EFFICACY OF PREOPERATIVE ASSESSMENT TOOLS IN PERIOPERATIVE PATIENT CARE; A NURSING PERSPECTIVE

A STUDY IN NAIROBI, KENYA.

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A PROPOSAL SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY OF UNIVERSITY OF NAIROBI.

MAY, 2010
DECLARATION

This thesis proposal is my original work and has not been presented in any other institution for examination

Sign............................................................................................................

Date.............................................................................................................

CERTIFICATE OF APPROVAL

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DEDICATION

This work is dedicated and to my family for their continuous support and to the honor of the late Professor Joyce Musandu for her inspirations.
ACKNOWLEDGEMENT

I am very grateful to my supervisors Dr. Omoni, Professor Ogendo and Dr. Wangare for their devotion, moral and academic support. I also thank everyone assisting me in one way or the other towards the success of this study.
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OPERATIONAL DEFINITIONS

Anesthesia is a deliberate creation of painless and muscle relaxation state to a surgical patient with or without loss of consciousness achieved by use of drugs to ease the surgical process.

Anesthetist is a medical doctor a nurse or a clinician trained to administer anesthesia.

Anxiety is an emotional reaction elicited by stress, fear and worry (of surgery in this context) manifested as somatic, experiential and interpersonal phenomenon whose observable characteristics are physiological changes such as increased respirations, heart rate and elevated blood pressure. In this study anxiety will be measured by the patient’s perception of his/her anxiety state which he/she will translate to the corresponding description of the anxiety levels as will be provided.

Assessment in this context refers to preoperative evaluation of a surgical patient during preoperative ward visit by the perioperative nurses in order to complete the preoperative preparation while gathering data pertinent to the planning of actual surgical care of the patient and documentation of such evaluation.

Checklist is a list that acts as a reference to verify specific items of preoperative preparation of a surgical patient. It is usually filled in the surgical ward and upon arrival to the OT, the receiving nurse review the list to confirm preparation. The list varies from hospital to hospital although the key concepts are the same according to World Health Organization (WHO) standards.

Collaborative health care refers to all healthcare personnel contributing their expertise towards the care of a surgical patient.

Elective surgery is scheduled or planned surgery.

Elective Cases are a category of patients scheduled for elective surgery.
Emergency Surgery refers to surgery for a category of patients for immediate surgical remedy failure to which morbidity or mortality ensues and preoperative preparation protocol can be breeched.

Perioperative nurses are nurses working in theatre who care for the patients during the three phases of surgery; preoperatively from the time patients are received in theatre and before induction of anesthesia; intraoperatively form induction of anesthesia, during the actual surgical procedure until the patient leaves the operating table; and postoperatively from the time the patient leaves the operating table to Post Anesthetic Care Unit (PACU) until discharge to the ward or from the operating table and transfer to Critical Care Unit (CCU).

Preoperative assessment tool is the assessment tool succinct to perioperative patient care that will be designed by the perioperative nurses guided by perioperative objectives for such assessment; the Association of peri-Operative Nurses (AORN) standards of practice and practical experience. The tool will serve as a documentary evidence for the assessment.

Preoperative visit is ward visit by a number of perioperative nurses the night before elective surgery for acquaintance, orientation to the operating room, evaluation of the patients’ readiness for surgery, assessing actual surgical needs, and allaying surgical anxiety. The assessment information should be disseminated to the rest of the nurses for effective planning of quality perioperative care, for effective collaboration and efficient use of theatre space.

