TITLE PAGE

KNOWLEDGE, ATTITUDE AND PRACTICE OF PATIENT TEACHING AMONG NURSES WORKING IN TERTIARY HEALTH INSTITUTIONS IN ENUGU

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APPROVAL

This Dissertation titled ñKnowledge, Attitude and practice of Patient Teaching Among Nurses Working in Tertiary Health Institutions in Enugu was originally the work of Okoro, Happiness Nnenna with Registration Number PG/MSC/05/45304 of the Department of Nursing Sciences, Faculty of Health Sciences and Technology, College of Medicine, University of Nigeria, Enugu Campus.

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CERTIFICATION

This is to certify that this dissertation is the original work of Okoro, Happiness Nnenna Registration Number PG/M.Sc/05/45304). I certify that the original work is mine except as specified in acknowledgement and references and that neither, the dissertation nor the original work contained therein has been submitted to the University or any other Institution for the award of Degree

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DEDICATION

This project work is dedicated to Jehovah God our Eternal father and all the hardworking nurses who have contributed to the good image of nursing profession.

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ABSTRACT

This study was carried out to determine the knowledge, attitude and practice of patient teaching among nurses working in selected tertiary health institutions in Enugu. The objectives of the study were to determine the nursesô knowledge of patient teaching, attitude towards patient teaching and practice of patient teaching. A cross-sectional descriptive survey design was used for the study in two tertiary health institutions in Enugu. Simple random sampling technique was used to select the two institutions of study. The target population for study was 978 nurses. A sample of 430 nurses was proportionately selected for the study. Self developed questionnaire with open and closed ended questions were used to assess knowledge and practice and four point modified likert scale was used to assess attitude. Cronbatch alpha statistics was used to establish the internal consistency which gave a reliability coefficient of 0.80. Descriptive and inferential statistics were used to analyze data. Results were presented in tables as percentages, means, and standard deviations. Chi-square, studentsô t-test and ANOVA were used to test hypotheses at P<0.05 level of significance. Findings revealed that all of the respondents (425=100% have heard about patient teaching, 50.4% indicated correctly meaning of patient teaching, 94.6% had knowledge of content and context of patient teaching, 72.7% had knowledge strategies, 80.9% knew types of patient teaching, and 85.9% knew teaching methods adopted in patient teaching. The attitude of nurses towards patient teaching was positive in both health institutions (means of 3.00 SD= 0.37 (UNTH) (3.06, SD = 0.37 (NOHE) the nurses practice of patient teaching was moderate ï 98.1% of nurses engage in patient teaching, 65.2% engage in patient teaching daily, 59.9% do not plan for patient teaching, 62.7% used the unplanned type of patient teaching, 87.1% evaluate patient teaching and only 42.7% dose always. 64.0% of nurses do not document patient teaching because they do not have special chart for documentation. There was significant differences (P<0.05) in the knowledge of patient teaching between nurses of the two institutions and in the practice of patient teaching among nurses with different years of work experience. There was no significant difference (P>0.05) in the attitude of nurses towards patient teaching, the types of patient teaching and the practice of patient teaching among nurses of the two institutions of study.

CHAPTER ONE

INTRODUCTION

Background to the Study

The well known parable ñif you give a man a fish, you feed him for a day, but if you teach him to fish you feed him for a life timeò, is apt for the illustration of the importance of patient teaching or education. Patient teaching or education involves helping patients become better informed about their condition, medical procedure and choices they have regarding treatment (Martin, 2012). Patient teaching is as old as nursing profession. This can be seen from the achievements of Florence Nightingale, founder of modern nursing in improving the standards for the care of war casualties in the Crimean war. Also in the Nightingaleôs vision of nursing which included public health promotion roles of nurses which was only partially addressed in the early days of nursing (Berman, Snyder, Kozier, & Erb, 2012). Though other health professionals like physicians, pharmacists, registered dietician etc participate in patient teaching, nurses as educators play a key role in improving health of the patients. This is because nurses are closer to the patients than any other health professionals. (Daniels, 2004 & Kelliher 2011)

Nurses assess the patientôs level of understanding about treatment methods and correct any knowledge deficits. The nurse is often a physician interpreter to the patient/client explaining in easily understood terms, clarifying and referring. Patient teaching supports behaviour change that leads to positive adaptation. Thus patient teaching involves decreasing the fear of change, reducing anxiety and anticipatory stress. Patient teaching is an essential function of every professional nurse in every practice setting - Schools, communities, worksites, healthcare delivery sites and homes.

Never has the demand for quality patient teaching (education) been greater than now. The current trend toward shorter hospital stay and decreased time for healthcare professional patient interactions have increased the need for effective patient teaching. Also more of the chronically ill patients are at home in need of nursing assistance from their families, friends and volunteers. Such patients and their families and friends should possess a moderate degree of understanding of the illness and its management. Nurses who are skilled educators increased client health and well being and reduce the demand for professional services (Taylor, Lillis, Lemore, 2007).

Nurses assume the role of teacher when clients have identifiable learning needs. The teacher learner relationship is enhanced by the continuance of the helping relationship in which mutual respect and trust have been established. The nurse builds on this trust by sharing information the nurse and client have mutually identified as important. The nurse care giver as a skilled teacher can expect to effect the following outcomes: High level wellness and related self-care practices, disease prevention and early detection, quick recovery from trauma illness with minimal to no complications, enhanced ability to adjust to developmental life changes and acute, chronic and terminal illness, family acceptance of the life style changes necessitated by the illness or disability of a family member, patients satisfaction: (Taylor et. al, 2007).

Smeltzer, Bare, Hinkle and Cheever (2011) stated that teaching as a function of nursing is included in all State nurse practice acts and in the standards of clinical nursing practice of the American Nurses Association. Patient teaching/client teaching is also mandated by several accrediting bodies, such as the Joint Commission on Accreditation of Health care organizations (JCAHO 2002). The American Hospital Associations patientôs bill of Rights

calls for the clients understanding of health status and treatment approaches. Informed consent for treatment procedure can be given only by clients who are well informed (Daniels, 2004). The UKCC guidelines for professional practice offer a number of helpful points that can be applied to the teaching of patients and their family including: - The importance of giving clear information on which the patient/client can make informed choices.

- The need to recognize patients/clients as equal partners.
- The importance of using language that is familiar to them
- The need to ensure that patients/clients understand the information they are given and so on (Quinn, 2010).

In Nigeria also, patient teaching is included in the curriculum for General Nursing and Midwifery by the Nursing and Midwifery Council of Nigeria (N&MCN) (N&MCN, 2006).The challenges in todayôs health care environment necessitate the need for patient teaching in an organized way. Also demands from consumer for comprehensive information about their health issues throughout the life cycle accentuate teaching to occur in every patient-nurse encounter (Smeltzer et.al, 2011). Patients come to the hospital with diverse disease conditions which can be acute or chronic. When patients are provided with a solid knowledge base about their disease process and treatment, outcome is more favourable. For them to be taught, nurses are required to teach them. Nurses are exposed through training and if they do not have this knowledge, they will not be motivated to teach patients, and patients will not understand theitr problems and how to manage them (Ward 2012).

Nurses need to have right attitude towards patient teaching for the patients to learn. They should look for opportunities to teach the patients no matter how tight their schedule appears to be.

There is also need for nurses to practice patient teaching routinely, in order to impact on the patients positively and perfect their expertise in it. If they do not practice patient teaching, patients will not be satisfied with nursing care given to them.

However, this integral role of nursing profession-patient teaching has been compromised in the nurseôs attempt to deal with disease and its effects on patients. Patient teaching is a parameter for professionalism in Nursing and should be treated with equal importance as other nursing actions. The foregoing promoted the interest of the researcher for the present study.

Statement of Problem

Patient teaching involves identification of patients learning needs/teaching opportunities, application of teaching strategies, evaluation and documentation. According to Burt, Mccraig & Simmons study (2008) findings showed that one in five Medicare clients was readmitted within 30days. 90% of the readmission was unplanned. Approximately 6.8 of clients discharged from hospitals in 2005-2006 visited emergency department within 7days of which 31% were readmitted. Findings from Driscoll, (2008) showed that clients and their family caregivers attributed these post discharge problems to their unmet informational needs. Also Koelling (2005) Weiss, (2007) associated quality of patient teaching provided by nurses with patient readmissions.

Furthermore finding from a study on problem encountered by breast feeding mothers in their practice of exclusive breastfeeding in tertiary hospitals in Enugu State by Okolie (2012) showed that lack of adequate education at antenatal clinics was (63%) and she advocated patient education through health education by nurses.

The UNTH hospital management and the nursing services department in collaboration with school of Nursing University of Nigeria Teaching Hospital Alumni Association based in USA(SONUNTHAAUSA) have equipped the nursing services department library in the continuing education unit with current textbooks, teaching aids such as models and softwares (demonstration techniques) etc. in 2011and 2013 respectively. This is aimed at improving the knowledge base of the nursing staff in order to carry out patient teaching efficiently. Despite these efforts made by the above mentioned bodies, the researcher observed that most nurses do not fully utilize these aids in assessment and in teaching patients. Also, patients discharged home were readmitted in no distant time. Majority of the patients do not have sufficient knowledge about their diseases and treatment regimen as evidenced by the twenty (20) patients, whose opinions were sampled in the outpatient unit of UNTH Enugu. This has created so many problems for the nurses and patients like long hospital stay and abscondments etc. The researcher wonders whether nurses know about patient teaching, what to teach and if they do, what do they teach and what do they do to achieve effective teaching outcome and how do they practice patient teaching? The above observation stirred the interest of the researcher to investigate issues relating to knowledge, attitude and practice of patient teaching among nurses in selected tertiary health institutions in Enugu State.

Purpose of Study

The purpose of this study is to determine the knowledge, attitude and practice of patient teaching among nurses in selected tertiary health institutions in Enugu State.

Objectives of the Study: The specific objectives of the present study were to:

1. Determine nurseôs knowledge of patient teaching.
2. Determine nurses attitude towards patient teaching

3. Assess whether nurses practice patient teaching.
4. Identify strategies and types of patient teaching adopted by nurses..
5. Determine challenges nurses encounter in patient teaching.

Research Questions

1. Do nurses have the knowledge of patient teaching?
2. What is the attitude of Nurses towards patient teaching?
3. Do nurses practice patient teaching?
4. Which strategies and types of patient teaching do nurses adopt?
5. What challenges do nurses encounter in patient teaching?

Research Hypotheses

H01: There will be no significant difference in the knowledge of patient teaching between nurses of the two institutions.

H02: There will be no significant difference in the attitude of nurses of different health institutions towards patient teaching.

H03: There will be no significant difference in types of patient teaching adopted between nurses of the two institutions.

H04: There will be no significant difference in the practice of patient teaching among nurses in different institutions of study.

H05: There will be no significant difference in the practice of patient teaching among nurses with different years of work experience.

H06: There will be no significant difference in the practice of patient teaching among nurses with different levels of educational qualification.

H07: There will be no significant difference in the practice of patient teaching between male and female nurses.

Significance of the Study

Findings from this study if published will achieve the following:

1. It will show areas of gaps in knowledge, attitude and practice of patient teaching among nurses and this will help nursing educators to know areas to emphasize on during training of nurses. If this is properly done, nurses will have sufficient knowledge about patient teaching and be motivated to teach.
2. When nurses have sufficient knowledge about patient teaching and teach patients, statement of problem will be eliminated and patients will know about their disease conditions and treatment regimen and take good care of themselves and be useful to themselves, relations, communities and the nation.
3. Nursing services department of institutions of study will utilize the findings of this study to organize continuing education programme for their nurses.
4. Nursing and midwifery council of Nigeria may be stimulated by the findings of this study by reviewing the various nursing schools curricular in order to enrich them in the area of patient teaching.
5. It will provide empirical evidence for patient teaching as there is dearth of nursing literature of this area in Nigeria.
6. It will serve as a reference point for other researchers that would want to work in this area.

Scope of Study

This study was conducted among nurses in tertiary health institutions in Enugu State. The study is limited to the knowledge of meaning, approaches, content, strategies and types/teaching of methods of patient teaching. Also study investigated nurseôs attitude to patient teaching, strategies and methods of patient teaching adopted by nurses in their practice, and if there is difference in knowledge and practice of patient teaching among nurses in the different institutions under study.

Operational definition of Terms

1. **Knowledge of patient teaching:** In this study implies nurses ability to indicate correctly meaning of patient teaching, approaches, strategies, types and methods of patient teaching. The nurses should have from 50% and above responses in the indices of knowledge to be adjudged knowledgeable of patient teaching.

   Categories of knowledge:

   90 ï 100% = Excellent knowledge

   70 ï 89% = Good knowledge

   50 ï 60% = Moderate knowledge

   49 and below = poor knowledge.

2. **Attitude toward patient teaching:** In this study implies nursesô willingness to see patient teaching as their responsibility, eager to teach patients, steps she takes to establish a trusting relationship with the patient that will pave the way for patient teaching. For example; introducing him/her self to the patient, assessment of the patient on admission using nursing process format to identify learning needs of the patient, reading patients

folders, engaging in extensive reading of different disease conditions of the patients to increase ones knowledge.

3. **Practice of patient teaching:** Implies nurses adoption or use of any of the strategies of patient teaching and types of patient teaching as listed in the questionnaire namely: planned and unplanned, use of the different teaching methods e.g. discussion, demonstration, printed materials, audio-visual aids, and tools for teaching children e.g. story books, health fair, dolls, puppet play etc in patient teaching and evaluation and documentation of patient teaching.

   Categories of practice of patient teaching:

   90 ï 100% = Excellent practice

   70 ï 89% = Good practice

   50 ï 60% = moderate practice

   49 and below = poor practice

4. **Patient teaching/client teaching/patient education:** Implies planned (structured) and unplanned (unstructured) health instructions/teaching given to patients by trained nurses which makes positive impact or leads to positive changes in health behaviour.
5. **Content of patient teaching:** Implies the teaching process and everything, patient requires to know about his/her health and well being for example; health promotion, prevention of illness, restoration of health, and rehabilitation.
6. **Context of patient teaching:** Implies the environment nurses used for patient teaching e.g. ward rounds, bedside, clinics etc.
7. **Patient/client:** interchangeably used in this study as recipients of nursing care, sick or well.

8. **Challenges encountered by nurses in patient teaching:** implies those difficulties that prevent nurses from teaching patients e.g. lack of time, shortage of staff, lack of knowledge and skill and lack of teaching aids etc.

CHAPTER TWO

LITERATURE REVIEW

This chapter discussed related literature to the study. Literature was reviewed using textbooks, journals and internet extracts under the following headings:

Conceptual review of literature

Review of related theory

Empirical Review

Summary of the literature Review

Concept of Patient Teaching/Education

Rankin, Stallings and London (2005) defined patient teaching (patient education) as the process by which health professionals and others impart information to the patients that will alter their health behaviours or improve their health status. Martin (2012) opined that patient teaching involves helping patients become better informed about their conditions, medical procedures, and choices they have regarding treatment. Quinn (2010) opined that patient teaching involves information giving asking and answering questions, explaining and demonstrating.

Faulkner (1996) cited in Quinn (2010) asserted that patient teaching covers the teaching of the patient to understand his disease which may affect his future or have contributed to his present state.

Walsh (2005) viewed patient teaching as an interactive process whereby learning which may be used to influence behaviour, takes place. Freire (1985) in Walsh (2005) pointed out that real patient education entails emancipation that is librating people to make their own decisions on their own terms. He however, noted that nurses and other professionals have

hesitated to allow patients the control that they need to make their own choices and decisions. At times this reluctance has stemmed from our maternalistic/paternalistic view of patients. Hospitals and other health care agencies have also created organizational barriers that prevent the patient from having the freedom to make decisions about health. Every patient has the right to seek information and participate in the educational plan. Simply providing information about health matters is a waste of time. This is because the purpose of education is to encourage patients to use knowledge to modify behaviour and perform activities that will result in improved health.

From the above definitions one can deduce that patient teaching is an interactive process whereby health professionals impart information on health matters with the aim of changing their health behaviours and thus improve their health status. The above definition implies that the role of the nurse is to plan learning experiences with the patient as a component of total care, so that patients share responsibility for health. When the nurse does this, patients are able to make rational decisions with respect to health, participates in self-care and adjust to the realities of life.

