ‘treat patient as an individual’, ‘ know how to give injections’, ‘ give patient treatments and medication on time’, ‘ treat patient with respect’, ‘ know how to handle equipment’, ‘reassure the patient’, ‘be kind and considerate’, ‘know what I’m doing’, ‘encourage patients to do what they can for themselves’, and ‘know when it’s necessary to call the doctor’. These ten most important nurse-caring behaviours from the nurses’ perspective are shown in Table 5.

Subscales represented among the ten most important nurse-caring behaviours from the nurses perspective included subscale 1; ‘Humanism/faith-hope/sensitivity’ (5 items), subscale 5; ‘Supportive/protective and corrective environment’ (1 item) and subscale 6; ‘Human needs assistance’ (4 items).

Among the ten most important nurse-caring behaviours, three items that were common to both groups included ‘give treatment and medications on time’, ‘treat patient with respect’ and ‘know when it is necessary to call the doctor’.

Table 5: Most Important Caring Behaviours as Perceived by Nurses and Comparison to Patients' Perception

S/scale	Item	Nurses		Patients		Z*	P†
		Mean (SD)	Rank	Mean (SD)	Rank		
1	Treat patient as an individual	4.85 (0.46)	1	4.22 (1.17)	26	-5.87	<0.001
6	Know how to give injections, IVs	4.77 (0.52)	2	4.23 (1.17)	24	-4.36	<0.001
6	Give patient treatments and medication on time	4.76 (0.53)	3	4.66 (0.65)	1	-1.11	0.26
1	Treat patient with respect	4.74 (0.49)	4	4.49 (0.82)	3	-2.73	0.0063
6	Know how to handle equipment	4.74 (0.61)	4	4.16 (1.20)	31	-4.53	<0.001
1	Reassure the patient	4.72 (0.55)	6	4.19 (1.08)	28	-4.75	<0.001
1	Be kind and considerate	4.69 (0.53)	7	4.30 (0.88)	14	-4.20	<0.001
1	Know what I'm doing	4.66 (0.77)	8	4.28 (1.15)	16	-2.92	0.0035
5	Encourage patients to do what they can for themselves	4.64 (0.54)	9	4.28 (0.93)	17	-3.43	0.0006
6	Know when it's necessary to call the doctor	4.63 (0.57)	10	4.38 (0.84)	7	-2.51	0.0119

**Two sample Mann-Whitney test significance at p<0.05*

The nurses' perception of important caring behaviours differed significantly from that of patient for 9 out of the 10 items that nurses considered most important in defining caring behaviour ($p<0.05$). Result of the non-parametric Mann-Whitney test showed that nurses and patients did not differ on their perception on the importance of 'give patient treatments and medications on time' ($p = 0.26$). Nurses ranked this item 3 (mean = 4.76) in terms of importance and patients ranked it 1 (mean =4.66).

Although nurses scored ‘treat patient with respect’ significantly higher (mean=4.74) than the patients (mean = 4.49) did (p = 0.0063), they ranked the item lower in relation to the ten most important caring behaviours placing it fourth while the patients ranked it third. The same applied to ‘know when it’s necessary to call the doctor’.

Nurses were more likely to rank items on ‘Human needs assistance’ such as ‘know how to give injections and IVs’, and ‘know how to handle equipment’ highly, but patients did not rank these items highly in terms of importance.

4.4 Patients’ Perception of Nurse-Caring Behaviours

The patient participants assigned a score to each CBA item. The items, which outline nurse-caring behaviours, were rated on a 5-point Likert scale to reflect their relative importance (from the patient’s perspective) in making the patient feel cared for. The possible scores ranged from a score of 1 corresponding to ‘not important at all’ to a score of 5 which corresponded to ‘very important’

The means (SD) for the CBA items ranged from a high of 4.66 (0.46) for item ‘give me treatments and medications on time’ to a low of 2.64 (1.45) for item ‘ask me I would like to be called’. There were 40 items perceived as ‘important’ or ‘very important’ (means scores ≥ 4). Subscales represented among the ten most important nurse-caring behaviours as shown in table 6 include ‘Humanism /faith-hope/sensitivity’, ‘Helping/trust’, ‘Expression of positive/negative feelings’ (1 item each), ‘Supportive/protective/corrective environment’ (3 items) and ‘Human needs assistance’ (4 items).

Table 6: Most Important Caring Behaviours as Perceived by Patients and Comparison to Nurses' Perception

S/scale	Item	Patients		Nurses		Z*	P†
		Mean (SD)	Rank	Mean (SD)	Rank		
6	Give patient treatment on time	4.66 (0.46)	1	4.76 (0.53)	3	-1.19	0.26
6	Help me with my care until am able to do it for myself	4.49 (0.52)	2	4.62 (0.64)	15	-1.03	0.30
1	Treat me with respect	4.49 (0.53)	3	4.74 (0.49)	4	-2.73	0.0063
3	Don't give up on me when I'm difficult to get along with	4.42 (0.49)	4	4.57 (0.67)	18	-1.09	0.27
5	Give me my pain medication when I need it	4.41 (0.61)	5	4.47 (0.84)	26	-0.63	0.52
5	Offer things to make me more comfortable	4.40 (0.55)	6	4.57 (0.58)	17	-1.10	0.27
6	Know when it's necessary to call the doctor	4.38 (0.53)	7	4.63 (0.57)	10	-2.51	0.0119
2	Really listen to me when I talk	4.35 (0. 77)	8	4.55 (0.71)	20	-1.93	0.05
6	Check my condition very closely	4.34 (0.54)	9	4.53 (0.69)	21	-1.46	0.14
5	Leave my room/ bedside neat after working with me	4.32 (0.57)	10	4.55 (0.69)	19	-2.16	0.03

**Two sample Mann-Whitney test significance at p<0.05*

Ten most important (those with the highest mean scores) caring behaviours from patients' perspective in the order from the most important were: 'give me treatments and medications on time', 'help me with my care until am able to do it for myself', 'treat me with respect', 'don't give up on me when I'm difficult to get along with', 'give me my pain medication when I need it', 'offer things to make me more comfortable', 'know when it's necessary to call the doctor',

'really listen to me when I talk', 'check my condition very closely', and 'leave my room/ bedside neat after working with me' as shown in Table 6.