Surgical team members are nurses in the operating room, the surgeon, assistant surgeon and the anesthetist who primarily participate in the actual surgical procedure. Collaborating members include the radiographer and theatre technicians among others.
ABBREVIATIONS

APAIS - Amsterdam Preoperative Anxiety and Information Scale
AORN - Association of peri- Operating Room Nurses
CNO - Chief Nursing Officer
DRGs - Diagnosis Related Groups
JCAHO - Joint Commission of Association of health Care Organizations
KNH - Kenyatta National Hospital
NANDA - North American Nursing Diagnosis Association
NATN - National Association of Theatre Nursing.
NNAK - National Nurses Association of Kenya
OR - Operating room
OT - Operating theatres
PACU - Post Anesthetic Care Unit
SPSS - Scientific Package for Social Sciences
WHO - World Health Organization
ABSTRACT
Preoperative patient assessment by perioperative nurses is critical in planning, preparation and implementing individualized patients’ surgical care with an ultimate goal of safe and quality surgical outcomes. The busy theatre schedules seldom permit an objective ward visit to perform such assessment. Perioperative nurses perform this assessment when the patient is already in theatre and this is seldom practiced. Perioperative nurses often rely on preoperative assessment by ward nurses and the anesthetists’ review to verify preoperative patient preparation, using a preoperative checklist. Checklists and theatre schedules do not adequately address the actual procedural needs of the nurse and the patient. The result of which has led to cancellation of surgery due to excessive anxiety of the patient, delays in surgery resulting from inadequate preparation causing ineffective use of operating room, fragmented nursing care due to lack of adequate and perhaps the cause of unexplained death on the operating table. Postoperatively, some patients still have myths about surgery which should have been clarified during the assessment. The aim of the study is to formulate, evaluate and validate a preoperative patient assessment tool succinct to perioperative nursing to enhance safe and quality surgical care. There is no known study that has addressed the efficacy of focused preoperative patient assessment by the perioperative nurses in planning and executing safe and quality perioperative care. The tool is intended to complement preoperative checklists and theatre schedules in enhancing quality surgical outcomes.
This will be a descriptive study that will be conducted in three phases. **Phase 1; involves the formulation of the assessment tool by the perioperative nurses.** The study population will be all perioperative nurses working in Kenya who will attend the work
shop organized through the National Nurses Association of Kenya (NNAK) Theatre Chapter. The sample size will be 384 nurses. The study tool will be discussion questions for the workshop formulated by the researcher based on perioperative patient assessment objectives, the Association of Perioperative Nurses (AORN) standards for preoperative patient assessment and preoperative checklists obtained from various hospitals in Kenya.

**Phase 2 will be testing the designed tool for validity and reliability** The tool will be administered for use by the perioperative nurses working in both private and public hospitals in Kenya. The sample size will be 82 nurses. Purposive sampling will be employed to select hospitals with at least 5 trained preoperative nurses to include Kenyatta National Hospital, the Nairobi Hospital, Moi Teaching and Referral Hospital, and Armed Forces Memorial Hospital for cost effectiveness from a compiled list of trained perioperative nurses working in the OT and their respective hospitals.

**Phase 3 will be evaluating enhanced anxiety reduction as surgical outcome after using the designed assessment tool.** This will be a pre-and post-test control experimental study which anxiety levels of patients prepared for elective surgery using the designed tool and those prepared routinely using will be assessed and compared. The participants will be stratified by gender and randomly assigned to the experimental group or control group. The study area will be Kenyatta National Hospital (KNH) general surgical wards 5A, 5B and 5D. Patients' anxiety levels will be determined moments before and 12 hours after surgery in the surgical wards using Modified Amsterdam Preoperative Anxiety Information Scale (APAIS) adapted from Amsterdam Preoperative Anxiety and Information Scale APAIS to suit the local situation. The sample size will be 96 participants.
Data analysis will be done using SPSS. In phase 1 and 2 descriptive statistics will be used. In phase 3 Paired sample T-test and Independent sample T-test will be used for testing mean differences between the experimental and control groups. The Chronbach’s alpha will be set at 0.05 corresponding to 95% confidence limit.

The authority to conduct the study will be obtained from KNH Ethics and Research committee and the selected hospitals for study. Informed consent will be obtained from all the participant and confidentiality and anonymity will be observed.

The study will take duration of three years at a cost of approximately Ksh. 454,960.00 (four hundred and fifty four thousand, nine hundred and sixty Kenyan shillings).