Importance of Patient Teaching

Patient teaching is very important in the health care setting.

Smeltzer, Bare, Hinkle Cheever, (2010) identified the following importance of patient teaching:

- Patient teaching provides adequate knowledge and training in self-care skills and thus helps clients to make informed decisions about health.
- It helps clients with chronic illness to participate actively in and assume responsibility for much of their own care.

- It helps those patients with chronic illness to adapt to their illness, prevent complications, carry out prescribed therapy and solve problems when confronted with new situations.
- It can also help in preventing crisis situations and reduce the potential for re-hospitalization resulting from inadequate information about self-care.
- Patient teaching helps clients to achieve their maximum health potential.
- It helps in reducing health care costs by preventing illness, avoiding expensive medical treatments, decreasing lengths of hospital stays and facilitating earlier discharge.
- Patient teaching is a tool for increasing patient satisfaction and for developing a positive image of the institution.
- Patient teaching is also a cost-avoidance strategy for those who believe that positive staff patient relationships avert malpractice suits.
- Patient teaching improves nursesô job satisfaction because you know you impacted someoneôs life quality.

Steps in Patient Teaching

As documented by Daniels (2004) teaching is considered as one of the processes in nursing and involves assessment of learning needs, identification of learning needs, development of teaching plans, implementation and evaluation. He posited that in assessing teaching needs, the following should be included:

- General health promotion of an individual for example, diet, hygiene, rest and relaxation, exercise, physical, emotional and social development, accident prevention health habits and immunization.
- General promotion of family relationships and developmental tasks.

- Needs related to illness that is knowledge of disease condition, treatment, medications, preventive actions and participation in treatment. These steps for patient teaching can be summarized as follows:

Assessment Phase

The nurse:

- Ascertains the level of knowledge of the learner about the specific topic
- Ascertains the desire to or patientôs readiness to learn
- Ascertains factors which impact on the learning and teaching approaches such as age, sex, educational background, and vulnerability, culture, psychological and physical states.
- Ascertains the patients coping mechanism and support system.

Planning phase

The Nurse:

- Develops an individualized teaching plan with patient/client centered behavioural objectives and goals
- Identifies content and methods
- Identifies a time frame that is appropriate to patient needs and the content being taught.

Implementation

The Nurse:

- Selects a comfortable setting conducive to learning
- Implements teaching plan
- Uses audio-visual media which appeal to more than one sense where possible

- Constantly assess the clientôs response as fear, fatigue, pain and ambivalence can affect clientôs ability to learn.

Evaluation Phase

The nurse evaluates patientôs progress and teaching efficacy.

- Has client demonstrated a specific behaviour skill?
- Has the client state information?
- Monitor the clients physiological responses
- Assesses plan and methods used and make modification as necessary.

Timing of Patient Teaching

Daniels (2004) & Berman et. al, (2008) opined that the best time for patient teaching is when the client is comfortable ï physically and psychologically.

- When the anxiety levels of client is low
- Family members may be present
- Uninterrupted time when the ward is less busy
- When the patient will utilize the knowledge within a short period because patients retain information and skills best when the time between learning and active use of the learning is short.

In addition to capitalizing on informed teaching time, the nurse must plan time during which formal teaching can be done. They further stated that teaching must match the pace of the clientôs progress. This is because some clients learn faster than others, some need more repetition timing of the teaching session is crucial. The more information is presented, the more a client is likely to forget. Therefore, teaching session must be kept to avoid over

whelming the client. Also there is need to ask the client questions to allow the nurse to pace the delivery of information.

Quinn (2010) documented three approaches to patient teaching, depending on who does the initiating. The approaches are nurse-initiated teaching, patient initiated teaching and family initiated teaching.

Nurse Initiated Teaching has two components namely:

- Teaching that the nurse believes the patient requires, for example how to administer her own insulin.
- Teaching that the nurse believes the family requires, for example how to carry out eczema dressing, on their children or how to deal with an elderly patient following discharge home termed carers education.

Patient Initiated Teaching is teaching that the patient/client requests, for example, how can I maintain my weight loss after I have been discharged home?

Family Initiated Teaching is teaching that the family requests, example ñHow can my husband reduce risk of a reoccurrence of his heart attack?

Dormains of Learning

Bloom (1956) in Berman et. al, (2012) identified three dormains or areas of learning viz: cognitive, affective and psychomotor dormains

Cognitive dormain deals with intellectual or thinking process (understanding). The cognitive domain includes six intellectual abilities and thinking processes namely: knowledge, comprehension application, analysis, synthesis and evaluation.

The affective dormain deals with the feeling. It is divided into categories that specify the degree of a personôs depth of emotional response to tasks. It includes feelings, emotions, interests, attitude and appreciations.

Psychomotor dormain is the ñskillò dormain. This includes motor skills such as giving an injection. Nurses should include each of Bloomôs three dormains in client teaching plans.

Guidelines to Patient Teaching

For effective patient teaching certain guidelines on teaching must be followed. The nurse may find the following guidelines as suggested by Bastable, Grambet, Jacobs & Sopcyk, (2011) helpful when teaching a patient.

- **Rapport**: Rapport between the nurse (teacher) and the patient (learner) is essential. A relationship that is both accepting and constructive will best assist learning. The nurse should know the patient well and the factors that can affect patient learning.

It is pertinent for the nurse to emphasize on what is necessary for patients to care for themselves. There is also the need to choose the right time. Hohler (2004) advocated that nurses should look for ñteachable momentsò that occur during normal routine care.

Also it is important for the nurse to consider the educational level of the patient as well as evaluate the patientôs senses before embarking on any patient teaching. This is important because the type of teaching materials that the nurse will give to the patients depend on these. Patient teaching that involves the different senses enhances learning. Patients should be allowed to discover the content of learning and so on.

Content of Patient Teaching

Content of patient teaching involves areas or components to be covered during patient teaching. As documented by Berman et. al, (2012) the following areas are identified:

promotion of health, prevention of illness/injury, restoration of health, and adapting altered health and function (rehabilitation).

Promotion of health involves any activity undertaken for the purpose of achieving a higher level of health and well being. This includes: increasing a personôs level of knowledge about wellness, growth and development topics like fertility control, hygiene, nutrition and exercise, stress management, lifestyle modification and resources within the community.

Prevention of illness/injury is a component of health concerned with the prevention of disease and injury and promotion of physical and mental health. This includes: health screening (e.g. blood glucose levels, blood pressure check, blood cholesterol, papanicolou test (pap-test) mammograms, visions, routine physical examination, specific protective health measures (e. g .immunization, use of condoms, use of sunscreen, use of medication, umbilical cord care etc.), first aid: safety (e.g. use of seat belts, baby carriers and helmet)

Restoration of health is concerned with bringing the sick individual back to normal.

This includes: information about laboratory tests diagnostic, treatment, medications, self-care skills needed to care for family members, resources within health care and community setting.

Adapting to altered health and function (Rehabilitation) is concerned with helping patients who are diagnosed with systemic diseases or disabilities from which they cannot recover completely to learn to live with less than a fully functioning body or mind. Here, patients are helped to develop coping strategies with their impairment and live life to their maximum. This includes: adaptation in lifestyle, problem solving skills, adaptation to changing health status, strategies to deal with current problem (e. g. homecare skills, diet, activity limits, prosthesis), strategies to deal with future problems (e.g. pain of terminal cancer), information

about treatments and likely outcomes, referrals to other health care facilities or services, facilitation of strong self image, grief and bereavement counseling.

Context of Patient Teaching

Context of patient teaching involves the environment for patient teaching. The environment determines the type of teaching method to adopt. The environment for teaching patients in the hospital can be at the bedside, ward round and in the clinics.

Teaching at the bedside involves teaching in the presence of the patient. The nurse uses this environment to help patients understand their illness, how that illness impacts on their lives and the road blocks to healing for the patients.

Patients learning needs can be identified by nurses when carrying out routine procedure like giving medication. Sometimes bedside teaching assumed informal type of patient teaching and employs the one-to-one teaching method. Planned type can also be used in bedside teaching. Bedside teaching when properly carried out by the nurse can create rapport between patient and the nurse, improves communication and development of confidence and trust in the nurse. However, bedside teaching is time consuming and that notwithstanding, bedside remains the excellent place to teach patients that are admitted in the hospital wards (MAHEC, 2009).

Ward round: can provide an excellent teaching opportunity to patients be it nurses ward rounds or doctors ward rounds. The ward round teaching enhances patient care because patient comes in contact with almost all the caregivers.

Clinics: patients with different disease conditions visit the clinic for medical treatment. Clinics provide educational opportunities for these patients who are either visiting for the first time. Physiological and psychosocial aspects of disease can be taught in the clinics. The

small group teaching method can be applied in the clinic teaching. The nurse must take care of individualôs concerns of each patient while teaching patients as a group in the clinic (Ford, 2012).

Strategies to Patient Teaching

Strategies to patient teaching involves those activities that the nurse teacher must put in place in order to achieve a good teaching/learning outcome. Mangal (2007) documented these strategies as follows:

- Arranging a favourbale and positive climate for learning

  An environment can detract from or assist learning, for example, noise or interruptions usually interfere with concentration, whereas a comfortable environment promotes learning. Berman et. al, (2012) stated that placing the patient in a position and location associated with activity or learning may influence the amount of learning that takes place.
- Helping the learners (patients) to have clear cut objectives and purpose of his/her learning.

According to Pramila (2010), the chief goal of any education process (patient teaching) is to bring about change in human behaviour. She further stated that for any educational programme to be effective, the purposes and objectives must be clearly stated so that it is easy to select the right subject matter, the clinical experience and the right method to evaluate the teaching ï learning process. She defined objectives as the desirable outcomes of intended actions through the mode of education (patient teaching), that is the result sought by the patient (learner) at the end of a teaching programme.

- **Organizing the learning resources and making them available to the learners:** learning resources are those sources that the teacher employs to bring about learning.

These resources are identified as messages, people, materials, devices, techniques and setting. Resources can be used by the learner in isolation or in combination usually in an informal manner to facilitate learning. According to (Iwu, Ike & Chimezie, 2006) these resources are of two types:

- **Resources by design:** those resources which have been specifically developed as instructional systems components in order to facilitate purposive, formal learning.
- **Resources by utilization:** those resources which have not specifically been designed for instruction but which can be discovered, applied, and used for learning purposes. To ensure the transfer of learning, the nurse should use the equipment that the patient will use before the teaching session, the nurse needs to assemble all resources (equipment and visual aids) and ensure that they are functioning effectively.
- **Balancing intellectual and emotional components of learning:** Mental level of the patients and emotional readiness of the patients must be balanced. Patient Teaching should be adjusted to suit the mental level of the client. Readiness to learn is equally important. Clients who are ready to learn behave differently from those who are not. A client who is ready to learn may search for information; ask questions, reading books or articles. They should assess for these readiness characteristics:

Physical readiness is the client ability to focus on things and not distracted by pain, fatigue etc?

Emotional readiness is the client emotionally ready to learn self-care activities? Clients who are anxious, depressed or grieving hardly learns.

Cognitive readiness can the client think clearly at this point? (Berman et. al, 2012).

Sharing feelings and thoughts with learners (patients) in a democratic way

During patient teaching, the nurse should assess patients feeling and their thoughts and encourage them to share their feelings with the nurse teacher. The learning environment should be such that allow the patients to express themselves freely.

Types and Teaching Methods Adopted in Patient Teaching

When teaching patients and their families, the teaching types can be either planned (formal or structured) in advance, or spontaneous (informal or unplanned, depending upon the context. Advance planning is always preferred since it helps to eliminate errors and omissions. However, even spontaneous teaching can incorporate an element of advance planning (Quinn, 2010).

According to Pramilla (2010) the common teaching methods and techniques that are used in adult patient teaching are:

Lecture is a verbal presentation made by the nurse to a group of patients or family members. Lecture is the method most often used by nurses when instructing or transmitting information to patients. It is a very effective method of teaching cognitive behaviours and is more effective when used with discussion. Lecture can be improved by using visual aids. Material presented in lecture should be prepared according to the patientôs level of understanding and they should have an opportunity to clarify their doubts. Lengthy lectures may cause loss of attention if the patient becomes bored, distracted or anxious about the material presented. Lectures can be highly effective for influencing cognitive behaviours but will not be effective in achieving affective or psychomotor learning objectives.

Small Group Work is a group of two or five patients and of family members. This method is used to discuss issues brought up in larger class, to share experience and to work on joint projects related to self care. Groups provide peer support, free expression, reinforcement of

teaching and sharing of ideas. They are useful for changing attitudes and exploring new patterns of behaviour. The nurse should prepare in advance the activities of the group before the time the group meets. Berman et. al, (2012)advocated that all members involved in a group must have a common need and social cultural factors be considered in the formation of a group.

Discussion is an earnest conversation by a group of patients, families and health care providers. Discussion can be enhanced by the following actions to be observed by the leader:

- Encourage full participation by questioning the participants who are not getting involved.
- Keep the discussion on target when the group gets into irrelevance, the leader should get them into the stream of the topic focused discussion.
- Do not let one or two participants to dominate the discussion. Though their input can be appreciated but direct attention to others by asking them to comment.
- Reinforce contributions by making positive remarks about their comments.
- Summarize the points made by the group as discussion draws to an end

Demonstration and Return Demonstration is used to teach psychomotor skills to the patients. Nurse demonstrates to the patient/family how to implement a procedure and observes them in return. The ideal demonstration involves the patients performing the real procedure with real equipment. Other teaching methods used for adults in patient teaching are:

Computer Assisted Instruction (CAI) is popular. Initially, the primary use of computer education methods was cognitive learning of facts. Nowadays however, computers can be used to teach the following: application of information, psychomotor skills, complex problem solving skills.

Some computer programs feature simulated situations that allow learners to manipulate objects on the screen to learn psychomotor skills. When used to teach such skills, CAI must be followed up with practice on actual equipment supervised by the teacher. (Berman et.al, 2012)

Discovery/Problem Solving in this method of learning the nurse presents some initial information and then asks the learners a question or presents a situation related to the information. The learners then apply the new information to the situation and decide what to do. (Berman et.al, 2012).

Mass Approach Pramilla (2010) posited that no health team can mount an effective health teaching except through mass media of communication. Mass media is a ñone wayò communication. It is useful in transmitting messages to people even in the remotest places. Though mass media alone cannot cause change in human behaviour, it should be combined with other methods. The power of mass media that is in favour of health, raising the health consciousness of the people, settling norms, delivering technical messages, popularizing health knowledge and fostering community involvement are well recognized. Approaches to mass media can be accessed through television, radio, internet, newspapers, printed material, direct mailing, posters, bill boards and signs, health museum and exhibitions and folk media.

One-to-one as documented by Quinn (2010) one- to ï one teaching method is the most common form of teaching with patients and families in the hospital. Its success depends to a large extent on the interpersonal skills of the teacher.

One to one method of patient teaching is used when sensitive or private topics are discussed but it is time consuming. Some of the benefits of one-to-one method of teaching are:

- Patients get the undivided attention of the nurse teacher

- Rapport can be established more quickly
- Progress can be quicker with just one patient
- Teacher can check learning easily with just one patient.

For one-to-one teaching to be effective, the pace of the teaching has to be judged carefully to ensure that the patient is keeping up with the information. The atmosphere needs to be informal and relaxed sessions should be kept short to avoid tiredness that may be experienced by some patients with certain disease conditions.

Other teaching methods include: explanation or description, question and answers sessions, printed and audio -visual materials.

Teaching Tools for Children

Teaching tools for children is different from those of the adults. These teaching tools are:

Story books: describes how the child feels, what will be done and what the place will be like. Parents and guardians can read these stories to children several times before the experiences.

Doll: Nurses can practice procedures on dolls or teddy bears that the patients will later experience. Children can also be allowed to practice on these dolls as this gives a sense of mastery of the situation. Costume dolls are often available for inserting tubes and giving injections (Berman et. al, 2012).