According to patients the most important aspect of caring behaviour was 'give patient treatments and medications on time'. The nurses also ranked this aspect of care highly (rank = 3), and patient and nurses perception of the importance of this item in defining nurse-caring behaviour was not significantly different (p=0.26).

There were significant differences between patients and nurses for 4 out of the 10 items that patients considered to be most important in defining nurse-caring behaviour ($p \leq 0.05$). Patients ranked 'treat me with respect' as the third most important aspect of caring behaviour (mean = 4.49). Similarly nurses ranked 'treat patient with respect' among the ten most important aspects of caring behaviour (rank = 4), but they assigned it a significantly higher mean score of 4.74 (p = 0.0063). The other items that showed significant differences include 'know when it's necessary to call the doctor', 'really listen when the patient talks', and 'leave the room/bedside neat after working with the patient'.

4.5 The Least Important Caring Behaviours as Perceived by Nurses and Patients

The caring behaviours that were ranked least in importance (those that had the lowest mean scores) by nurses and patients are shown in table 7 and 8. The results demonstrate that there were more similarities than differences between the perceptions of nurses and patients on the least important nurse-caring behaviours with 7 of the least important items common to both groups.

The seven items that were common to both groups include 'understand when the patient needs to be alone', 'help patient see that past experiences are important', 'tell the patient what to expect

during the day', 'talk to the patient about his/her life outside the hospital', 'touch the patient when he/she needs it for comfort', 'ask the patient how he/she would like to be called' and 'visit the patient if the patient moves to another ward/unit'.

Table 7: Least Important Caring Behaviours as Perceived by Nurses and Comparison to Patients' Perception

S/Scale	Item	Nurses		Patients		P†
		Mean (SD)	Rank	Mean(SD)	Rank	
4	Ask the patient what he/she wants to know about his/her health/illness	4.03 (0.92)	54	4.05 (1.12)	39	0.32
5	Understand when the patient needs to be alone	3.88 (0.96)	55	3.88 (0.96)	59	<0.001
7	Help patient see that past experiences are important	3.87 (0.92)	56	3.87 (0.92)	57	0.03
5	Tell the patient what to expect during the day	3.84(1.04)	57	3.47 (1.34)	56	0.04
1	Ask the patient how he/she likes things done	3.80 (0.95)	58	3.69 (1.23)	53	0.97
6	Allow the patient's family to visit as much as possible	3.63 (1.05)	59	3.85 (1.33)	49	0.01
2	Talk to the patient about his/her life outside the hospital	3.56 (0.98)	60	3.56 (0.98)	61	<0.001
2	Touch the patient when he/she needs it for comfort	3.56 (1.13)	61	3.56 (1.13)	60	0.001
2	Ask the patient how he/she would like to be called	3.51 (1.14)	62	3.51 (1.14)	63	<0.001
2	Visit the patient if the patient moves to another ward/unit	2.80 (1.14)	63	2.80 (1.14)	62	0.67

**Two sample Mann-Whitney test significance at p<0.05*

Table 8: Least Important Caring Behaviours as Perceived by Patients and Comparison to Nurses' Perception

S/Scale	Item	Patients		Nurses		P†
		Mean(SD)	Rank	Mean (SD)	Rank	
5	Consider my spiritual needs	3.66 (1.30)	54	4.38 (0.78)	32	<0.001
1	Know "when I've had enough" and act appropriately	3.48 (1.31)	55	4.18 (0.78)	43	<0.001
5	Tell me what to expect during the day	3.47 (1.34)	56	3.84 (1.04)	57	0.04
7	Help me see that past experiences are important	3.47 (1.32)	57	3.87 (0.92)	56	0.03
6	Keep my family informed of my progress	3.37 (1.43)	58	4.15 (0.80)	46	<0.001
5	Understand when I need to be alone	3.23 (1.34)	59	3.88 (0.96)	55	<0.001
2	Touch me when I need it for comfort	2.98 (1.46)	60	3.56 (1.13)	61	0.001
2	Talk to me about my life outside the hospital	2.76 (1.48)	61	3.56 (0.98)	60	<0.001
2	Visit me if I move to another ward/unit	2.75 (1.42)	62	2.80 (1.14)	63	0.67
2	Ask me what I would like to be called	2.64 (1.45)	63	3.51 (1.14)	62	<0.001

**Two sample Mann-Whitney test significance at p<0.05*

4.6 Comparative Analysis of Patients' and Nurses' Perception of Care

The comparison of means between the seven subscales measuring nurses and patients perception of care is presented in Table 9. Patients and nursing staff differed significantly from each other on ratings of 4 of the 7 subscales. Nurses' mean scores of each of these caring behaviours

subscales: 'Humanism/ faith-hope/sensitivity', 'Helping/trust', 'Supportive, protective and corrective environment' and 'Human needs assistance' were significantly higher than mean scores of the patients ($p<0.05$).

Table 9: Mean Score Values of Patients and Nurses on Caring Behaviours Subscales

Subscale	Patients (n=182)		Nurses (n=127)		Z	P†
	Mean (SD)	Rank	Mean	Rank		
1. Humanism/ faith-hope/sensitivity	4.11(0.6)	3	4.44(0.4)	1	-5.50	<0.001
2. Helping/ trust	3.60(0.7)	7	4.02(0.6)	7	-5.51	<0.001
3. Expression of positive/ negative feelings	4.03(0.8)	4	4.19(0.7)	5	-1.65	0.097
4. Teaching/ learning	4.12(0.8)	2	4.22(0.7)	4	-0.51	0.611
5. Supportive, protective and corrective environment	4.03(0.6)	4	4.41(0.5)	3	-5.38	<0.001
6. Human needs assistance	4.16(0.6)	1	4.43(0.4)	2	-3.50	0.001
7. Allowing for existential phenomenological forces	3.84(0.9)	6	4.08(0.7)	6	-1.92	0.054

**t test significance p value<0.05*

Patients perceived the 'Human needs assistance' subscale (mean = 4.16, SD = 0.6) as the most important set of nurse-caring behaviours. Conversely, the nurses ranked the 'Human needs assistance' subscale (mean = 4.43, SD = 0.4) second to 'Humanism/ faith-hope/ sensitivity' subscale (mean = 4.44, SD = 0.4).

Of note, patients and nurses agreed in the order of ranking the two subscales which they perceived as being least important in defining nurse-caring behaviours namely, 'Allowing for existential phenomenological forces' and 'Helping/ trust'.