Puppet play: Pramilla (2010) defined puppet as an inanimate object or representational figure animated or manipulated by a puppeteer. It is usually a depiction of a human character and is used in puppetry (a play). Puppets can be used to role play situations to provide information and show the child what the experience will be like, puppets can offer comfort

and safety; they can be used to help children understand what they will experience as a patient and by doing so, they can calm the childôs fears and enhance their recovery.

Health Fairs: This is used to teach children about their bodies and ways to stay healthy. Children that are well cared for by their parents receive prizes that will stimulate others who did not win prizes to aspire to remain healthy. Fairs can focus on high risk problems children face such as accident prevention, poison control and other topics identified as concern.

Evaluation

Evaluation is an essential component of patient teaching. It can be ongoing or summative. The purposes of evaluation as documented by Pramilla (2010) are to:

- Measure the extent to which the patient has met his/her learning objectives.
- Identify the positive factors which promoted behaviour change or learning
- Identify the negative factors which prevented change in behaviour or learning.
- Reinforce the patientsô learning
- Provide basis for change in learning objectives and teaching strategies.

She further stated that evaluation has four steps namely:

- Patients participation during interventions
- Patients performance immediately following learning experience
- Patients performance at home and
- Patients overall self-care and health management

Quinn (2010) opined that the most common method of assessing patients learning is by the use of oral questionnaire and this can usually provide sufficient feedback on their understanding. He outlined the types of questions as follows:

Open questions: These questions are phrased so as to allow the patients to respond in any way they like and are used to ascertain patientôs feelings.

Probing questions:

This is used to follow up a previous response by the patient and allow the teacher to explore the response in more depth.

Factual questions: These are used to check whether the patient has understood the teacherôs points and consist of asking the patient to repeat certain items of information.

Documentation of Patient Teaching

Berman et. al, (2012) stated that documentation of the patient teaching is essential because it provides a legal record that the teaching took place and communicates the teaching to other health professionals. She said that if teaching is not documented, legally it did not occur. Pramilla (2010) in her own contribution said that patient teaching can be documented in the patientsô medical record, patients care plan and or education file. Berman et. al, (2012) added that it is also important to document the responses of the client and support people to teaching activities.

Berman et. al, (2012) suggested that the parts of the teaching process that should be documented in the clientôs chart include the following:

- Diagnosed learning needs
- Learning outcome
- Topics taught
- Client outcomes
- Need for additional teaching
- Resources provided

While the written teaching plan that the nurse uses as a resource to guide future teaching sessions might also include these elements.

- Actual information and skills taught
- Teaching strategies used
- Time framework and content for each class
- Teaching outcomes and methods of evaluation
- They are also of the opinion that both the nurse and the patient should sign the copy of the teaching form.

Barriers to Effective Patient Teaching

As documented by Berman et al, (2012) many factors combine to constrain patient teaching by nurses. Such factors can be from the patients and the nurses.

Factors from the patients include nature of the patient, physical and emotional state, age, social and cultural background, his education and experience and so on. Patients present to the hospital with various health problems requiring cure or palliation. Some of the patients do not see themselves as learners.

Physical and emotional state of the patients may constrain patient teaching. When patients are not physically and emotionally stable, they will not be able to concentrate for patient teaching. Patients in the two extremes of age that is the elderly and the very young patients are difficult to be taught. The elderly patients may be faced with some memory loss, sensory deficit acquiring psychomotor skills. The very young patients cannot make decisions on their own. Parents of the very young patients may object to patient teaching.

Social economic factors can constrain patient teaching: patient teaching from low income group find it difficult to comply with some treatment regimen. For example if a patient is

taught by the nurse to use a new sterile syringe for each injection of insulin, when patient cannot afford it. Many cultural groups have their own folk beliefs and practices with many of them related to diet, health, illness and lifestyle. The cultural practices and values held by patients will affect patient teaching (Berman et. al, 2012). Level of education and experience of a patient is important in patient teaching. Patients with little or no education have less information about health and management of disease process. Therefore, such patients pose a challenge for the nurse to teach.

Factors from the nurses include the nature of nursing, lack of knowledge of what to teach by the nurse, lack of competence and confidence with teaching skills, lack of time and lack of conducive environment for teaching and so on. The nature of nursing is such that nursing care has priority over patient teaching and little or no attention is given to patient teaching.

Equally important is the lack of knowledge of what to teach by some nurses. The busy nature of nursing do not allow some of them to update their knowledge with the disease conditions patients present with in order to teach patients well about their conditions. At times where the nurses have the knowledge, they may lack competence and confidence to handle patient teaching very well.

Lack of time which may be as a result of workload may constrain patient teaching for example Nurses role in providing patient care, supervision of non nursing staff, responsibility to the physician for carrying out medical orders and assisting the doctors with special procedures.

The environment where patient teaching takes place may constrain patient teaching, lack of conducive environment, lack of space, lack of privacy, noise and frequent interruptions due

to patient treatment routines militate against nurseôs ability to concentrate and effectively interact with patients.

Concept of Knowledge

According to the New International Websters Comprehensive Dictionary of English Language (2013), knowledge is a result or product of knowing, information or understanding acquired through experience, practical ability or skill.

Knowledge can be acquired in three different dormains namely: cognitive, affective and psychomotor learning. Craven & Hirnle (2006) stated that cognitive knowledge is the rational thought and involves learning about facts, arriving at a conclusion, making decisions or drawing inferences. Affective learning result in changed beliefs, attitudes or values while psychomotor refers to muscular movements that form some sort of knowledge.

Knowledge of patient teaching: As documented by Berman et. al, (2012) knowledge alone is not enough to motivate a person to change behaviour. There is need to learn what needs to be done to change behaviours and acting on the knowledge. Therefore, knowledge must appeal to the emotion for it to affect behaviour. This is because emotion works hand-in-hand with cognitive process or the way we think about an issue or situation. Patient teaching involves means whereby attitudes counter- productive to health and wellbeing might have to be altered. For patient teaching to be effective it must meet the needs expressed by the individual clients themselves.

Knowledge of patient teaching therefore involves the nurses ability to have adequate knowledge of different patients disease conditions, the nurses ability to identify clients requiring teaching, assessing and diagnosing their learning needs, planning, implementing, evaluating as well as documenting patients teaching . Nurses are in a position to promote healthy lifestyles through the application of health knowledge, the change process, learning

theories, and nursing and teaching process, when teaching patients and their families. Nurses on their own part, should have emotional appeal for patient teaching as integral function of the nurse. It is only then that their knowledge of patient teaching will affect their behaviour.

Concept of Attitude

Attitude as documented in the New International Websters Comprehensive Dictionary of English language (2013) is defined as a state of mind, behaviour or conduct regarding some matter as indicating opinion or purpose. Plotnik & Kouyoumdjian (2008) defined attitude as any belief or opinion that includes an evaluation on some object, person or event along a continuum from negative to positive that predisposes us to act in a certain way toward that object, person or event. Altschul & Sinclair (2005) defined attitude as an orientation towards an object or situation, a readiness to respond in a predetermined manner.

From the above definitions of attitude, one can deduce that attitude is a state of mind about a matter and it includes evaluation of the matter from negative to positive and taking a stand for either negative or positive.

Attitude is acquired during the periods of development. Brandt & Witherel (2012) stated that learning accounts for the most of the attitudes we hold. Passer & Smith (2007) argued that hereditary variables may affect attitude but believes that they do so indirectly. Plotnik (2008) opined that our beliefs and values contribute to the attitude formation. He further suggested that individuals must be consistent in their beliefs and values in order to develop a good attitude, in other words to stand up for those beliefs and values that we consider very important. Attitude can have a significant impact on behaviour, hence it is used to predict behaviour. Passer and Smith (2007) supported the above view by stating that there are three factors which explain attitude behaviour relationship. First attitude influence behaviour more

strongly when situational factors that contradict our attitude are weak. In other words our intentions to engage in a behaviour is strongest when we have a positive attitude toward that behaviour, when subjective norms (our perceptions of what other people think we should do) support our attitudes and when we believe that it is under our control.

Second reason for attitude relationship is that attitude has a greater influence on behaviour when we are aware of them and when they are strongly held. That is attitude behaviour consistency increases when people consciously think about them or are reminded of their attitudes before acting.

Passer and Smith concluded that general attitude best predict general behaviour and specific attitude best predict specific behaviour.

Attitude of nurses towards patient teaching similarly can be influenced when situational factors that counteract patient teaching are weak.

Patientôs conditions and expectations may influence nursesô behaviour towards patient teaching.

Also, when nurses are aware of their attitude towards patient teaching, it will have greater influence on their behaviour. When nurses think consciously about their attitude toward patient teaching or are reminded of their attitude before acting.

Concept of Practice

The New International Websters Comprehensive Dictionary of English Language (2013) defined practice as; to make use of habitually or often to apply in action, the act of or process of executing or accomplishing, doing or performance. The definition implies that nurses should practice or carry out patient teaching as a professional habit because practice is the behaviour outcome of knowledge and attitude.

Knowledge, Attitude and Practice of Patient Teaching:

Knowledge of patient teaching alone is not enough to motivate nurses to change their behaviour towards patient teaching. Nurses require to know what needs to be done to achieve effective patient teaching. Knowledge and attitude will only affect practice when the information is relevant and a positive attitude is shown toward imparting the knowledge.

Review of Related Theories

A number of theories have been propounded to explain knowledge, attitude and practice of patient teaching by nurses. These theories try to explain the inter-relationship between knowledge, attitude and practice. They form part of what come to be known as knowledge, attitude and practice (KAP) model and the learning theories.

Two of such theories which underlie this study are discussed below:

Ibrahim Badranôs knowledge, Attitude and practice theory and Carl Ransom Rogers Learning theory

Ibrahim Badran's knowledge, Attitude and practice (KAP) Model

Badran (1995) stated that knowledge, Attitude and practice constitute a triad of interactive factors characterized by dynamism and unique interdependence. According to Badran, Knowledge is the capacity to acquire, retain and use information and education is prerequisite for knowledge. He defined attitude as the inclinations to react in a certain way to certain situations to see and interpret events according to certain disposition or to organize opinions to inherent and interrelated structures. By practice, he meant the application of knowledge that leads to action. Good practice is an art that is linked to the progress of knowledge and technology and is executed in an ethical manner. He also identified several important factors that could influence or control the course of practice which include

conglomerate of information, education, communication and human resources development, modern technologies, environmental factors etc. Badran stated that triad of knowledge; attitude and practice in combination govern all aspects of life in human societies and all the three pillars that make up the dynamic system of life.

Application of Theory to the Study

Nurses acquire knowledge about patient conditions; physical, emotional, physiological, cultural as well principles of teaching during nursing, midwifery, post basic nursing training as well as masterôs programmes in nursing. To retain the knowledge acquired, nurses engage in personal readings, workshops and conferences in order to refresh their memory.

Attitude: The knowledge that nurses acquired and retained on patient teaching will incline them to react in a certain way positive or negative way towards patient teaching.

Practice: When nurses apply the rules and knowledge of patient teaching, they will be moved to action of teaching patients no matter how tight their schedules may appear to be. As nurses continue to increase their knowledge and their techniques of patient teaching, they will become perfect in teaching patients and invariably enhance their practice of patient teaching. This in turn will directly or indirectly affect their attitude towards patient teaching. If patient teaching by the nurses positively influence the patients, the tendency for the nurses to be positively motivated to retain and improve their knowledge. On the other hand, if patient teaching by the nurses had a negative outcome, there is also the likelihood of the nurse to seek for more knowledge so that he/she can be competent enough to teach patients effectively.

As opined by Badran that knowledge precedes attitude and that both knowledge and attitude will predict and precede practice. In essence, if the nurses are not knowledgeable of what to

teach the clients, their attitude will not be influenced; neither will their practice of patient teaching be efficient. Hence according to Badran, (1995) knowledge, attitude and practice are interactive factors characterized by dynamism and unique inter-dependence.

However, extraneous variables like finance, time factor, materials, belief and education can indirectly affect knowledge, attitude and practice of patient teaching.

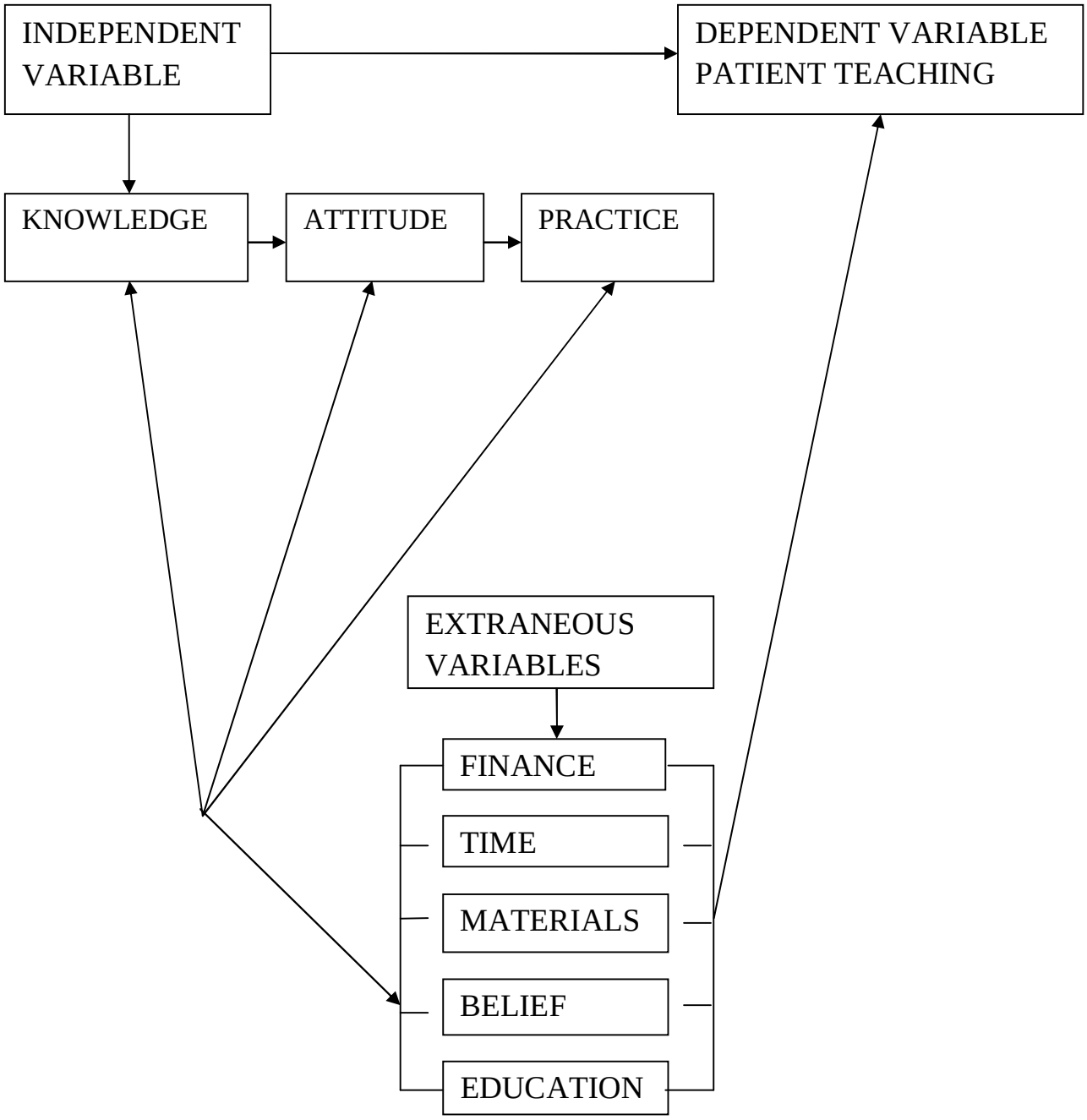

Figure 1: Adapted Model from Ibrahim Badranôs Model of knowledge, Attitude and Practice (2014).

Carl Ransom Rogers Experiential Learning Theory

Carl Ransom Rogers experiential learning theory (1983) is a teaching-learning theory. Carl Ransom Rogers was an American psychologist. This theory has its origin in his views about psychotherapy and humanistic approach to psychology. Rogers distinguished two types of learning namely: cognitive and experiential. He termed cognitive as meaningless in itself unless it is subjected to some use. He stated that cognitive learning is knowledge based.

According to Carl Ransom Rogers, the experiential learning on the other hand, is quite vital to ones progress and welfare. It is associated with the application of the acquired knowledge.

Application of the Theory to Study

Nurses in their various training schools acquire knowledge of what to teach, how to teach and how to evaluate patient teaching.

According to Carl Ransom Rogers, this knowledge is meaningless if it is not subjected to some use which is patient teaching.

Experiential learning is the application of acquired knowledge and it is vital to ones progress and welfare. This implies that when Nurses apply their knowledge of patient teaching by practicing patient teaching, the nurseôs knowledge will increase, patient will benefit and there will be progress and welfare of the individual nurses and the nursing profession. This is because every time a nurse empowers a client toward autonomy and self-care some autonomy and power is reflected to the nurses and the profession.

Empirical Review

There is a dearth of literature on knowledge, attitude and practice of patient teaching among nurses working in the tertiary institutions. However, some of the studies carried out in related area were reviewed.

Oyetunde and Akinmeye (2015) conducted a study on factors influencing practice of patient education among nurses at the University College Hospital (UCH) Ibadan Nigeria published in the open journal of nursing. A cross-sectional descriptive survey design was employed, using 200 nurses. These nurses were selected through stratified and simple random sampling techniques. The researchers used a self designed questionnaire in their method and data was analyze using statistical package for social sciences version 15 (SPSS 15). The study revealed that the knowledge and practice of patient education among the nurses in UCH Ibadan was high and the knowledge was found to be significantly associated with its practice (x2=7.89, p=0.017). The working experience of nurses does not determine whether they practice patient education or not. Almost all the respondents (70% - 90%) in their study affirmed that the nursesô experience, cultural barriers, workplace, insufficient staffing, and the complexity of patientôs condition were important factors that influenced the practice of patient education. The researchers concluded that nurses at the University College Hospital have good knowledge and positive attitudes towards patient education but could not practice effectively. The researchers advocated a more critical approach in addressing heavy workload insufficient staffing, among others needed to improve patient education. Further studies should be carried out on developing nursesôroles as patient educators.

In another study by Aghakhani, SharifNia, Ranjbar, Rahbar & Beheshti (2012) on Nurses attitude to patient education barriers in educational hospitals of Urmia University of Medical Sciences in Iran. The study was conducted using a cross-sectional design. The sample consisted of 240 nurses affiliated in the educational hospital. The data were gathered by a questionnaire. Demographic variables and three domains were studied. Twenty questions were about their working situation, 4 questions about hospital educating facilities, and 12

questions were about patientsô situation in hospital. The type and frequency of education barriers were evaluated, and variables associated with reporting an obstacle were analyzed. Findings revealed that the educational condition in their hospital used for study was not good and most of the nurses believed that patient education is not their duties, facilities in hospitals are not sufficient and shortness of time is the most important of insufficiency of patient education. In yet another study conducted by Whitehead, Wang, Wang, Zhang, Sun & Xie (2012) on health promotion and health education practice: nursesô perceptions in cluina. The study was conducted using Husserlian phenomenological approach with a sample of eight (8) students and eight senior nurses. The interviews were audio recorded and transcribed from Mandarin to English. Data analysis adhered to the framework developed by Giorgi. Result showed that health education and health promotion related practices showed similar results to those reported in Europe and North America. Hospital based nurses were often aware of what health promotion is, but did not have the scope or opportunity to implement it in practice. Instead, they were likely to conduct more limited forms of health education. Actual understanding of health promotion and health education constructs was high with most participants, underpinned by active clinical-based educational support. Some participants were able to able to conduct broader health promotion activities on voluntary basis in their own communities. The researchers concluded that health education and health promotion are universal health-related constructs. Thus, there is an expectation that all nurses will implement these in a similar fashion where possible, hospital based nurses should strive to improve their health education practices and further embrace wider perspectives of health promotion practice.

In another study by Kemppainen, Tossavainen and Turunen (2013) on Nurses roles in Health promotion practice; an integrative review. The paper presented an integrative review aimed at examining the findings of existing research studies (1998-2011) of health promotion practice by nurses. Systemic computer searches were conducted of the Cochrane data bases, cinahl, pubmed, web of science, PSYCLNFO and Scopus databases, covering the period January 1998 to December 2011). Data were analyzed and the results were presented using the concept map method of Novak and Gowin. The review found information on the theoretical basis of health promotion practice by nurses, the range of expertise, health promotion competencies and the organizational culture associated with health promotion practice. The researcher concluded that nurses consider health promotion which is an aspect of patient teaching) important but a number of obstacles associated with organizational culture prevent effective delivery.

In yet another study by Lin Chang, Chang and Lou (2011) on critical care nurses, knowledge, attitudes and practice of oral care for patients with oral and endotracheal intubation published in the journal of clinical nursing, Twelve (12) adult intensive care units in northern Taiwan were purposively chosen. Two hundred and five nurses (205) were recruited for the study. Data were collected by structured questionnaire. Findings showed the average percentage indicating the intensive care unit nurses oral care knowledge, attitude and practices were 58.8%, 79.4% and 49.8% respectively. Researchers discovered that higher scores on oral care knowledge were associated with nurses performing oral care more frequently. The nurseôs age and the type of intensive care unit they work in were significant factors related to the frequency of performing oral care. The researchers concluded that nurses who have more

resources for learning about oral care have greater knowledge about it and provide oral care to intubated patients more frequently.

In a study conducted by Kotronoulas, Papadopoulou and Patiraki (2009) on ó Nurses knowledge, attitudes and practice regarding provision of sexual health care in patients with cancer: critical review of the evidenceò. This study was aimed at gathering evidence regarding knowledge, attitude and behaviour (practices) of oncology nurses toward sexual health issues and to identify salient and latent key factors which influence provision of sexual health care in the context of cancer. A critical review of the literature was conducted over a period of thirty (30) years and 18 original research articles were retrieved and analyzed. Findings revealed that although oncology nurses hold relatively liberal attitudes and recognize provision of sexual health care as an important nursing role, they possess limited sexual knowledge and communication skills, while often avoid or fail to effectively respond to patientôs sexual concerns.

The researchers concluded that there is an evident need of dispelling the myths about sexual health in cancer care. Besides, continuing education activities and availability of education materials could assist nurses to adequately address sexual concerns while caring for patient with cancer.

In another study conducted by Asian pacific journal of cancer prevention (2014) on summary of ñCervical cancer screening): knowledge, Attitudes and practices among nursing staff in a Tertiary level Teaching Institution of Rural Indiaò. A cross sectional, descriptive interview-based survey was conducted with a pretested questionnaire among 262 staff nurses. Findings revealed that 77% of the respondents knew that pap smear is used for detection of cervical cancer, but less than half knew that pap smear can detect even precancerous lesions of cervix.

Only 23.4% knew human papiloma virus infection as a risk factor. Only 26.7% of the respondents were judged as having adequate knowledge base on scores allotted for questions evaluating knowledge about cervical cancer and screening. Only 17(7%) of the staff nurses had themselves been screened by pap smear, while 85% had never taken a pap smear of a patient. Adequate knowledge of cervical cancer and screening, higher parity and age>30 years were significantly associated with self screening for cervical cancer. Most nurses were of the view that paptest is a doctorôs procedure, and nearly 90% of nurses had never referred a patient for pap testing. The researchers concluded that majority of nursing staff in rural India may have inadequate knowledge about cervical cancer screening and attitudes and practices towards cervical screening could not be termed positive.

In yet another study by Alok, Gunvant Anjani Ragini and Anjali (2013) on the knowledge, attitude and practices (KAP) of the Nurses on cervical cancer and screening among Nurses in a Teaching Hospital at Surat carried out on 200 female nurses. A self-administered structured, open ended questionnaire was used. Information obtained was analyzed in Epi info and Microsoft Excel software. Findings showed that majority of the respondents (88%) were married, most common age of marriage being 21-25 years. Nurses linked multiple sexual partners (61%), Human papiloma virus infection (38.6%) and heredity (31%) to cervical cancer. Approximately 70% believed that cancer of the cervix is preventable, detectable and curable if detected early. Pap smear was recognized as major screening technique by 74% nurses. Major (84%) source of information was health professional. Eighty percent (80%) of nurses had never had cervical/screening while 87.5% did not recommend it to others. The researchers concluded that for a successful implementation of cervical

screening program, the nurses should be targeted first by education and sensitization so that they can play pivotal role in developing the compliance of women.

In a study on knowledge, Attitude and practice of family planning among nursing staff by Lal (2012). 199 nurses working in the J.L.N group of Hospitals, Ajmer, India were interviewed. 59.3% were trained nurses between 16-30 years of age. 71% of the in service nurses were in age group of 26-35. 59.4% of the nurses were married. 51.1% had 1-3 children, 20.6% did not have any children.

Only 77% of the nurses could explain what they understood by the term family planning. About 71.8% of the married nurses had knowledge of family planning, 34.6% had acquired information about family planning by working as family planning staff, 29.6% from mass media, 24.3% through classroom teaching, 11.3% from their husband and 10.3% from friends and relatives. Out of 78 married nurses, 48.7% were using some form of contraception. 33.3% of the nurses who had children were using contraceptives and 81.8% of them had been sterilized. 64.1% of the married nurses considered sterilization of either partner as the most effective method of family planning, 17.9% preferred oral contraceptives and 10.3% felt that conventional contraceptive were most effective. 1 nurse preferred the use of IUD. 97% of the nurses were in favour of family planning. 83.9% advocated audio-visual methods as the most effective method by 34.6% and family planning clinics were preferred by 12%. 6.1% of the nurses agreed that nurses themselves could refer couples to family planning clinics. 51% of the total interviewed stated that nurses could undertake the task of educating patients and motivating them for family planning when they are in the hospital or are attending the hospital.

49.7% of the respondents who were interviewed suggested that family planning programme should be strengthened, 26.5% stressed the importance of educational measures, and 13.3% the co-operation between family planning staff and the people. The researchers concluded that the coverage of the family planning subject in the training of all nursing staff should be adopted.

In a study conducted by Spear (2010) on Nursesô Attitudes knowledge and belief related to the promotion of breast feeding among women who bear children during adolescence. 151 nurses employed by three nonprofit hospitals and city and country public Health departments located in the south eastern part of the United States were surveyed. Findings revealed that participants were generally knowledgeable about and supportive of breast feeding by adolescent mothers. However, some of the nurses did not know that there are nutritional differences between breast milk and infant formula continued the practice of imposing time limits for feedings at the breast, and indicated that they were skeptical about young mothersô potential for success with breast feeding because of immaturity and lack of commitment. Significant differences were noted in mean attitude and knowledge scores based on the participantôs specialty, knowledge and attitude were positively correlated with the nurses level of education.

In a study conducted by Muttappallymahl, Sreedharan, Venkatramana and Thomas (2010) on Attitude and practice of Nurses in imparting Breast self-Examination to women in Ajzmer United Arab Emirate (UAE), among 154 nurses from different hospitals in UAE. Findings showed that majority of the nurses (90.3%) had a positive attitude in providing knowledge regarding risk factors of breast cancer and about the purpose of performing breast self examination. Eighty-eight point three percent (88.3%) of the nurses were with a positive

attitude towards providing information about breast self examination to all females who come to the hospital irrespective of their demand. Also majority of the nurses (83.8%) were found to be teaching method of breast self examination.

Summary of Literature Review

There is dearth of literature on knowledge, attitude and practice of patient teaching among Nurses. Studies carried in related areas include: factors influencing practice of patient education among nurses at UCH, nurses attitude to patient education barriers in educational hospital of Urmia University of Medical Sciences, health promotion and health education practice: nurseôs perception in China, assessment of knowledge, attitude and practice associated factors towards palliative care among nurses, nurses roles in health promotion practice, critical care nurses knowledge, attitudes and practices of oral care for patients with oral intubation, nurses knowledge, attitude and practice regarding provision of sexual health care to cancer patients, knowledge Attitudes and practices of nurses toward cervical screening, knowledge, attitude and practice of family planning among nurses.

The reviewed literature shows that patient teaching is an integral part of nursing job. Two theories of knowledge, attitude and practice (KAP) by Ibrahim Badran and learning Theory by Carl Ransom Rogers were reviewed to provide a framework for this study. Badranôs theory shows that knowledge, attitude and practice constitute a triad of interactive factors characterized by dynamism and unique interdependence. Carl Ransom Rogers theory of learning showed that cognitive knowledge that is not applied into use is useless and meaningless. The empirical literature reviewed, revealed that there is paucity of literature on knowledge, attitude and practice of patient teaching by nurses in Nigeria. The existing ones are rather too old for the study, hence the need for this study.

CHAPTER THREE

RESEARCH METHODS

This chapter presents the research design, area of study, population of the study, sample and sampling technique, instrument for data collection, validity of instrument, reliability of the instrument, ethical consideration, and procedure for data collection, method of data collection and method of data analysis.

Design

A cross sectional descriptive survey design was used for this study. The descriptive survey approach design is based on on-going event. This design was successfully used by Osuala, Anarado, Nwazuruoke, Okpala and Okafor (2013) in a study of knowledge, attitude and barriers to nursing entrepreneurship among nurses in South East of Nigeria. The descriptive design is considered most appropriate for this study because the purpose of the study is to observe, describe and document the characteristics of phenomena of study in their natural setting at the time of study.

Area of study

The study was carried out in Enugu State. Study sites were University of Nigeria teaching hospital and National Orthopaedic Hospital Enugu (UNTH, NOHE). There are four tertiary health institutions in Enugu state namely UNTH, NOHE, ESUTH (owned by the state) and Neuropsychiatric Hospital, Enugu.

National Orthopaedic Hospital Enugu (NOHE), University of Nigeria Teaching Hospital Ituku-Ozalla, Enugu (UNTH) is federal owned Hospitals. University of Nigeria Teaching Hospital Enugu is a cardiothoracic centre of excellence. It is situated along Enugu-Port Harcourt expressway, U.N.T.H is bounded in the East by Ozalla Town, in the west by Ituku

town, in the north by extension of Udi Hills and South by the Enugu Port Harcourt Expressway. U.N.T.H is a five hundred (500) bedded hospital, with twenty-four (24) wards seventeen (17) clinics and ten (10) units. Number of admissions in a month is 672 patients. The hospital provides training services to doctors, nurses and other health personnelôs, curatives and preventive health services to the general public.

National Orthopaedic Hospital is a federal government owned Hospital. The bed capacity is 220. N.O.H.E has twelve (12) wards six (6) units and five (5) clinics. Number of admissions per year is 2,364 patients. Average admission per month is 197 patients. N.O.H.E is specialized in Orthopaedics and plastic surgery. Resident doctors and post basic nursing students are trained there. N.O.H.E is located along Enugu-Abakaliki Expressway. It is bounded in the East by Area Command Nigeria Police force, in the West by Nike Grammar School, in the North by Institute of Ecumenical Education Thinkers corner and south by the 82 Division of Nigerian Army Barracks.

Population of the Study

The target population for the study consisted of all the nurses working in the wards and clinics of the two hospitals. They were chosen because they are directly involved in patient care. The total number is nine hundred and seventy-eight (978) comprising 675 nurses in UNTH and three hundred (303) nurses in National Orthopaedic Hospital (see Appendix IV for target population of study).

Sample

The sample size for this study comprised four hundred and twenty-five (430) nurses. This sample was drawn from two randomly selected tertiary health institutions (UNTH and NOHE) in Enugu state.

Two hundred and ninety-seven (297) nurses were randomly selected from UNTH, while one hundred and thirty-two (133) nurses were selected from NOHE.. The sample was determined using Nwana (1981) in Akpabio & Ebong (2010) suggestion. Nwana suggested that if the population is a few hundred, a 40% or more sample will do; if many hundreds a 20% sample will do; if a few thousands a 10% sample will do and if several thousand a 5% or less sample will do. In this study, 40% of the total population was used in order to get a representative sample. (See appendix IV)

Sampling Procedure

Simple random sampling procedure was employed to select the two tertiary health institutions in Enugu State. In order to select the 430nurses, stratified, random sampling procedure were used to select the nurses from the two tertiary health institutions used for the study. The nurses from the two hospitals were first of all stratified into cadre. Then, they were proportionately selected according to their numbers and cadres. Inclusion Criteria include: willingness to participate in the study, nurses must be working in the clinical area (i.e wards and clinics).