4.7 Nurses' Demographic Factors and Perception of Caring Behaviours

The results of Kruskal Wallis test shown below in table 10 indicate that both the length of experience (p=0.4) and level of training (p=0.149) were not significantly associated to nurses' perception of caring behaviours.

Table 10: Perception of Caring in Relation to Nurses' Level of Training and Nursing Experience

	Observations	**Rank sum**	**Kruskal Wallis P value**
Nursing experience			
less than 5y	4	201.5	0.4
5-9y	22	1092	
10-14y	42	2691.5	
15-20y	26	1732.5	
20y+	34	2538.5	
Level of training			
ECN	22	1434.5	0.149
KRN	11	869	
KRCHN	77	4977	
BScN	17	886	

Correlation was done between variables that were significantly related with perception. Table 11 shows Pearson's correlation coefficients for the seven subscales of nurse-caring behaviours and the main demographic characteristics including gender and age. Nurses' gender did not show a significant correlation with any of the seven subscales.

The age of nurses showed significant positive correlations with their ratings on three of the seven subscales. These subscales included 'Humanism/ faith-hope/sensitivity', 'Expression of positive/ negative feelings', and 'Allowing for existential phenomenological forces'. In all these three subscales nurses' ratings of nurse-caring behaviours increased with increasing age.

Table 11: Relationship between Caring Behaviours Subscales and Nurses' Characteristics

	Humanism/ faith-hope/ sensitivity	Helping/ trust	Expression of positive/ negative feelings	Teaching/ learning	Supportive, protective & corrective environment	Human needs assistance	Allowing for existential phenomenological forces	Gender	Age
Humanism/faith-hope/sensitivity	1.00								
Helping/ trust	0.7150*	1.00							
Expression of positive/ negative feelings	0.7375*	0.7248*	1.00						
Teaching/ learning	0.7442*	0.7640*	0.7561*	1.00					
Supportive, protective & corrective environment	0.7851*	0.7051*	0.7638*	0.7115*	1.00				
Human needs assistance	0.6793*	0.6370*	0.6364*	0.6470*	0.7691*	1.00			
Allowing for existential phenomenological forces	0.7182*	0.5969*	0.6176*	0.6366*	0.6961*	0.7005*	1.00		
Gender	-0.0945	-0.0816	-0.0875	-0.0932	-0.0869	-0.0761	-0.0474	1.00	
Age	0.2091*	0.1582	0.2013*	0.1188	0.1614	0.0626	0.2040*	0.2034*	1.00

*significant p values at $p < 0.05$

4.8 Patients' Demographic Factors and Perception of Caring Behaviours

The two main patient demographic characteristics were correlated with patient ratings of nurse-caring behaviour within each of the seven subscales (table 12). Responses given by patients to items within all the seven subscales of nurse-caring behaviours were strongly and positively correlated. However, responses to 'Humanism/ faith-hope/sensitivity' subscale items showed moderate correlation ($r < 0.5$) with 'Expression of positive/ negative feelings', 'Allowing for existential phenomenological forces' and 'Teaching/ learning' subscales.

Gender was significantly correlated to responses on the 'Humanism/ faith-hope/sensitivity' with female patients more likely to rate responses to this items higher than their male colleagues.

The patients' age also showed significant and positive correlation with patient rating of 'Helping/ trust' subscale items and also with items on the 'Supportive, protective and corrective environment' subscales.

There was no correlation between the patients perception of nurse caring behaviours and whether the patient was in the preoperative or postsurgical period ($p>0.05$).

Table 12: Relationship between Caring Behaviours Subscales and Patients' Characteristics

	Humanism/ faith or hope/sensitivity	Helping/ trust	Expression of positive/ negative feelings	Teaching/ learning	Supportive, protective and corrective environment	Human needs assistance	Allowing for existential phenomenological forces	Gender	Age
Humanism/ faith - hope/sensitivity	1.00								
Helping/ trust	0.5800*	1.00							
Expression of positive/ negative feelings	0.4914*	0.5301*	1.00						
Teaching/ learning	0.4579*	0.5864*	0.5623*	1.00					
Supportive, protective and corrective environment	0.5633*	0.6356*	0.6197 *	0.7434*	1.00				
Human needs assistance	0.5805*	0.6615*	0.5351*	0.6402*	0.7070*	1.00			
Allowing for existential phenomenological forces	0.4713*	0.5324*	0.5246*	0.5602*	0.5997*	0.6904*	1.00		
Gender	0.1886*	0.1028	0.1141	0.0958	0.128	0.1119	0.0813	1.00	
Age of patients	-0.0148	0.1549*	0.06	0.1218	0.1617*	0.0958	-0.0281	0.0149	1.00

*significant p values at $p < 0.05$

4.9 Nurses' and Patients' Suggestions on Other Caring Behaviours

A total of 76 responses from 65 patients and 11 nurses to an open ended question on whether nurses could do anything else outside the items listed in the CBA tool to make patients feel cared for were analysed.

The responses showed that among the roles that nurses felt they could take on to indicate caring behaviour were orientation of patients to hospital environment, involving family in patient care, showing family respect, counselling both patients and family, providing culturally sensitive care, providing explanation to patients for any expected or unforeseen delays in delivery of care, and regularly seeking feedback from clients on level of satisfaction with nursing care.

35.7% (n=65) of patients made at least one suggestion on additional ways of demonstrating caring. 21.5% of the 65 patients indicated that nurses should be polite in their interaction with patients. 16.9% of the 65 patients felt that the nurses needed to show more dedication to their work. A similar number of patients also thought that nurses could exhibit caring behaviour by showing fairness in discharge of their duties.

Patients also felt that courtesy was an important aspect of caring behaviour with simple actions like greetings, explanations of procedures and seeking permission before performing procedures featuring among the suggestions on possible ways of showing caring behaviour. Another way of demonstrating caring, as indicated by other patients, was for nurses to be truthful when providing explanations for delays in provision services. One patient suggested that nurses should "talk to patients more often" while another said that nurses should "not ignore patients".

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.0 Nurses' Perception of Important Nurse-Caring Behaviours

There were 54 items out of the 63 of the CBA tool which had a mean score of four or higher which means the items were perceived as 'very important' or 'important'. This indicates that nurses perceived most of the caring behaviours identified by CBA tool as important. These findings concur with similar studies by Mizuno et al (2005) and Zamanzadeh et al (2010).