Instrument for Data Collection

Data were collected using questionnaire tagged Knowledge, Attitude and Practice of Patient Teaching among Nurses in Health Institutions questionnaire (KAPPTQ) developed by the researcher. Questions were generated from reviewed literature guided by the objectives set for the study.

The instrument has two sections A and B. Section A comprised nine (9) items on social demographic characteristics of the respondents. Section B composed of thirty seven (37) items covering nurseôs knowledge, attitude and practice of patient teaching. Both open and

closed ended questions and four point modified likert-type scale ranging from ñstrongly disagreeò (1) to strongly agree (4) on one subscale. These items were generated from reviewed literature based on the objectives of the study.

Validity of the instrument:

The face and content validity were carried out by the project supervisor and two senior lecturers in the Department of Nursing Sciences, University of Nigeria Enugu Campus. They examined the generated items in line with the stated objectives and modifications were made on the items. All modifications were effected as suggested in the items to structure the final copy used for data collection.

Reliability of the instrument:

In order to establish the reliability of the instrument, after effecting corrections and modifications suggested by the supervisor and two lecturers in the department, a pilot testing of the questionnaire was carried out. Copies of the questionnaire were administered once to 43 nurses representing 10% of the sample with similar background at Nnamdi Azikiwe Teaching Hospital, Nnewi. Data generated were analyzed, using split-half method, and Cronbach Alpha statistics was used to establish the internal consistency giving a reliability coefficient of 0.80 for the KAPPTIQ (See Appendix III).

Ethical consideration

The study was conducted after ethical clearance were obtained from the Health Research Ethics committee of the University of Nigeria Teaching Hospital, Enugu and National Orthopaedic Hospital respectively(see Appendices VI and VIII) . A written administrative permit to carry out the study in the Nursing services department of both hospitals were also

obtained. All the study participants were fully informed of the study, assured of anonymity and confidentiality of their information and informed verbal consent was obtained.

Procedure for Data Collection

Three research assistants were trained on the purpose and objectives of the study and how to collect data using the instrument. With the help of the three research assistants, the researcher then administered the questionnaire to nurses who met the inclusion criteria. The three shifts were covered and nurses who gave their consent were given an explanation on the study, advised on their rights including confidentiality of personal data and assured that their participation would not affect their promotion. The consenting nurses were each given a copy of the questionnaire to fill in their wards. Some of the questionnaires were collected same day while others were collected later through the chief nursing officers of each ward after successfully filling them. Data collection lasted for a period of ten weeks partly because two hospitals were involved in the study and partly because respondents who misplaced their questionnaire were given another copy to respond to. This prolonged data collection period.

Methods of data analysis:

The data generated were collated, tallied and computed descriptively using frequencies, percentages, means and standard deviations. Hypotheses were subjected to inferential statistical test using chi-square, t-test and analysis of variance (ANOVA). Hypotheses were tested at 0.05 probability level. All analyses were done using statistical package for social sciences (SPSS) version 17.

The data on knowledge, and practice of patient teaching were analyzed descriptively using frequencies and their percentages. Knowledge and practice were categorized into: 90-100% (excellent), 70-89% (good), 50-60% (moderate), 49 and below (poor). The data collected on

attitude of nurses to patient teaching was based on 4-point modified likert type scale ranging from ñstrongly disagreeò (1) ñdisagreeò(2) ñAgreeò (3) to ñstrongly Agreeò (4) and analyzed item by item using means and standard deviations. The mean decision score was 2.5. Therefore, a mean score of any item from 2.5 and above was considered as an important positive attitude while a mean score below 2.5 of any item was considered as a negative attitude toward patient teaching.

CHAPTER FOUR

PRESENTATION OF RESULTS

In this chapter, the results of data analyses were presented according to the research objectives and hypotheses set for the study. Four hundred and thirty (430) copies of the questionnaire were retrieved during data collection. Out of this number, 425 copies of the questionnaire returned were properly completed and fit for analysis. The questionnaire return rate was 98%. The high return rate may be attributed to the researcherôs record of nurses to whom questionnaire were administered. Those who misplaced their questionnaire were given a new one to fill and the researcher and the assistants collected them on the spot. Data from the 425 copies were subjected to data analyses and results presented in this chapter are based on this number.

Table 1: Socio Demographic Characteristics of the Respondents

n=425

Item	UNTH n=293	NOHE n= 132	Total n=425	X^2	P-value
Sex					
Male	5(1.7%)	5(3.8%)	10(2.4%)	1,716	0.190
Female	288(98.3%)	127(96.2%)	415(97.6%)		
Age group					
20-30yrs	41(14.0%)	38(28.8%)	79(18.6%)		
31-40yrs	134(45.7%)	54(40.9%)	188(44.2%)	14.403	0.002
41-50yrs	76(25.9%)	29(22.0%)	105(24.7%)		
51-60yrs	42(14.3%)	11(8.3%)	53(12.7%)		
Mean Age	40.8(±8.2yrs)	37(± 8.1yrs)	39.8(±8.3yrs)		
Marital status					
Single	60(20.5%)	38(28.8%)	98(23.1%)		
Married	219(74.7%)	92(69.7%)	311(73.2%)	6.049	0.195
Divorced	4(1.4%)	1(1.8%)	5(1.2%)		
Separated	4(1.4%)	0(0.0%)	4(1.9%)		
Windowed	6(2.0%)	1(0.8%)	7(1.6%)		
Religion					
Christianity	286(97.6%)	128(97.0%)	414(97.4%)	1.295	0.523
Islam	4(1.4%)	1(0.8%)	5(1.2%)		
Traditional religion	3(1.0%)	3(2.3%)	6(1.4%)		
Highest Educational qualification					
Registered. Nurse	22(7.5%)	13(9.8%)	35(8.2%)		
Reg. Nurse/ Midwife	138(47.1%)	84(63.6%)	222(52.2%)		
BSc Nursing/BNSc	100(34.1%)	23(17.4%)	123(28.9%)	17.940	0.001
MSC Nursing	16(5.5%)	2(1.5%)	18(4.2%)		
Ph.D Nursing	0(0.0%)	0(0.0%)	0(0.0%)		
Otherse.g.H.edu	17(5.8%)	10(7.6%)	27(6.4%)		
Cadre in Nursing					
DDNS	2(0.7%)	0(0.0%)	2(0.5%)		
ADNS	3(1.0%)	0(0.0%)	3(0.7%)		
CNO	97(33.1%)	27(20.5%)	124(29.2%)		
ACNO	21(7.2%)	11(8.3%)	32(7.5%)	22.616	0.001
PNO	59(20.1%)	14(10.6%)	73(17.2%)		
NO1	75(25.6%)	54(40.9%)	129(30.4%)		
NO II	36(12.3%)	26(19.7%)	62(14.6%)		
Years of practicing as a registered Nurse					
1-5yrs	27(9.2%)	25(18.9%)	52(12.2%)		
6-10yrs	76(25.9%)	45(34.1%)	121(28.5%)	17.021	0.001
11-20yrs	97(33.1%)	40(30.3%)	137(32.2%)		

Above 20yrs	93(31.7%)	22(16.7%)	115(27.1%)
Total	**293(100%)**	**132(100%)**	**425(100%)**

The results on Table 1 show the demographic distribution of the nurses according to the health institutions. Most 415(97.1%) of the respondents were females, many 188(44.2%) fall within the age range of 31-40 years. The mean age for all respondents was 39.8 ±8.3 years. Majority 311(73.2%) of the respondents were married. Almost all the respondents 414 (97.4%) were Christians.

Majority 222 (57.2%) have double diploma in nursing (Registered Nurse/midwife), followed by 123(28.9%) who were holders of academic certificates (BSC/BNSC Nursing). 35(8.2%) of them have diploma in nursing (Registered Nurses), 27(6.4%) of nurses had Bachelor of Health Education; while 18(4.2%) had MSC in Nursing.

The cadre of the nurses showed that a little more than one quarter of the respondents 129 (30.4%) were nursing officers one (No 1), 124(29.2%) chief nursing officers (CNO) followed by 73 (15.4%) were principal nurse officers (PNO), 62(14.6%) were Nursing Officer two (NOII) and 32(7.5%) were Assistant Chief Nursing Officer (ACNO). There were 3(0.7%) Assistant Directors of Nursing (AND) and 2(0.5%) Deputy Directors of Nursing and they were from UNTH. As regards years of practicing as registered nurse, most 137(32.2%) of the respondents had practiced for 11-20 years; 121(28.5%) for 6-10 years, while 115(27.1%) had practiced for more than 20 years. Only 52(12.2%) of the respondents had practiced for 1-5 years.

Objective 1: To determine nurse's knowledge of patient teaching.

This objective was achieved by analyzing responses to items 10-12; 14 and 16; 13-15; 17; 18-21. The results of these analyses were presented on table 2, 3, 4 and 5.

Table 2: Respondents knowledge of the meaning and the approaches to patient teaching

n= 425

Items	UNTH n=293	NOHE n=132	Total n=425	x^2	P Value
Information about patient teaching					
Yes	293(100%)	132(100%)	425(100%)		
No	0(0%)	0(0.0%)	0(0.0%)		
Source of information*					
Nursing training schools	268(91.5%)	115(87.1%)	383(90.1%)		
Text books	167(57.0%)	61(46.2%)	228(53.6%)	2.436	0.656
Radios and television	82(28.0%)	43(32.6%)	125(29.4%)		
Seminars and workshops Organized for nurses	220(75.1%)	97(73.5%)	317(74.6%)		
Continuing education programme	216(73.7%)	89(67.6%)	305(71.8%)		
What patient teaching entails					
Answering patient questions regarding health issues	54(18.4%)	25(18.4%)	79(18.6%)		
An interactive process whereby learning which may be used takes place.	62(21.2%)	26(19.7%)	88(20.7%)	0.216	0.975
Involves planned formal and unplanned health instruction given to patients which may lead to positive change in behaviour.	182(62.1%)	75(56.8%)	257(60.5%)		
Patient teaching entails identifying patient learning needs, planning and carrying out teaching, evaluation and documentation +.	152(51.9%)	62(47.0%)	214(50.4%)		
Categories of patients that need patient teaching	272(92.8%)	125(94.7%)	388(93.4%)	3.800	0.917
Every patient +	47(16.0%)	24(18.2%)	71(16. %)		
Patient with chronic diseases only	53(18.1%)	24(18.2%)	77(18.1%)		
Patient at risk of diseases only	53(18.1%)	28(21.2%)	81(19.1%)		
Pregnant and nursing mothers only					
Patients with certain diseases such as	55 (18.8%)	31(23.5%)	86(20.2%)		

diabetic mellitus, HIV/AID etc only.

					0.674
Approaches to patient teaching*	234(79.9%)	112(84.8%)	346(81.4%)		
Nurse initiated approach+	213(72.2%)	90(68.2%)	303(71.3%)	2.388	
Patient initiated approach +	144(49.1%)	65(49.2%)	209(49.2%)		
Family initiated approach+	53(18.1%)	27(20.5%)	80(18.8%)		
Ward initiated approach	137(46.8%)	50(37.9%)	187(44.0%)		
Coalition initiated approach					

***Responses not mutually exclusive**
+Correct answers (options)

The result on Table 2 shows that all the nurses 425 indicated that they have heard about patient teaching before. On their sources of information about patient teaching, majority 383 (90.1%) said it was from nursing training schools, 317(74.6%) said in seminars and workshops organized for nurses; 305(71.8%) said from continue education programme, 228(53.6%) said from textbooks, while 125(29.4%) said from radios and televisions. As regards what they think patient teaching entails, only 214 (50.4%) of them got it right and said that patient teaching entails identifying patient learning needs, planning and carrying out teaching, evaluation and documentation. On which categories of patients that need patient teaching, majority 397 (93.4%) of them got it right by choosing the option ñevery patientò. On the approaches to patient teaching, majority 346(81.4%) said nurse initiated approach, 303(71.3%) said patient initiated approach, while 209(49.2%) said family initiated approach. The above table showed that nurses had excellent knowledge of the categories of patients that need patient teaching, good knowledge for nurse initiated approach and patient initiated approach and poor knowledge for family initiated approach as approaches to patient teaching.

Table 3: Respondents knowledge of the content and context of patient teaching.

n = 425

Items	UNTH (n=293)	NOHE (n=132)	Total	X^2	P-VALUE
Four (4) areas covered in patient teaching*					
Health promotion +	278(94.9%)	124(93.9%)	402(94.6%)		
Illness/injury prevention+	262(89.4 %)	116(87.9%)\	378(88.9%)	0.705	0.983
Restoration of health+	241(82.3%)	104(78.8%)	345(81.2%)		
Adaptation of altered health+	203(69.3%)	96(72.7%)	299(70.4%)		
Client support function	84(28.7%)	35(26.5%)	119(28.0%)		
Health management	85(29.0%)	42(31.8%)	127(29.9%)		
Information needed to identify patients learning needs *	259(88.4%)	119(90.2%)	378(88.9%)		
Health history+	213(72.7%)	92(69.7%)	305(71.8%)		
Age +	186(63.5%)	69(52.3%)	255(60.0%)		
Cultural factors +	73(24.9%)	25(18.9%)	98(23.1%)		
Learning style +	71(24.2%)	22(16.7%)	93(21.9%)		
Clients support system +	193(65.9%)	72(54.5%)	265(62.4%)	4.720	0.858
Physical examination +	121(41.3%)	49(37.1%)	170(40.0%)		
Health literacy +	151(51.5%)	54(340.9%)	205(48.2%)		
Learning readiness +	87(29.7%)	32(24.2%)	119(28.0%)		
Motivation	181(61.8%)	69(52.3%)	250(58.8%)		
Special needs of the patients noted.					
Environments for teaching patients in the hospital*	278(94.2%)	126(95.5%)	402(94.6%)		
Bedside +	231(78.8%)	100(75.8%)	341(77.9%)		
During ward rounds +	259(88.4%)	110(83.3%)	369(86.8%)		
In the clinics +	64(21.8%)	15(11.4%)	79(18.6%)	4.908	0.297
In the home	17(5.8%)	17(5.3%)	24(5.6%)		
In the school					

***Responses not mutually exclusive**

+ Correct option

The results on Table 3 show respondents knowledge of content and context of patient teaching. On the four areas covered in patient teaching, majority of respondents 402 (94.6%) said health promotion, followed by illness/injury prevention, 378 (88.9%), restoration of health 345 (81.2%), while 299 (70.4%) indicated adaptation of altered health. Information needed to identify patients learning needs during assessment of patients centered on the following ñhealth historyò 378(88.9%), ñAgeò 305 (71.8%); ñPhysical examinationò 265 (62.4%); cultural factors 255(60.0%); ñspecial needs of the patients notedò 250 (58.8%);

ñLearning readinessò 205 (48.2%); ñHealth literacyò 170 (40.0%); ñLearning styleò 98(23.1%); and ñclient support systemò 93 (21.9%). As regards the environments for teaching patients in the hospital, majority of the nurses got it right as follows; 402(94.6%) said bedside, 331(77.4%) said during ward rounds, while 369(86.8%) said in the clinics.

From the findings, researcher concludes that the respondents had excellent knowledge of health promotion and good knowledge of illness/injury prevention, restoration of health and adaptation of altered health as four areas covered in patient teaching. Also the nurses showed good knowledge of health history and age and moderate knowledge for cultural factors and physical examination and poor knowledge for health literacy and learning readiness as information needed to identify learning needs of patients in the hospital, respondents had excellent knowledge of bedside, good knowledge of ward rounds and clinics.