Nurses ranked 'Humanism/ faith-hope/sensitivity' subscale highest in importance in demonstrating caring followed by 'Human needs assistance', and thirdly, 'Supportive/protective/corrective environment'. These results are similar to those of O'Connell and Landers (2008) in a study carried out among nurses working in a critical care unit which showed a similar ordering of the first 3 subscales.

The 'Humanism/faith–hope/sensitivity' subscale which was ranked by nurses in this study as most important encompasses the affective aspects of caring ((Basavanthappa, 2007). The importance of these affective processes of caring has previously been demonstrated by O'Connell and Landers (2008), Wilkins and Slevin (2004) and Thomas et al (2004) among critical care nurses. A possible explanation for nurses ranking the affective aspects of caring highly is that caring is mutually enriching and nurses who consciously practice it find themselves reenergised for the more demanding aspects of their practice (Taylor et al, 2008).

The nurses ranked the 'Human needs assistance' subscale as the second most important in demonstrating nurse-caring behaviours with four items from this subscale being ranked among the ten most important. Among the first three items ranked by nurses in this study as most

important, two items from this subscale namely, 'know how to give injections' and 'give patient treatments and medication on time' were ranked as the two most important caring behaviours by nurses working in an oncology setting in Iran (Zamanzadeh et al, 2010). This may indicate that nurses in surgical and oncology care settings also considered the instrumental aspects of caring in nursing, which involve substantive actions, as important in demonstrating caring to patients. The nurses' views on the importance of the instrumental aspects of caring is supported by Linton (2007) who points out that nursing is a skill-oriented field requiring efficiency and safety which necessitates the need to master skills required to carry out nursing interventions including handling of a variety of equipment.

In the present study, no item from 'Teaching and learning' subscale featured among the ten most important nurse-caring behaviours. In contrast to this finding, a caring behaviour 'helping the patient not feel dumb by giving the patient adequate information' was ranked among the three most important nurse-caring behaviours in a study among nurses working in a Japanese hospital (Mizuno et al, 2005). The importance of patient education cannot be overemphasised since it is crucial in enabling the patient to better care for him/herself and make informed decisions regarding care and treatment (White, 2005).

Apart from the items in the CBA tool, other indicators of caring from the nurses' perspective included involving family in patient care, respecting the patient's family and social background, and counselling both patients and family. These sentiments concur with Virvan (2004) who stressed that if one is to demonstrate caring in the fullest sense of the word it requires that the nurse understands the meanings, attributes, characteristics and practices of care in the context of the client's culture (which also involve the patient's family and community).

Another indicator of caring not captured in the CBA tool, from the nurses' perspective, was orientating patients to the hospital environment. Ulrich and Zimring (2004) state that trying to find one's way around a hospital is a stressful experience especially to new patients and visitors who are often unfamiliar with the hospital and are otherwise stressed and disoriented. This fact clearly points to the reason for nurses indicating orientation of patients to the hospital environment as an important indicator of caring. Orienting newly admitted patients to the hospital environment is one way of reducing anxiety related to being in unfamiliar surroundings especially when ones health is not at its optimum.

5.1 Patients' Perception of Important Nurse-Caring Behaviours

According to patients, the 'Human needs assistance', 'Teaching and learning', and 'Humanism/faith-hope/sensitivity' were the most important subscales in demonstrating caring in the order they are listed. This supports the findings of another study using the CBA instrument (Kimble, 2003) which showed 'Human needs assistance' subscale as the highest ranked by patients. This subscale encompasses the technical aspects of nursing care, which include among others, assisting the patient with his/her care when necessary, competence in procedures and timely provision of nursing services. Medical-Surgical patients tend to value more physical caring competencies and the ability of the nurse to deliver a general feeling of well-being (Henderson et al, 2007) and nurses have to incorporate these aspects into practice if they are to promote quality nursing care in this population of patients.

The most important item as reported by patients in this study, which is from the 'Human needs assistance' subscale, 'give patient treatments and medications on time' was also ranked as the most important caring behaviour by oncology patients in an Iranian hospital (Zamanzadeh et al,

2010) and it was among the ten most important items in another study that utilised the CBA tool among patients' relatives in a critical care setting (O'Connell and Landers, 2008). Other items from the Human needs subscale that featured in the top ten most important caring behaviours include 'help me with my care until am able to do it for myself' and 'check my condition very closely.' This shows that the patients consider instrumental nursing activities that focus on management of health deviations in a way that promotes fast, safe and supportive recovery to be among the most important indicators of caring.

The 'Supportive/protective/corrective environment' subscale (subscale 5), though ranked fourth overall, had three of its items featured in the ten most important caring behaviours. These include, 'gives me pain medication when I need it', 'offers things to make me more comfortable' and 'leave my room neat after working with me'. These findings concur with those from a previous study by Suliman et al (2009) among patients admitted to medical-surgical wards in three hospitals in Saudi Arabia. This subscale involves the nurse manipulating the environment in order to provide support and protection for the patient's mental and physical well-being. Additionally, this subscale incorporates nursing interventions aimed at promoting the patient's comfort, privacy and safety (Basavanthappa, 2007). These findings indicate that this carative factor is considered an important indicator of caring to medical-surgical patients across different cultures.

5.2 Comparison of Nurses' and Patients' Perception of Nurse-Caring Behaviours

This study demonstrated marked differences between surgical patients and nurses working in surgical settings on their perceptions regarding the importance of nurse-caring behaviours. Among the ten most important nurse-caring behaviours only three items were common to both

groups, namely, ‘give patient treatments and medications on time’, ‘treat patient with respect’ and ‘know when it is necessary to call the doctor’.

Nurses rated four of the seven subscales of nurse-caring behaviours higher than patients. A possible explanation of a high rating of caring behaviours by most nurses is that nurses consider nursing as a caring profession and demonstrating caring in practice is expected of a nurse. The nurse is educated to view nursing as synonymous with caring from the day he/she joins the nursing profession. According to Watson (2006) there is increasing attention and commitment to developing and practicing human caring as a model for nursing and this will contribute to nursing practice that is based on caring rather than viewing caring as an expectation that is too abstract to base practice upon.

Nurses and patients did not differ on their perception of the importance of ‘give patient treatments and medications on time’. This finding is similar to a study by Zamanzadeh et al (2010) that showed concordance in both oncology patients and nurses rating of this item as the most important. This indicates that both nurses and patients put great emphasis on measures aimed at stabilising the patient to normal or near normal physiological state even as the nurse addresses other aspects of caring.