Table 4: Respondents knowledge of strategies to patient teaching

Items	UNTH n=293	NOHE n=132	Total n=425	X^2	P VALUE
Strategies for teaching*					
The Nurse must arrange for a favourable and positive climate for learning.+	218(74.4%)	106(80.3%)		7.431	0.115
The nurse must set clear cut objectives and purpose for patient learners. +	216(73.7)	93(70.5%)	324(76.2%) 309(72.7%)		
The nurse must focus on patient care instead of patient teaching.	45(15.4%)	10(7.6 %)			
The nurse must balance intellectual and emotional components of learning and share feelings and thoughts with learner in a democratic way+	201(68.6%)	70(53.5%)	55(12.9%) 271(63.8%)		

***Responses not mutually exclusive**

+ Correct options

The result on Table 4 shows responses regarding the strategies to patient teaching. The result showed that majority 324 (76.2%) of the nurses correctly identified ñarranging for a favourable and positive climate for learning, followed by ñset clear cut objectives and purpose for patient learners 309(72.7%), ñBalance intellectual and emotional components of learning and share feelings and thoughts in a democratic wayò 271 (63.8%), ñthe learning resources and make it available organizing to the patient learners 235 (55.3%), , while only 55(12.9%) identified ñfocus on patient care instead of patient teaching which is a wrong option.

Table 5: Respondents knowledge of types and methods of patient teaching nurses adopted in patient teaching.

n = 425

Items	UNTH n=293	NOHE n= 132	Total n=425	X^2	P VALUE
Types of patient teaching					
Planned (formal) method +	235(80.2%)	109(82.6%)	344(80.9%)		
Open method	104(35.5%)	47(35.6%)	151(35.5%)	1.109	0.775
Unplanned (informal) spontaneous or on the spot+	240(81.9%)	96(72.7%)	336(79.1%)		
Closed method	43(14.7%)	16(12.1%)	59(13.9%)		
Teaching methods used in teaching adults *					
Discussion method (one-to-one/group discussion). +	256(87.4%)	109(82.6%)	365 (85.9%)	5.107	0.884
Printed and audio visual materials +	177(60.4%)	80(60.6%)	257(60.5%)		
Computer assisted learning program +	59(20.1%)	20(15.2%)	79(18.6%)		
Modeling and role play+	146(49.5%)	47 (35.6%)	192(45.2%)		
Demonstration /simulation+	244(83.3%)	102(77.3%)	275(81.4%)		
Lecture method (explanation and description)+	184(62.8%)	85(64.4%)	269(63.3%)		
Discovery/problem solving+	95(32.4%)	38(28.8%)	133(31.3%)		
Question and answer method +	156(53.2%)	58(43.9%)	214(50.4%)		
Health literacy	48(16.4%)	23(17.4%)	71(16.7%)		
Abridged method	17(5.8%)	7(5.3%)	24(5.6%)		
Teaching tools used for children *	277(94.5%)	119(90.2%)	396(93.2%)	9.826	0.043
Story books +	212(72.4%)\	79(59.8%)	291(68.5%)		
Dolls+	193(65.9%)	89 (67.4%)	282(66.4%)		
Puppet play +	62(21.2%)	44(33.3%)	106(24.9%)		
Health fair +	134(45.7%)	46(34.8%)	180(42.4%)		
Motivation					
+Correct option					
***Responses not mutually exclusive**					

The results on Table 5 revealed that majority 344 (80.9%) of the nurses indicated correctly the types of patient teaching as ñplanned (formal)ò while 336 (79.1%) of nurses as ñunplanned (informal) ñspontaneous or on the spot typeò. The teaching methods used in teaching adult patients known by majority of the nurses were ñdiscussion methodò (one-to-one or group discussion 365(85.9%); ñlecture methodò (explanation and description) 269 (63.3%); ñprinted and audio visual materialsò 257 (60.5%); ñdemonstration/simulationò 244

(81.4%); ñQuestion and answer methodò 214 (50.4%); Other less commonly known include modeling and role playò 192 (45.2%); ñDiscovery/problem solving method133 (31.3%);and few nurses 79(18.6%) knew about ñComputer assisted learning programmeò.

As regards tools that are used for teaching children respondents were familiar with include: ñstory booksò 396 (93.2%); followed by ñpuppet playò 282 (66.4%); and ñDollsò 291 (68.5%). ñHealth fairò attracted the least responses106 (24.9%).

From the above results, researcher concludes that respondents had good knowledge of types of patient teaching, had good knowledge of discussion, demonstration/simulation and moderate knowledge of printed and audio-visual materials, lecture method and question and answer method as teaching methods used for adults but showed poor knowledge Computer assisted learning modeling and role play and discovery/problem solving. As for teaching tools used for teaching children, respondents had excellent knowledge of story books, moderate knowledge for dolls and puppets and poor knowledge for health fear.

Objective 2: **To access nurses attitude towards patient teaching.**

This objective was achieved by analyzing responses to items 22-30 in the questionnaire. Data was analyzed item by item. This yields means and standard deviations presented on Table 6.

Table 6: Respondents responses on attitude to patient teaching

n=425

S/N	ITEMS	U NTH (n=293)						NOHE (n=132)							
		SA	A	D	SD	X	St dev	SA	A	S	SD	X	St dev	t-test	p-value
22	As a nurse, I view patient teaching as a core responsibility for nurses	198	70	18	7	3.57	0.72	89	34	6	3	3.58	0.69	-0.226	0.281
23	I value my teaching role as a nurse	172	116	5	0	3.57	0.53	74	55	3	0	3.54	0.54	0.573	0.567
24	I like teaching patients	131	150	6	6	3.39	0.63	58	70	4	0	3.41	0.55	-0.366	0.714
25	I see patient teaching as a mere waste of time*	2	18	29	253	1.21	0.58	1	9	24	98	1.34	0.64	-2.018	0.039
26	I do not allow my nursing duty to prevent me from teaching patients	43	121	122	7	2.68	0.75	16	50	59	7	2.57	0.77	1.443	0.150
27	To make way for patient teaching, I try to be friendly to my patients by introducing myself to them on admission	121	138	33	1	3.29	0.67	72	42	17	1	3.40	0.74	-1.482	0.139
28	I usually assess patients on admission to identify their learning needs	89	178	23	3	3.20	0.62	60	67	4	1	3.41	0.59	-3.193	0.002
29	As a habit, I read patient folders to assess areas where patenting teaching is needed	76	142	71	4	2.99	0.75	44	46	42	0	3.02	0.81	-0.316	0.752
30	I always engage in extensive reading of my patients different conditions to increase my knowledge as to give first hand information to them.	95	146	47	5	3.13	0.73	55	57	19	1	3.26	0.73	-1.688	0.096
	Means of means					3.00	0.37					3.06	0.37	-1.396	0.163

* Negative scored item: the higher the mean score, the more negative the attitude towards

The result on Table 6 shows the mean scores and standard deviations of each of the 9 items on nurses attitude towards patient teaching on a modified 4 point Likert type scale giving a critical scale mean of 2.5. Mean scores from 2.5 and above for any item is considered positive attitudes towards patient teaching except for negative worded statements. Mean scores for the items ranged from 1.21 (SD = 0.58) to 3.57 (SD = 0.53) for UNTH nurses and 1.34 (SD = 0.64) to 3.58 (SD = 0.69) for NOHE nurses.

The result shows that out of nine (9) items used to elicit responses on nurses attitude towards patient teaching, eight (8) items had mean score values above 2.5 which is the critical mean, ranging from 2.68 (SD = 0.75) to 3.57(SD = 0.72) for UNTH nurses and 2.57 (SD = 0.77) to 3.58 (SD = 0.69) for NOHE nurses. UNTH nurses had higher mean scores for three (3) items than NOHE nurses, while NOHE nurses had higher mean scores for five (5) items than UNTH nurses, but there is no significant difference in their responses to attitude towards patient teaching ($P>0.05$) for the 8 items. One item, ñI usually assess patients on admission to identify their learning needsò with mean scores of 3.20 (SD=0.62) for UNTH nurses and 3.14(SD=0.59) for NOHE nurses shows a significant difference in the attitude towards patient teaching between UNTH and NOHE nurses ($P<0.05$). This implies that even though both UNTH and NOHE nurses agree with this item, UNTH nurses agreed more on the item than NOHE nurses.

The remaining (one) item, ñI see patient teaching as a mere waste of timeò had mean scores of 1.21(SD=0.58) for UNTH nurses and 1.34 (SD=0.64). The mean scores are lower than 2.50, which is the critical mean for the subscale and it is significant ($P<0.05$). This implies that even though both nurses from UNTH and NOHE disagree with this item, UNTH nurses had a higher disagreement than the NOHE nurses with group mean scores of 3.00 (UNTH) and 3.06 (NOHE) the result generally show that the nurses have positive attitude towards patient teaching.

Objective 3: To assess whether nurses practice patient teaching.

To achieve this objective, responses to items 31-35 were used. The result was presented in Table 7.

Table 7: Respondents practice of patient teaching

n = 417

Items	UNTH (n=293)	NOHE (n=132)	Total n=425	X^2	P-VALUE
Do you engage in patient teaching?					
Yes	288(98.3%)	129(97.7%)	417(98.1%)	0.158	0.691
No	5(1.7%)	3(2.3%)	8(1.9%)		
Proffered reasons by those who engage in patient teaching* (n=417)					
Based on patients need	(48.3%)	56(43.4%)	195(46.8%)		
Creating awareness	263(91.3%)	91(70.5%)	354(84.9%)		
For better outcome	194(67.4%)	73(56.6%)	267(64.0%)		
Better understanding	278(96.5%)	97(75.2%)	375(89.9%)		
Easy patient compliance	199(69.1%)	80(62.0%)	279(66.9%)		
For information	249(86.5%)	92(71.3%)	341(81.8%)		
Good health promotion	275(95.5%)	91(70.5%)	366(87.8%)		
For learning	191(66.3%)	72(55.8%)	263(63.1%)		
Patient understanding	238(82.6%)	43(33.3%)	281(67.4%)		
Prevention of illness	155(53.8%)	56(43.4%)	211(50.6%)		
Proper management	261(90.6%)	76(58.9%)	337(80.83%)		
For motivational	180(62.5%)	38(29.5%)	218(52.3%)		
For familiarization	132(45.8%)	23(17.8%)	155(37.2%)		
It is my duty to teach patients	119(41.3%)	34(26.4%)	153(36.7%)		
To alleviate anxiety	115(39.9%)	46(35.7%)	116(38.6%)		
Change of behaviour	121(42.0%)	49(38.0%)	170(40.8%)		
To correct misconceptions	194(67.4%)	56(43.4%)	250(60.0%)		
For quick recovery	116(40.3 %)	29(22.5%)	145(34.8%)		
Psychological support	104(35.4%)	24(18.6%)	126(30.2%)		
Alleviate pain/suffering	125(43.4%)	27(20.2%)	140(33.6%)		
To prevent complications	114(39.6%)	26(20.2%)	140(33.6%)	0. 246	0.970
Correction of wrong impression	155(53.8)%	30(23.3%)	185(44.4%)		
Frequency of engaging in patient teaching* (n=417)					
Once weekly	47(16.3%)	23(17.8%)	70(16.8%)		
Twice weekly	26(9.0%)	12(9.3%)	38(9.1%)	1.632	
Daily	190(66.01%)	82(63.6%)	272(65.2%)		0.201

Monthly	25(8.7%)	12(9.3%)	37(8.9%)
Allocation of special time to patient teaching			
Yes	55(19.1%)	18(14.0%)	73(17.5%)
No	233(80.9%)	111(86.0%)	344(82.5%)
Answers to open ended questions for those who do not engage in patient teaching * (n=8)			
Nonpayment of teaching allowance	3(60, 0%)	1(50.0%)	4(50.0%)
No time for teaching	2(40.0%)	0(0.0%)	2(25.0%)
Patients condition (i.e. unconscious)	3(60.0%)	2(66.7%)	5(62.5%)
Tight ward activities	1(20.0%)	1(33.3%)	2(25.0%)
Language barrier	2(40.0%)	1(33.3%)	3(37.5%)
Environmental factor	1(20.0%)	1(33.3%)	2(25.0%)

***Responses not mutually exclusive**

Results on Table 7 show responses on practice of patient teaching. As regards practice of patient teaching, majority 417(98.1%) of respondents indicated that they engage in patient teaching, while 8(1.9%) indicated that they do not practice patient teaching. However, the responses of the respondents is not significantly different between the two institutions (P>0.05). This implies that nurses regard patient teaching as core nursing responsibility and hence there was no significant different in the practice of patient teaching in the two institutions under study.

The major reasons why nurses engage in patient teaching included ï ñfor better understandingò 377(80.8%); ñgood health promotionò 366(87.8%); ñcreating awarenessò 354 (84.9%); ñproper managementò 337(80.8%); and ñfor informationò 34 (81.8%). The major reasons why some nurses (n=8) do not engage in patient teaching included: ñI am not being paid teaching (allowanceò 4 50.0%); ñpatient condition, that is unconsciousnessò 5(62.5%); ñNo time for teachingò 2 (25.0%); a language barrierò 3(37.5%); and ñenvironmental factorò 2(25.0%). Majority 272(65.2%) of the respondents engage in patient teaching on daily basis;

70(16.8%) ñonce weekly,ò 38(9.1%) weekly, and 37(8.9%) ñmonthlyò. Most of respondents have no special time allocated to patient teaching, 344 (82.5%), while 73 (17.5%) had.

Objective 4: To identify strategies and types of patient teaching adopted by nurses.

To realize this objective, items 36-45 in the questionnaire were used. The data collected was analyzed using frequencies, percentages, chi-square and p-value. The result was presented on Table 8.

Table 8: Respondents responses on the types of patient teaching employed by nurses. n= 425

Items	UNTH n=293	NOHE n=132	Total n=425	X^2	P-value
Planning for patient teaching					
Yes	123(42.7%)	46(35.7%)	169(40.5%)	1.837	0.175
No	165(57.3%)	83(64.3%)	248(59.5%)		
Types of patient teaching often used by nurses.					
Planned (formal/structured) +	51(41.5%)	14(30.4%)	65(38.5%)		
Open type	46(37.4%)	17(37.0%)	95(22.8%)	0.709	0.871
Unplanned(informal or spontaneous/on the spot) +	82(66.7%)	24(52.2%)	106(62.7%)		
Closed type	12(7.8%)	3(6.5%)	15(8.9%)		
Evaluation of patient Teaching					
Yes	246(85.4%)	117(90.7%)	363(87.1%)	2.204	0.138
No	42(14.6%)	12(9.3%)	54(12.9%)		
Frequency of evaluation of patient teaching					
Always	100(40.7%)	55(47.0%)	155(42.7%)	2.263	0.520
Sometimes	110(44.7%)	50(42.7%)	160(44.1%)		
Rarely	35(14.2%)	12(10.3%)	47(12.9%)		
Reasons for evaluating patient teaching*					
To know the effect of teaching	161(65.4%)	60(51.3%)	221(60.9%)		
For continuity of care	144(58.5%)	51(43.6%)	195(53.7%)		
For change of attitude	189(70.3%)	32(36.2%)	216(59.9%)		
To assess patient understanding	103(41.9%)	68(58.1%)	169(46.6%)	0.977	0.323
To ascertain if healing takes place	114(46.3%)	55(47.0%)	171(47.1%)		
To access improvement in heath behavior	101(41.1%)	40(34.2%)	146(38.8%)		
To confirm if objectives are met	94(38.2%)	28(23.9%)	122(33.6%)		

To encourage patients to learn more	98(39.8%)	29(24.8%)	127(35.0%)		
Documentation of patient teaching					
Yes	110(34.7%)	39(40.2%)	149(36.0%)		
No	209(65.3%)	58(59.8%)	267(64.0%	2.386	0.496
Frequency of documentation					
Always	38(37.3%)	18(39.1%)	56(37.8%)		
Sometimes	28(27.5%)	13(28.3%)	41(27.7%)		
Rarely	29(28.4%)	9(19.6%)	38(25.7%)		
Information documented *					
Date and time of teaching	89(80.9%)	21(53.8%)	110(73.8%)		
Disease condition of the patient	80(72.7%)	16(41.0%)	93(62.3%)		
Extent of learning	71(64.5%)	22(56.4%)	93(62.3%)		
Exclusive breast feeding	63(57.3%)	19(48.7%)	82(55.0%)		
Health history	52(51.0%)	14(30.4%)	66(44.6%)		
Health topic	43(42.2%)	16(34.8%)	59(39.9%)		
Patient data	44(43.1%)	19(41.3%)	63(42.6%)		
Patient attitude and response to teaching	47(46.6%)	16(34.8%)	63(42.6%)		
Vital signs	41(40.2%)	25(54.3%)	66(44.6%)		
Personal hygiene	21(20.6%)	14(30.4%)	35(23.6%)		
Matter arising in the course of teaching	59(57.8%)	22(47.8%)	81(54.7%)		
Medication given	47(46.1%)	20(43.5%)	59(39.6%)	0.162	0.687
Patient improvement	40(39.2%)	19(41.3%)	59(39.9%)		
Outcome of teaching	33(32.4%)	16(34.8%)	49(31.1%)		
Special chart for documentation					
Yes	39(38.2%)	16(34.8%)	55(37.2%)		
No	63(61.8%)	30(65.2%)	93(62.8%)	0.034	0.983
If no, where do you document patient teaching					
Nurses chart	27(42.9%)	13(43.3%)	40(43.0%)		
Plain sheet	16(25.4%)	8(26.7%)	24(25.8%)		
Note book	20(31.7%)	9(30.0 %)	29(31.2%)		

*** Responses not mutually exclusive**

The results on Table 8 showed that majority 248 (59.5%) of the respondents do not plan their patient teaching, while only 169 (40.5%) of the respondents plan their patient teaching. This result is not significantly different between the two health institutions ($p > 0.05$).This may

because most nurses identify patients learning needs while carrying out procedures on them and same is taken care of on spot. Result also revealed that majority 106(62.7%) of the nurses out of the 169 nurses that plan for their patient teaching indicated that they always use unplanned (informal or spontaneous/on the spot type of patient teaching, while 65(38.5%) said that they always use planned (formal/structural). However, this result is not significantly different between the two health institutions of study (P>0.05).