According to patients, ‘Human needs assistance’, ‘Teaching and learning’, and ‘Humanism/faith-hope/sensitivity’ were the most important subscales in demonstrating caring in the order they are listed. Nurses indicated two of the above three as the most important subscales but in a different order namely, ‘Humanism/ faith-hope/sensitivity’, ‘Human needs assistance’, and ‘Supportive/protective/corrective environment’.

The findings from this study and a similar one by Zamanzadel et al (2010) showed that patients ranked higher the importance of the 'Teaching and learning' subscale than it was ranked by nurses. In a study by Liu, Mok, and Wong (2006) patients reported that they appreciated being cared for by nurses who were knowledgeable and able to provide adequate explanations and that these explanations helped them feel more secure, safe and less anxious. Consequently there is need for nurses to recognize the importance of the 'Teaching and learning' subscale in promoting quality nursing care.

Nurses were more likely to rank items on 'Human needs assistance' subscale such as 'know how to give injections, IV', and 'know how to handle equipment' (which are nurse-centred rather than patient–centred) highly, but patients did not rank these items highly in terms of importance. Patient-centred care, which is a necessity if high patient satisfaction is to be achieved, requires that nurses begin to focus on the patient and not how efficiently they can accomplish tasks.

There were more similarities than differences between the perceptions of nurses and patients on the least important nurse-caring behaviours with seven of the ten least important items common to both groups. The caring behaviours, 'talk to the patient about his/her life outside the hospital', 'touch the patient when he/she needs it for comfort', 'ask the patient how he/she would like to be called', 'visit the patient if the patient moves to another ward/unit', all from subscale 2 which is 'Helping/trust ' were ranked lowest by both groups.

Indeed the congruence between the two groups on least important nurse caring behaviours is further demonstrated by the fact that both groups agreed in the order of ranking the two subscales which they perceived as being least important. Subscale 7 – 'Allowing for existential phenomenological forces' was ranked sixth and subscale 2- 'Helping/ trust' ranked seventh.

This marked agreement on ranking was also noted among critical care nurses and patients' relatives who both ranked subscale 3- 'Expression of positive/negative feelings' and subscale 7- 'Allowing for existential phenomenological forces' sixth and seventh respectively in a study by O'Connell and Landers, 2008. A low ranking of these subscales may be better explained by considering the CBA tool in conjunction with Maslow's hierarchy of needs. It is well established that addressing basic physiologic needs is a priority followed by security then other higher order needs follow (Linton, 2007). As nurses care for patients, incorporation of Maslow's hierarchy of needs is basic to promoting quality nursing care.

5.3 Nurses' Demographic Characteristics and Perception of Nurse-Caring Behaviours

A previous study on factors influencing nurses' perception of nurse-caring behaviours in a critical care setup discovered a correlation between the experience of the nurse and the perception nurse-caring behaviours. Nurses with less work experience tended to place less emphasis on nurse/family interactions. Experience also seemed a determinant in the ability of the nurse to provide emotional support. Investigation revealed that the less experienced nurses focussed on developing expertise in physical caring of the patient first before dealing with emotional care of the family (Beeby, 2000).

Another study (Mizuno et al, 2005) showed that nurses who graduated from junior nursing colleges ranked the most important behaviour as 'listens to the patient' while those who graduated from nursing colleges (bachelor's degree) or graduate programs in nursing ranked 'gets to know the patient as an individual person' as the most important. All these findings contrast with this study since both the length of experience and level of training were not significantly associated to nurses' perception of caring behaviours thus concurring with Garrett

and McDaniel (2001) who concluded that a nurse's perception of the work environment and care is more a function of personality than education or experience.

Nurses' gender did not show a significant correlation with any of the seven subscales assessing nurse-caring behaviour. The age of nurses showed significant positive correlations with their ratings on three out of the seven subscales. These subscales included 'Humanism/ faith-hope/sensitivity', 'Expression of positive/ negative feelings', and 'Allowing for existential phenomenological forces'. In all these three subscales nurses' ratings of nurse-caring behaviour increased with increasing age of the participating nurses.

5.4 Patients' Demographic Characteristics and Perception of Nurse-Caring Behaviours

It has been suggested that men have fewer expectations than women (Johansson, Oleni and Fridlund, 2002). In a study among patients receiving care in an emergency department, women rated significantly higher than men the importance of subscales 'Humanism/faith-hope/sensitivity', 'Helping/trust', 'Expression of positive/negative feelings', 'Supportive/protective/corrective environment', and 'Human needs assistance' in demonstrating caring (Baldursdottir and Jonsdottir, 2002). In the present study, gender was significantly correlated to responses on the 'Humanism/ faith-hope/sensitivity' subscale with female patients rating the importance of items in this subscale higher than their male counterparts. There was no significant difference between male and female patients' ratings on the other subscales.

The patients' age also showed significant and positive correlation with patient rating of items in 'Helping/ trust' and 'Supportive/protective/corrective environment' subscales. This demonstrated some similarity with a study among patients in an emergency department in Iceland

(Baldursdottir and Jonsdottir, 2002) which showed significant age differences for every subscale (i.e., the higher the age of subjects, the greater the rating of the importance of nurse-caring behaviours). On the other hand the findings contrasted with those of Kimble (2003) which showed no significant correlations between the rating of nurse-caring behaviours subscales and age of the respondents.

Previous studies have indicated differences in perception on importance of nurse-caring behaviours related to patients' educational level. A study by Baldursdottir and Jonsdottir (2002) found a higher score on subscales 'Human needs assistance', 'Teaching and learning', and 'Human/faith-hope/sensitivity' (which mirrors the findings in the present study on the most important subscales in demonstrating caring) among people with lower education level who received care at an Emergency Department setting in Iceland.

Majority of patients in this study (67.7%) had not studied beyond high school. Many patients, on their own, may not be able to obtain health information easily or understand enough about their condition to ask relevant questions about their management which possibly explains high rating of the importance of the 'Teaching and learning' subscale among patients.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.0 Conclusion

The following conclusions were made from current study involving nurses working in the surgical care setup and adult patients admitted in the surgical wards:

- Nurses ranked the item 'treat patient as an individual' as the most important nurse-caring behaviour while patients ranked highest the item 'give patient treatments and medications on time'.

- The subscale 'Humanism/ faith-hope/ sensitivity' was ranked highest by nurses while the 'Human needs assistance' subscale was ranked the most important by patients.

- Among the ten most important nurse-caring behaviours, only three items were common to both groups, namely, 'give treatment and medications on time', 'treat patient with respect' and 'know when it is necessary to call the doctor'.

- Nurses' perception on the importance of 4 of the 7 subscales namely, 'Humanism/faith-hope/sensitivity', 'Helping/trust', 'Supportive, protective and corrective environment' and 'Human needs assistance' was significantly higher than that of patients.

- Both groups had a similar perception on the importance of item 'give patient treatments and medications on time'

- The age of nurses showed significant positive correlations with their ratings of subscales 'Humanism/ faith-hope/sensitivity', 'Expression of positive/ negative feelings', and 'Allowing for existential phenomenological forces'

- Female patients' perception on the importance of subscale 'Humanism/ faith-hope/sensitivity' was higher than male patients

- The patients' age also showed positive correlation with patients' perception on importance of 'Helping/ trust' and 'Supportive, protective and corrective environment' subscales.

6.1 Recommendations

The results of this study do provide some information on what patients expect from nurses in the surgical care environment in comparison with nurse' views on caring. This information can be used by the nursing staff to enhance the way they provide care to the patients.

In relation to the findings of this study it is recommended that:

- Nursing staff incorporate the nursing behaviours which patients considered most important into patient management to enable provision of care that is more patient-centred.

- Workshops for nurses are organised to sensitize them on how to demonstrate caring in practice in relation to patients' perspective regarding caring in nursing.

- The hospital put mechanisms in place, in terms of resources and ongoing education, to enable nurses, more effectively, meet patients' expectations of nursing services.

- A caring-based nursing model is developed for the inpatient setting to guide nurses in provision of nursing care.

- Regular surveys are conducted to measure patients' satisfaction with nursing services, based on the most important carative factors as identified by patients, so that aspects requiring improvement are identified and addressed.

- Educators design educational programs, for nurses and nursing students, addressing caring in nursing aimed at improving the quality of nursing care.

- Regular audits of nursing services based on the carative factors are conducted and the findings be used to continually improve responsiveness of nurses to patients' needs.

Possible areas of further research include:

- Research to gain further insight into the phenomenon of caring and its effects on health and healing, patient outcomes and healthcare costs in the developing countries

- A research aimed at developing caring behaviours measurement tool for Kenyan/African set up

REFERENCES

Baldursdottir, M. & Jonsdottir, H., 2002.The Importance of Nurse Caring Behaviours as Perceived by Patients Receiving Care at an Emergency Department. *Heart & Lung*, 31(1), pp. 67-75.

Basavanthappa, B., 2007. *Nursing Theories*. 1st ed. New Delhi, India: Jaypee Brothers Medical Publishers Ltd.

Beeby, P., 2000. Intensive Care Nurses' Experiences of Caring: Part 2, *Intensive and Critical Care Nursing*, 16, pp.151–163

Cara, C., 2007. *A Pragmatic View of Jean Watson's Caring Theory* [online]. Université de Montréal. Available at: URL: http://www.humancaring.org/conted/Pragmatic%20View.pdf [Accessed on 3 February 2011].

Chang, Y., Lin, Y., Chang, H., & Lin C., 2005. Cancer Patient and Staff Ratings of Caring Behaviours: Relationship to Level of Pain Intensity. *Cancer Nursing*, 28(5), pp. 331-339.

Cronin, S., & Lee, B., 2009. Caring Behaviours Assessment Tool. In J. Watson (Ed.), *Assessing and Measuring Caring in Nursing and Health Science*. 2nd ed. New York: Springer.

Dorsey, C., Phillips, K., & Williams C., 2001. Adult Sickle-Cell Patients' Perceptions of Nurses' Caring Behaviours. *ABNF Journal*, 12(5), pp. 95.

Garrett, D. & McDaniel, A., 2001. A New Look At Nurse Burnout: The Effects of Environmental Uncertainty and Social Climate. *Journal of Nursing Administration*, 31(2), pp. 91-96.

Henderson, A., Van Eps, M., Pearson, K., James, C., Henderson, P. & Osborne, Y., 2007. 'Caring For' Behaviours that Indicate to Patients that Nurses 'Care About' Them. *Journal of Advanced Nursing* 60(2), pp. 146–153. Blackwell Publishing Ltd.

Johansson, P., Oleni, M. & Fridlund, B., 2002. Patient Satisfaction with Care in the Context of Health Care: A Literature Study. *Scandinavian Journal of Caring Sciences,* 16(4), pp. 337-344.

Kimble, L., 2003. *Patients' Perception of Nurse Caring Behaviours in an Emergency Department*. MScN. Thesis, Marshal University College of Nursing and Health Professionals.

Linton, A., 2007. Introduction to Medical-Surgical Nursing. 4 th Ed. Missouri: Saunders, Elsevier Inc.

Liu, J., Mok, E. &Wong, T., 2006. Caring In Nursing: Investigating the Meaning of Caring from the Perspective of Cancer Patients in Beijing, China. *Journal of Clinical Nursing,* 15, pp. 188–196.

Mizuno, M., Ozawa, M., Evans, D., Okada, A. & Takeo, K., 2005. Caring Behaviours Perceived by Nurses in a Japanese Hospital. *Journal of Nursing Studies,* 4(1), pp. 13–19.

Ministry of Health, 2005. Reversing the Trends. *The Second National Health Sector Strategic Plan of Kenya- NHSSP II - 2005-2010.* Nairobi, Kenya, MOH Health Sector Reform Secretariat.

Moore, M., Armbruster, D., Graeff, J. & Copeland, R., 2002. Assessing the "Caring" Behaviours of Skilled Maternity Care Providers During Labour and Delivery: Experience from Kenya and Bangladesh .*The CHANGE Project*. Washington, D.C: The Academy for Educational Development/ The Manoff Group.

Mugenda, O. & Mugenda, A., 2003. *Research Methods: Quantitative and Qualitative Approaches*. Nairobi, Kenya: African Centre for Technology Studies.

Mulligan, A., Young, L., Randal, S., Raiano, C., Velardo, P., Breen, C. & Bushee, L., 2005. Best Practices for Perioperative Nursing Care for Weight-loss Surgery Patients. *Obesity Research*, 13(2), pp. 267-273.