On whether the nurses do evaluate their patient teaching, majority 363(87.1%) of them indicated that they do so, while 54(12.9%) said that they do not. This result is not significantly different between the two health institutions of study (P>0.05). As regards how often the respondents evaluate their patient teaching, slightly above one quarter 155(42.1%) said that they do it always, 160(44.1%) said that they do it sometimes; 47(12.9%) of them said that they rarely do it; while 1(0.3%) said that she does not do it at all. The major reasons why the nurses evaluate their patient teaching include;

ñTo know the effect of their teachingò, 221(60.9%); ñfor change of attitudeò 216(59.5%) and for ñcontinuity of careò 195(53.7%).

On whether nurses document their patient teaching, majority 249(64.5%) of the nurses indicated that they do not document their patient teaching, while only 148(35.5%) indicated that they do document their patient teaching.

On how often these 148 nurses document their evaluation of patient teaching, 56(37.8%) said that they do so always; 41(27.7%) of them said sometimes; 38(25.7%) of them said rarely. The information nurses document following patient teaching include; ñdateò and ñtimeò of teaching 108(73.0%) ñdisease condition of the patientò 93(62.8%) ñExtent of learningò 92(62.2%). ñMatters arising in the course of teachingò 81(54.7%); ñMedication givenò 67(45.3%) and ñvital signò 66(44.6%) on whether nurses do have special chart for documenting their patient teaching, 55(37.2%) indicated that they do, while 93(62.8%)

indicated they do not. This is not significantly different between the two health situations under study (P>0.05).

As regards where they do the documentation, out of the majority 93(62.8%) of nurses who indicated that they do not have special chart for documenting patient teaching, 24(25.8%) of them said that they use plain sheet for the documentation; while 29(31.2%) of them said that they use note book for documentation.

Objective 8: To determine challenges nurses encounter in patient teaching

This objective was achieved using question 46 and result was presented on Table 9.

Table9: challenges nurses encountered in patient teaching.

n = 425

Items	**UNTH**	**NOHE**	**Total**	**X^2**	**P-value**
Challenges	**N=293**	**N=132**	**N=425**		
Challenges of patient teaching.*					
Age determination	194(67.4%)	83(64.3%)	277(66.4%)		
Time constraints	247(85.8%)	79(61.2%)	326(78.2%)		
Lack of co-operations	234(81.3%)	80(62.0%)	314(75.3%)		
Cultural and religious beliefs	249(86.5%)	108(83.7%)	357(85.6%)		
Communication barrier	222(77.1%)	73(56.6%)	295(70.7%)		
Denial syndrome	217(75.3%)	84(65.1%)	301(72.2%)		
Distraction	182(63.2%)	80(62.0%)	262(62.8%)		
Disagreement	185(64.2%)	69(53.5%)	254(60.9%)		
Deaf and dumb patient	85(29.5%)	34(26.4%)	119(28.5%)		
Ignorance and non challant attitude of patient	216(75.0%)	77(59.7%)	293(70.3%)		
Stress	256(88.9%)	110(85.3%)	366(87.8%)		
Lack of teaching aids	247(85.8%)	95(73.6%)	342(82.0%)		
Illiteracy	237(82.3%)	91(70.5%)	328(78.7%)		
Negative attitude of some patients	173(60.1%)	70(54.3%)	243(58.3%)		
Shortage of time	199(69.1%)	67(51.9%)	266(63.8%)		
Apathy in some patients	141(49.0%)	57(44.2%)	198(47.5%)		

Busy work schedule	182(63.2%)	76(58.9%)	258(61.9%)
Economic status of the patient	63(21.9%)	33(25.6%)	96(23.0%)

*** Responses not mutually exclusive**

The result on Table 9 shows the challenges nurses encounter with patient teaching. Major ones include ñstressò 366 (87.8%); ñcultural and religiousò beliefsò 357 (85.6%), ñlack of teaching aids342 (82.0%) and time constraints 326 (78.2%)

Hypotheses Testing

Hypothesis 1: There will be no significant difference in the knowledge of patient teaching between nurses of the two institutions.

To test this hypothesis, the data generated from questions 13-21 were subjected to student t-test analysis. The average scores obtained out of the thirty eight (38) correct answers therein were used to calculate mean scores and standard deviation for the analysis. The result of the analysis was presented on Table10.

Table10: t-test comparison of mean scores on knowledge of patient teaching between nurses of the two health institutions.

n = 425

Institutions	**N**	**Mean**	**Std dev.**	**df**	**t**	**P-value**
UNTH	293	26.54	7.18			
NOHE	132	23.33	7.54	423	2.892	0.004
Total	425	25.54	7.304			

The result presented on Table 10 above shows a significant difference in the knowledge of patient teaching between nurses of the two health institutions studied (P<0.05). This implies

that the nurses in UNTH are more knowledgeable in patient teaching than NOHE nurses. The null hypothesis was therefore rejected (P<0.05).

Hypothesis 2: There will be no significant difference in the attitude of nurses of different health institutions toward patient teaching. Data generated from items 22-30 were subjected to t-test analysis in order to test this hypothesis.

The result was presented on Table 11.

Table 11: t –test comparison of mean scores on the attitude of nurses of the two institutions towards patient teaching.

n = 425

Institutions	N	Mean	Std dev.	df	t	P-value
UNTH	293	3.00	0.37			
NOHE	132	3.06	0.37	423	-1.396	0.163
Total	425	3.02	0.37			

The result on Table 11 above shows no statistical significant difference in the attitude of nurses towards patient teaching between the UNTH and NOHE nurses (P>0.05). The null hypothesis is therefore accepted (P>0.05).

Hypothesis 3: There will be no significant difference in the types of patient teaching adopted by nurses of the two institutions. To test this hypothesis, the raw score generated from question 37 was subjected to analysis using student t-test. The average scores obtained for the two (2) correct answers therein were used to test this hypothesis. The result of analysis was presented on Table 12.

Table 12: t-test comparison of mean scores on types of patient teaching adopted by UNTH and NOHE nurses.

n = 425

Institutions	N	Mean	Std dev.	df	t	P-value
UNTH	293	0.99	0.54			
NOHE	132	0.55	0.53	423	2.581	0.010
Total	425	0.95	0.54			

The result on Table 12 above shows a significant difference in the types of patient teaching adopted by nurses of the two institutions. This implies that the nurses in UNTH adopted better type of patient teaching than nurses in NOHE. The null hypothesis was therefore rejected ($P<0.05$).

Hypothesis 4: There will be no significant difference in the practice of patient teaching between UNTH and NOHE nurses.

To test this hypothesis, the raw scores generated from items 31, 35, 36, 38 and 41 were subjected to student t-test.

The average score obtained out of the five expected answers therein were used to test the hypothesis. The result of the analysis is presented on Table 13.

Table 13: t – test comparison of mean scores on practice of patient teaching between UNTH and NOHE nurses.

n = 417

Institutions	N	Mean	Std dev.	df	t	P-value
UNTH	283	2.83	1.17			
NOHE	129	2.76	1.08	415	0.552	0.581
Total	417	2.81	1.14			

The result on Table 13 above showed no statistical significant difference in the practice of patient teaching between UNTH and NOHE nurses. The Null hypothesis was accepted (P>0.05).

Hypothesis 5: There will be no significant difference in the practice of patient teaching among nurses with different years of work experience.

To test this hypothesis, the raw scores generated from questions 31, 35, 36, 38 and 41 were subjected to one way analysis of variance (ANOVA). The result of the analysis was presented on Tables 14 and 15.

Table 14 Adjusted mean scores and standard deviations on practice of patient teaching of nurses with different years of work experience.

Years of work	**N**	**Mean**	**Std dev.**
1-5 years	52	2.27	0.77
6-10 years	117	2.83	1.14
11-20 years	136	2.73	1.16
Above 20 years	112	3.13	1.16
Total	417	2.81	1.14

Result in Table 14 shows that nurses who had worked above 20 years had the highest mean score in patient teaching.

Table 15: Summary of one-way analysis of variance (ANOVA) on patient teaching between nurses with different years of work experience.

Sources of variation	Sum of squares	df	Mean squares	F	P-value
Between groups	27.270	3	9.090	7.333	0.000
Within group	511.996	413	1.240		
Total	539.266	416			

The result on Table 15 above showed the summary of analysis of variance (ANOVA) on patient teaching among nurses with different years of work experience. There is a highly significant difference in the practice of patient teaching among nurses with different years of work experience. This implies that the higher their years of work experience, the better their practice of patient teaching. The null hypothesis was therefore rejected ($P<0.05$).

Hypothesis 6: There will be no significant difference in the practice of patient teaching among nurses with different level of educational qualification.

To test this hypothesis, the raw scores generated from 31, 35, 36, 38 and 41 were subjected to one way analysis of variance (ANOVA). The results of the analysis were presented on Tables 16 and 17.

Table 16: Adjusted mean scores and standard deviation on patient teaching of nurses based on educational qualification.

n = 425

Educational qualification	N	Mean	Std. dev.
Registered nurse	34	2.41	0.99
Registered nurse/midwife	219	2.64	1.08
BSC Nursing/BNSC	120	3.09	1.24
Postgraduate nursing	18	3.11	0.96
Others	26	3.15	1.12
Total	417	2.81	1.14

The result on Table 16 shows the adjusted mean scores and standard deviations on patient teaching between nurses with different educational qualification.

Table 17: Summary of one-way analysis of variance (ANOVA) on patient teaching between nurses with different educational qualification.

Sources of variation	Sum of squares	df	Mean square	F	p-value
Between groups	25.658	4	6.414	5.145	0.000
Within groups	513.609	412	1.247		
Total	539.266	416			

The result on Table 17 shows the result of one way analysis of variance (ANOVA) on patient teaching qualifications. The result shows a significant difference on patient teaching between nurses with different educational qualification ($P<0.05$). This implies that the higher the educational qualification the better their practice of patient teaching. The null hypothesis was therefore rejected ($P<0.05$).

This implies that the higher their level of educational qualification the better their practice of patient teaching. The null hypothesis was therefore rejected (P<0.05).

Hypothesis 7: There will be no significant difference in the practice of patient teaching between male and female nurses.

To test this hypothesis, the raw scores generated from questions 31, 35, 36, 38 and 41 were subjected to student t-test analysis. The result of the analysis was presented on Table 18.

Table 18: t-test comparison of mean scores on practice of patient teaching among male and female nurses.

Gender	N	Mean	Std. dev.	df	t	p-value
Male	10	3.50	1.18			
Female	417	2.79	1.13	415	1.958	0.051
Total	417	2.81	1.14			

The result on Table 18 above shows no significant difference in the practice of patient teaching among male and female nurses investigation.

The null hypothesis was therefore accepted (P>0.05).

Summary of findings

Major findings include the following:

- The mean age of the nurses used for this study is 39.8±8.3 yrs.
- The majority of the nurses had knowledge of patient teaching mostly from nursing training schools.
- U.N.T.H Nurses had better knowledge of patient teaching than NOHE nurses.
- Nurses of both institutions of study had a positive attitude towards patient teaching.

- Majority of the nurses practice patient teaching using the unplanned or spontaneous or on the spot type of patient teaching most of the times.
- Majority of the nurses do evaluate their patient teaching.
- Majority of the nurses do not document their patient teaching and those that do so do not have special chart for documenting patient teaching. Worse still, majority of the nurses lacked knowledge of information to be documented during evaluation.
- There is a significant difference in the knowledge of patient teaching between nurses of the two institutions.
- There is no significant difference in the attitude of the nurses towards patient teaching. This implies that from the two institutions investigated, nurses have positive attitude towards patient teaching. Although UNTH nurses had a higher positive attitude than NOHE nurses, however the difference is not statistically significant.
- There is no significant difference in the methods adopted in patient teaching between nurses of the two institutions. This shows that UNTH and NOHE nurses adopt similar methods for patient teaching.
- There is no significant difference in the practice of patient teaching among nurses of the two institutions studied.
- There is a significant difference in the practice of patient teaching among nurses with different years of work experience.
- There is a significant difference in the practice of patient teaching among nurses with different educational qualifications.
- There is no significant difference in the practice of patient teaching among male and female nurses.

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter discusses the major findings of the research work with regard to the set objectives and hypothesis. Included here also are conclusion, limitation of the study, recommendations, suggestion for further studies and summary of this research work.

Discussion of major findings

Nurses knowledge of meaning and approaches to patient teaching.

Majority of the nurses had correct information about meaning and approaches to patient teaching and their major sources of information were from their nursing training schools, seminars and workshops organized for nurses and through continuing education programmes. The reasons adduced to this may be that patient teaching is included in the curriculum for nurses. (N&MCN curriculum, 2006). Also, seminars and workshops and continuing education programmes serve as a refresher courses for nurses. In addition, nurses may have learnt more about meaning and approaches to patient teaching by assessing the internet and other publications. It is also possible that they may have utilized these approaches in their encounter with patients. Nowadays nurses are embarking on one higher educational programmes or the other for example they health education, nursing education etc, and they are exposed to information relating to meaning and approaches to patient teaching and therefore, it is not surprising that majority of the nurses were familiar with meaning and approaches of patient teaching. This finding agrees with studies by Lin Chang et. al, (2011) that majority of nurses have knowledge on or all care but disagrees with Kotronoulas et al, (2009) who reported that majority of the nurses in their study possess

limited sexual knowledge and communication skills in teaching sexual health issues to patients with cancer.

Nurses knowledge of content and context of patient teaching.

The findings of the study revealed that majority of the nurses knew about the following content of patient teaching: ñHealth promotionò, illness/injury prevention, ñrestoration of health and adaptation of altered healthò. Nurses having good information on this may be related to the fact that they may have been teaching their patients in these areas and are therefore familiar with the content of patient teaching.

Also, majority of the nurses were familiar with information needed to assess patients requiring patient teaching such as ñHealth historyò, ñAgeò, ñphysical examination and cultural factorsò and so on. The above information is found in the nursing process form which nurses regularly used to assess their nursing care needs. As regards the context, that is environments for patient teaching in the hospital, majority of the nurses were familiar with them such as ñBesideò, ñward roundsò and ñClinicsò. Most nurses utilized these environments in the delivery of nursing care as well as teaching their patients. This finding agrees with the findings of Kemppainen et. al, (2013) that majority of the nurses consider health promotion which is an aspect of patient teaching important.