Neil, R., 2002. In: A. Tomey & M. Alligood, ed. *Nursing Theorists and Their Work*. 5th ed. Missouri: Mosby Inc.

O'Connell, E. & Landers**,** M., 2008. The Importance of Critical Care Nurses' Caring Behaviours as Perceived by Nurses and Relatives. *Intensive and Critical Care Nursing*, 24(6), pp. 349-358.

Ojwang, B., Ogutu, E. & Matu, P., 2010. Nurses' Impoliteness as an Impediment to Patients' Rights in Selected Kenyan Hospitals. *Health and Human Rights an International Journal*, 12 (2).

Rafii, F., Hajinezhad, E. & Haghani, H., 2008. Caring in Iran and Its Relationship with Patient Satisfaction. *Australian Journal of Advanced Nursing*, 26 (2), pp. 75-84.

Redic, L., 2004. The Caregiver Role. In: H. Harkreader & M. Hogan, ed *Fundamentals of Nursing Caring & Clinical Judgement*. 2nd ed. Philadelphia: W B Saunders Company.

Rosen, H., Bergh, I., Lundman, B. & Martensson, L., 2010. Patients Experiences and Perceived Causes of Persisting Discomfort Following Day Surgery. *BMC Nursing*, 9(16).

Suliman, W., Welmann, E., Omer, T. & Thomas, L., 2009. Applying Watson's Nursing Theory to Assess Patient Perceptions of Being Cared for in a Multicultural Environment. *The Journal of Nursing Research,* 17(4), pp. 293 - 300

Sumner, J., 2001. Caring in Nursing: A Different Interpretation. *Journal of Advanced Nursing,* 35(6), pp. 926-932.

Taylor, C., Lillis, C., LeMone, P. & Lynn, P., 2008. *Fundamentals of Nursing: The Art and Science of Nursing Care*. 6th ed. Philadelphia: Wolters Kluwer/ Lippincott Williams & Wilkins Health.

Thomas, J., Finch, L., Schoenhofer, S., & Green, A., 2004. The Caring Relationships Created by Nurse Practitioners and the Ones Nursed*:* Implications for practice. *Advanced Practice Nursing e-Journal,* 4(4).

Ulrich, R. & Zimring, C., 2004. *The Role of the Physical Environment in the Hospital of the 21st Century: A Once-in-a-Lifetime Opportunity* [Online]. Available at: URL: http//www.rwjf.org: [Accessed 20 August 2011].

Virvan, D., 2004. The Nurse-Client Relationship. In: H. Harkreader & M. Hogan, ed *Fundamentals of Nursing Caring & Clinical Judgement.* 2nd ed. Philadelphia: W B Saunders Company.

Watson, J., 2006. Caring Theory as an Ethical Guide to Administrative and Clinical Practices. *Nursing Administration Quarterly*, 30(1), pp. 48–55. Lippincott Williams & Wilkins, Inc.

Watson, J., 2002. Instruments for Assessing and Measuring Caring in Nursing and Health Sciences. New York: Springer.

White, L., 2005. *Foundations of Basic Nursing.* 2nd ed. New York: Thomson Delmar Learning.

Wilkins, K. & Slevin, E., 2004. The Meaning of Caring to Nurses: An Investigation into the Nature of Caring Work in an Intensive Care Unit. *Journal of Clinical Nursing*, 13(1), pp. 651–659.

Wolf, Z., Miller, P. & Devine, M., 2003. Relationship between Nurse Caring and Patient Satisfaction in Patients Undergoing Invasive Cardiac Procedures. *MedSurg Nursing*, 12(6), pp. 391-396

Zamanzadeh, V., Azimzadeh, R., Rahmani, A. & Valizadeh, L., 2010. Oncology Patients' and Professional Nurses' Perceptions of Important Nurse Caring Behaviours. *BMC Nursing*, 9(10). BioMed Central Ltd.

APPENDICES

APPENDIX 1: CONSENT EXPLANATION (ENGLISH)

STUDY TITLE: Nurses' and Patients' Perceptions on the Importance of Nurse-Caring Behaviours: A Study at Surgical Wards of Kenyatta National Hospital

Investigator.....

I am Everlyne Ogugu a student at the University of Nairobi pursuing a master's degree in nursing sciences. I wish to invite you to participate in this research whose purpose is to compare nurses and patients perception of nurse-caring behaviours at the surgical wards of Kenyatta National Hospital.

You may not benefit from this research directly as an individual. However, information generated from this study will provide insight into how nurses can better demonstrate caring in their nursing practice and thus promote better nurse-patient relations.

The study and its procedures have been approved by Ethic and Research Committee Kenyatta National Hospital – University of Nairobi and Ministry of Higher Education Science and technology

If you were to participate in this study, the researcher would give you a questionnaire to fill or interview you in case you need assistance with answering questions on the questionnaire.

The questionnaire will take an estimated 40 minutes to complete. The only risk associated with this study is the discomfort you may experience with the length of time it will take to answer the questionnaire items. However you are free to take a break in between answering the questions.

You are free to ask any questions about the study now and any time .The investigator's contacts are given as follows;

Physical address School of Nursing Sciences, University of Nairobi

College of Health Sciences

Kenyatta National Hospital Campus

Telephone + 254 721 568436

Email evaogugu@yahoo.com

Your participation in this study is voluntary (you are not under any obligation to participate). Refusal to participate attracts no penalty. You have the right to withdraw at any time without any penalty from any person. There will be no financial costs for participation or non-participation. No compensation will be given for participation in the study.

This research is part of a course requirement and the researcher has no competing interests

Study data will be will be collected by the investigator, coded and stored securely and will not be linked to your identification. Your signature on this consent form will not be used to identify you in any way.

The study results will be communicated to the nurses through the Director of Nursing, KNH once the study is completed. Findings will also be published in national and international research journals of scientific research ethics but your identity will remain confidential.

APPENDIX II: CONSENT EXPLANATION (KISWAHILI)

MAELEZO YA MSHIRIKI KUKUBALI KUSHIRIKI UTAFITI

KWA MSHIRIKI,

Utafiti: Hisia za Wagonjwa na Wauguzi Kuhusu umuhimu wa tabia za wauguzi ambazo zinaonyesha hisani.

Mchunguzi…….

Jina langu ni Everlyne Ogugu. Mimi ni mwanafunzi katika chuo kikuu cha Nairobi nikisomea digrii ya masta katika uuguzi wa wagonjwa mahout. Ninapaswa kama mojawapo ya mahitaji ya digrii hii kufanya uchunguzi au utafiti juu ya Hisia za Wagonjwa na Wauguzi Kuhusu umuhimu wa tabia za wauguzi ambazo zinaonyesha hisani katika wodi za upasuaji za hospitali kuu ya Kenyatta. Uchunguzi huu unalenga kuwezesha wauguzi kuelewa vyema zaidi jinzi wanaoweza kuudumia wagonjwa kwa njia bora.

Utafiti wenyewe umeruhusiwa na Wizara ya Elimu, Sayansi na Teknolojia, na Kamati ya Adilina Utafiti ya Hospitali ya Kenyatta.

Utafiti huu unahusu kukusanya habari au mawazo ambapo utahitajika kujaza fomu ya udadizi au kujaziwa fomu hiyo na mchunguzi mwenzangu msaidizi. Hautahitajiki kunakili jina lako kwa fomu hiyo na habari au mawazo tuipokeayo itakuwa ya siri na haitafichuliwa.Kushiriki kwa uchunguzi au utafiti huu itakuwa kwa hiari yako na waweza kuacha kushiriki kwa hiari yako pia bila tashwishwi ya majuto. Matokeo ya utafiti yatatolewa kwa mkuu wa wauguzi baada ya kumalizika kwa uchunguzi huu.

Iwapo utahitaji kuniuliza maswali fulani au kuelezewa kuhusu tashwishwi ihusuyo uchunguzi huu, basi waweza kunifikia kupitia kwa:

Simu ya mkono: 0721 568 436

Barua pepe: evaogugu@yahoo.com

Pia ninapatikana katika shule ya Sayansi ya Uuguzi, Chuo kikuu cha Nairobi ambayo iko katika hospitali kuu ya Kenyatta.

APPENDIX III: CONSENT FORM (ENGLISH/KISWAHILI)

I hereby consent to participate in the study titled "Nurses' and Patients' Perceptions on the Importance of Nurse-Caring Behaviours: A Study at Surgical Wards of Kenyatta National Hospital", whose nature and purpose I fully understand as explained to me.

Participant's signature (Optional)..... Date.....

I have explained the study details to the participant. I have sought his/her understanding of study. The participant has voluntarily agreed to participate in the study.

Investigator's signature..... Date.....

Nimekubali kushiriki katika hii uchunguzi unaofahamika kama "Hisia za Wagonjwa na Wauguzi Kuhusu Umuhimu wa Tabia za Wauguzi Ambazo Zinaonyesha Hisani: Uchunguzi katika ward za wagonjwa wanaohitaji upasuaji, KNH", baada ya kupewa maelezo na kuelewa.

Saini ya mshiriki (hiari yako)..... Tarehe.....

Nimeelezea mshiriki kinanagaga kuhusu hii uchunguzi na Mshiriki amekubali kushiriki katika hii uchunguzi kwa hiari yake.

Saini ya mchunguzi.....

Tarehe.....

APPENDIX IV: LETTER OF APPROVAL BY KNH/UON-ETHICS & RESEARCH COMMITTEE

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

11th March, 2011

Ref: KNH-ERC/ A/49

Everlyne G. Ogugu
Dept. of Nursing
University of Nairobi

Dear Everlyne

RESEARCH PROPOSAL: "A COMPARATIVE STUDY OF NURSES AND PATIENTS PERCEPTION OF NURSE-CARING BEHAVIOURS: A STUDY AT SURGICAL WARDS KENYATTA NATIONAL HOSPITAL" P55/2/2011

This is to inform you that the KNH/UON-Ethics & Research Committee has reviewed and approved your above revised research proposal for the period 11th March 2011 – 10th March 2012.

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 specimens must also be obtained from KNH/UON-Ethics & Research Committee for each batch.

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

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

Yours sincerely,

PROF A N GUANTAI
SECRETARY, KNH/UON-ERC

c.c. The Deputy Director CS, KNH
The HOD, Records, KNH
The Chairman, Dept. of Nursing, UON
Supervisors: Mr. Antony Ayieko Ong'any, Dept. of Nursing, UON
Theresa M.A. Odero, Dept. of Nursing, UON
Miriam C.A. Wagoro, Dept. of Nursing, UON

APPENDIX V: LETTER OF APPROVAL BY NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

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

Our Ref: **NCST/RRI/12/1/MED-011/39**

Date: **13th April, 2011**

Everlyne Gesare Ogugu
University of Nairobi
P. O. Box 30197
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on **"A comparative study of nurses and patients perception of nurse- caring behaviours: A study at surgical wards Kenyatta National Hospital "** I am pleased to inform you that you have been authorized to undertake research **in Kenyatta National Hospital** for a period ending ***30th September, 2011.***

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

On completion of the research, you are expected to submit **one hard copy and one soft copy** of the research report/thesis to our office.

P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The Director

Kenyatta National Hospital

APPENDIX VI: PERMISSION GRANT BY AUTHORS OF CARING BEHAVIORS ASSESSMENT TOOL

BELLARMINE UNIVERSITY
IN VERITATIS AMORE

March 25, 2011

Dear Ms. Ogugu:

Thank you for your interest in the Caring Behaviors Assessment. Enclosed is a copy of the tool and additional information regarding its development. Please feel free to use the CBA. In return, we ask that you acknowledge its authorship (reference to the 1988 article in *Heart and Lung* or the following book chapter is sufficient: Cronin, S.N., & Lee, B. (2009). Caring behaviors assessment tool. In J. Watson (Ed.), Assessing and measuring caring in nursing and health science (2nd Ed.). New York: Springer) and, upon completion of your work, please send us a copy of your abstract. We would also appreciate the results of any further reliability and validity testing of the CBA.

We will be most interested in your findings. If we can answer any questions or be of any further assistance, please feel free to contact us.

Sincerely,

Sherill Nones Cronin

Sherill Nones Cronin, PhD, RN, BC
Graduate Nursing Programs Director & Professor of Nursing

Barbara Lee, MSN, RN, BC, CWOCN
Assistant Professor
LANSING SCHOOL OF NURSING AND HEALTH SCIENCES