Nurses Knowledge of strategies to patient teaching.

The findings revealed that majority 76.2% of the respondents knew that the nurses ñmust arrange for a favourable and positive climate for learningò ñmust set clear cut objectives and purpose for patient learningò 72.7%, organize learning resources and make it available to the patient learnerò and ñBalance intellectual and emotional components of learningò as well as ñshare feelings and thoughts with patient learners in democratic way 63.8%. This finding is

not a surprise because nurses are taught these strategies very well in their nursing training schools and as such they are expected to be grounded in the knowledge of these strategies. The finding is in keeping with what Berman et.al, (2012) stated that an environment can detract from or assist learning, noise or interruptions usually interfere with concentration. Setting clear cut objectives and purpose is in agreement with the view of Pramilla (2010) who documented that for any educational programme to be effective, the purposes and objectives must be clearly stated in order to select the right subject matter, the clinical experience and the right method to evaluate the teaching-learning process. Organizing the learning resources and making them available to the learners is in keeping with what Iwu et. al, (2006) stated that to ensure transfer of learning the nurse should test these resources and ensure that they are functioning effectively before using them to teach the patient.

As regards the balancing of intellectual and emotional components of learning strategy, Berman et al, (2012) stated that the physical readiness, emotional readiness and the cognitive readiness must be available for patients to learn effectively.

Nurses knowledge of types and teaching methods to adopt in patient teaching

On the aspect of types of patient teaching known to nurses, finding revealed that majority 80.9% of the respondents knew the types of patient teaching as planned, and 79.1% as unplanned. Majority 85.9% of the nurses were familiar with the teaching methods used in teaching adults such as ñdiscussion methodò, ñdemonstration/simulationò 81.4%, ñlecture methodò 63.3%, ñPrinted and audio visual materialsò 60.5%, ñquestion and answer sessionò 50.4%. The reason attributed to the above finding may be that most nurses have been using these methods in teaching patients. On the other hand, computer assisted learning programme as a teaching method for adults was not known to most nurses. This can be attributed to the

fact that computer usage in this country is still in the developing stage and as such the different uses in which computer can be used is not yet known by some nurses (Berman et. al, 2012). As regards tools used for teaching children, majority of the nurses were familiar with them such as ñstory booksò, dollsò and ñpuppet playò. Few nurses knew of ñHealth Fairò as a teaching tool for children. Nurses especially those in paediatric units were familiar with most of these tools used for children. The fact that majority of the nurses were not familiar with ñhealth fairò as a tool for teaching children may be because this particular tool is not used often in this country. The findings of this study showed that most of indices for assessing knowledge of nurses on patient teaching are all high indicating that the nurses have knowledge about patient teaching. Comparison between the knowledge about patient teaching between UNTH and NOHE nurses indicated UNTH nurses were more knowledgeable in patient teaching than nurses of NOHE. This might be attributed to the educational background and years of experience of nurses in UNTH who have more nurses with degree in Nursing and years of experience than NOHE who have more nurses with few years of experience and less educational background. This finding on knowledge of patient teaching is congruent with the findings of Oyetunde & Akinmeye (2015), Lin et. al, (2011), Alok et. al, (2013) in their studies on factors influencing practice of patient education among nurses at the University College Hospital Ibadan, Assessment of Knowledge, Attitude and practice of palliative care among nurses in selected hospitals in Addis Abba, and knowledge and attitude and practice of oral care by critical care nurses on patients with oral endotracheal tubes who reported that knowledge and practice of patient education among the nurses in UCH Ibadan was high and the knowledge was found to be significantantly associated with its practice. The result of this study disagrees with the findings of Oyetunde et. Al, (2015) who

reported that working experience of nurses does not determine whether nurses practice patient education or not.

This finding of this study is incongruent with the findings of pacific journal of cancer screening in tertiary level, teaching institution in rural India who reported that majority of the nursing staff in rural India may have inadequate knowledge about cervical cancer screening and attitudes and practices towards cervical screening could not be termed positive. This finding is attributed to their exposure and culture.

Nurses attitude towards patient Teaching

The study revealed that nurses of both institutions of study have positive attitude towards patient teaching. The reason for the above finding may be attributed to the fact these nurses regard patient teaching as their core duty.

This findings is in agreement with the report of Oyetunde et. al, (2015) who reported that nurses used in their study had positive attitude towards patient education. However, this finding of this study on attitude towards patient education contrasted with the findings of Aghakhani et. al, (2012) on a similar study who reported that most nurses used for the study believed that patient education was not their duties.

Also, Muttappallmal et. al, (2010) in his study on attitude and practice of Nurses in imparting Breast self examination to women reported that majority (90.3%) of the nurses had positive attitude in providing knowledge regarding risk factors of breast cancer and the purpose of performing breast self examination.

Teaching methods nurses used in patient teaching

Finding of the study revealed that majority of the nurses use the following teaching methods when teaching patients in this rank order:

ñDiscussion methodò (One-to-one/group discussion) ranked highest in the teaching methods used by nurses. Discussion method is an earnest conversation on one-on-one basis, a group of patientôs familiar and health care providers. The nurseôs preference for this teaching method may be traced to the nature of the patient that they care for. When a patient requires particular information that is pertinent to him, the best option for the nurse is to choose to dose on one-one-one basis. In order to maintain confidentiality and privacy of that particular patient. But where the nurse wants the full participation of the patients and change in attitude, group discussion is the best option. Demonstration is next on the rank of the teaching methods used by nurses. This is not a surprise because most of the procedures carried out on patients that required that the patient should be conversant with are usually demonstrated to the patient. Nurses demonstrate to these patients that demonstrated to the patient. Nurses demonstrate to these patients that have chronic illness and that need to maintain maximum health at home and reduce frequent hospitalization. Teaching method which is next on the rank is usually employed by nurses to assess whether the patients can return the demonstrations which the nurses have demonstrated to them. Nurses use demonstration/simulation teaching methods when teaching psychomotor skills to the patients and their families.

Lecture method is another teaching method which majority of the nurses use. Nurses used this method often when teaching cognitive behaviours to patients especially in the clinics and wards. Findings of the study also revealed that printed and audio-visual materials were teaching method used by nurses in teaching patients. The reason for using this method may be due to the fact that what is read, heard and seen is not easily forgotten. The finding of the study showed that question and answer method were employed by majority of the nurses in

patient teaching. The reason for the use of this teaching method may be for the nurses to find out the knowledge of patient, evaluate their patient teaching and to correct misconceptions.

Strategies and types of patient teaching adopted by nurses

Findings from the study showed that majority of the nurses arrange for a favourbale and positive climate. The reason for this action of nurses may be able to be adduced to the fact that no meaningful learning can take place in an environment that is noisy and unconducive ward or clinic. Findings of the study also revealed that the nurses set clear cut objectives and purpose when teaching their patients. The reason may be adduced to the fact that setting clear cut objectives help in selection of right subject matter, clinical experience and right method of evaluation of the learning process.

The study also showed that the Nurses balance the intellectual and emotional components of learning and share feelings and thoughts in a democratic way with patient learner. The reason for adopting this strategy by nurses is that the patient must be able to focus on things, have stable emotion and be able to think clearer for learning to take place. This reason is in agreement with the view of Berman et al, (2012) that physical readiness, emotional and cognitive readiness must exist for effective teaching and learning to take place.

The findings of the study revealed that the majority of the nurses adopt the unplanned (informal) spontaneous or on the spot method of patient teaching. The reason for adopting this method is that majority of the nurses does not have time to plan their patient teaching. Due to work overload. Most patient learning needs are detected when nurses are carrying out one procedure or the other and utilize the opportunity to teach the patient on the spot. Though it is reasonable to adopt this method instead of not engaging in patient teaching at all. However, unplanned (informal) spontaneous or on the spot method is fraught with some

mistakes like misinformation. This finding is in agreement with what Quinn (2010) documented that Advance planning is always preferred since it helps to eliminate errors and omissions.

Challenges nurses encounter in patient teaching

Findings of the study revealed that nurses encounter challenges with patient teaching. Most of the nurses identified stress as the major challenge that they encounter in patient teaching. They said that patient care is stressful and when patient teaching is added, the whole process becomes more stressful. Others identified cultural and religious beliefs as a challenge to patient teaching. This is not a surprise because certain cultures and religious beliefs impinge on patient teaching. Lack of teaching aids was also indicated by the nurses as a challenge to patient teaching. The reason adduced to this may be that teaching aids make patient teaching easy and interesting.

The result of study also revealed that lack of time constrains patient teaching.

This may be attributed to the fact that nurses run shifts and patient care takes time because nurses carryout many procedures on patients in order to complete the patients care for the shift and as such may not find the time to teach patients.

The above findings on the challenges encountered by nurses used for the study is in agreement with the findings of Oyetunde et. al, (2015), Aghakhani et. at, (2012) and Whitehead et. al, (2012) who reported that nurses experience, cultural barriers, workplace, insufficient staffing and complexity of patientsô condition were important factors that influence the practice of patient education. However, no matter the challenges that nurses encounter in patient teaching, nurses should as a matter of fact make patient teaching a priority care.

Implication of Findings to Nursing

- Knowledge of patient is important for nurses
- Reasons for the knowledge of patient teaching is also important
- None payment of teaching allowance to eight (8) nurses affected their attitude and practice of patient teaching
- Most nurses do not document patient teaching
- Most nurses do not also know what to document in the chart for patient teaching
- Nurseôs years of work experience affected patient teaching positively.
- Educational qualification also affected patient teaching positively.

Limitations of the Study

There was great dearth of literature in this area of study. The paucity of literature was compensated by some relevant literatures from related studies. The researcher encountered some difficulty among the nurses. Some of the nurses were reluctant to fill the questionnaire because they claim they do not have time for it. The researcher also encountered huge financial expenses in carrying out this research.

Summary of findings:

- There is significant difference in the knowledge of patient teaching between nurses in UNTH and NOHE. UNTH nurses are more knowledgeable in patient teaching than Nurses in NOHE.
- There is no significant difference in the attitude of nurses in the two health institution used for the study

- There was significant difference in the methods adopted in patient teaching between nurses of two institutions of study. UNTH Nurses adopted better method of patient teaching.
- There is no difference in the practice of patient among nurses of two health institutions used for the study
- There is highly significant difference in the practice of patient teaching among nurses with different years of work experience. The higher the nurses years of work experience, the better their practice of patient teaching.
- There is highly significant difference in the practice of patient teaching among nurses with different level of educational qualifications. The higher the nurseôs educational qualifications, the better their practice of patient teaching.
- There is no significant difference in the practice of patient teaching between male and female nurses in the two institutions of study.

Conclusion

Based on the findings of this study, the following conclusions were made:

- Majority of the Nurses have good knowledge of patient teaching, but UNTH nurses are more knowledgeable in patient teaching than nurses at NOHE.
- On the attitude of Nurses toward patient teaching, there was no significant difference
- Though there is no significant difference in the types of patient teaching adopted by nurses of the two health institutions, UNTH nurses adopted better method of patient teaching than Nurses in NOHE.
- There is significant difference in the practice of patient teaching among nurses with different years of work experience. The higher the work experience, the better their

practice of patient teaching. However, from the findings of this study the researcher conclude that there is fair practice of patient teaching among nurses used for the study because majority of them do not document their patient teaching.

Recommendations:

The following recommendations were made based on the findings of the study;

- The continuing education unit of both institutions of study should imbibe patient education
- The management of both institutions of study should pay all cadres of nurses teaching allowance in order to motivate them to teach patients.
- Employ more nurses to enable nurses have time to teach patients
- Written standardized patient teaching plan should be introduced in both institutions to enable nurses teach patients easily
- Management of the two health instotutions should provide special chart for documenting patient teaching.

Suggestions for Further Studies

Based on the findings of the study, the researcher suggests that studies be carried out to:

- Determine ñThe constraining factors to effective patient Teaching.
- Knowledge, Attitude and practice of patient Teaching Among Nurses in Tertiary Health Institutions in Nigeria.
- Knowledge, Attitude and practice of patient Teaching among Nurses working in private Hospitals in Enugu.

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APPENDIX I

QUESTIONNAIRE

Nursing Sciences Department
University of Nigeria
Enugu Campus.

Dear Respondent,

I am a postgraduate student of the above named Institution carrying out a study to determine knowledge, attitude and practice of patient teaching among Nurses in Tertiary Health Institutions (University of Nigeria Teaching Hospital Ituku-Ozalla and National Orthopaedic Hospital Enugu). Kindly assist me in completing the questionnaire honestly. Do not write your name. All information supplied will be used for academic purpose.

Yours faithfully,

Okoro Happiness N.
0803383037

SECTION A

DEMOGRAPHIC DATA (PERSONAL DATA)

Instruction; fill/tick the appropriate option

1. Hospitalé .
2. Ward location é
3. Gender: Male ☐ Female ☐
4. Age: é é é é é é é é é é é é é .
5. Marital status: single ☐ Married ☐ Divorced ☐
6. Religion: Christianity ☐ Islam ☐ Traditional ☐
   Others specify é ..
7. Highest educational qualification
   (a) Registered nurse ☐ (b) Registered nurse/midwife ☐
   (c) B.Sc Nursing/BNSC ☐ (d) MSC Nursing ☐
   (e) PhD Nursing ☐ (f) Others specify ☐
8. What is your cadre in nursing?
   (a) DDNS ☐ (b) ADN ☐ (c) CNO ☐ (d) ACNO ☐
   (e) PNO ☐ (f) No 1 (Nursing sister) ☐ (g) No II (Staff nurse/midwife) ☐
9. How long have you been practicing as a registered nurse?
   é ....

SECTION B: KNOWLEDGE OF PATIENT TEACHING

10. Have you heard of patient teaching before?
    Yes ☐ No ☐
11. If yes, what are your sources of information (Tick as many as are applicable)
    a. Nursing training schools ☐
    b. Textbooks and televisions ☐
    c. Radios and televisions ☐
    d. Seminars and workshops organized for nurses ☐
    e. Continuing education programs ☐

12. What do you think patient teaching entails?

a. Answering patient questions regarding health issues ☐
b. It is an interactive process whereby learning which may be subsequently be used takes p☐e
c. It involves planned (formal) and unplanned (informal) health instruction given to patients which may lead to positive change in beh☐our
d. Patient teaching entails identifying patient learning needs, planning and carrying out teaching evaluation and documentation ☐

13. The four (4) areas covered in patient teaching are:

a. Health promotion ☐
b. Illness/injury prevention ☐
c. Restoration of health ☐
d. Adaptation of altered health ☐
e. Client support and function ☐
f. Health management ☐

14. Which of the categories of patients need patient teaching?

a. Every patient ☐
b. Patients with chronic diseases only ☐
c. Patients at risk of diseases only ☐
d. Pregnant and nursing mothers only ☐
e. Patients with certain diseases such as diabetic mellitus, HIV/AIDS patients etc ☐

15. In the assessment of patients, which of the following information are needed to identify patientôs learning needs?

a. Health history ☐
b. Age ☐
c. Cultural factors ☐
d. Clients support system ☐
e. Physical examination ☐
f. Health literacy ☐
g. Learning readiness ☐
h. Special need of the patient ☐

16. What are the approaches to patients teaching?
    a. Nurse initiated approach ☐
    b. Patient initiated approach ☐
    c. Family initiated approach ☐
17. What are the strategies for patient teaching?
    a. The nurse must arrange for a favourable and positive climate for learning ☐
    b. The nurse must set clear cut objectives and purpose for patient learner ☐
    c. The nurse must organize the learning resources and make it available to the patient learners. ☐
    d. The nurse must balance intellectual and emotional components of learning and share feelings and thought with learners in a democratic way ☐
18. What are the environments for teaching patients in the hospital?
    a. Bedside ☐
    b. During ward rounds ☐
    c. In the clinics ☐
19. What are the methods of patient teaching?
    a. Planned (formal) method ☐
    b. Unplanned (informal) spontaneous or on the spot method ☐
20. Which of the following teaching methods are used in teaching adult patients?
    a. Discussion method (one-on-one/group discussion) ☐
    b. Printed and audio visual materials ☐
    c. Computer assisted learning program ☐
    d. Modeling and role play ☐
    e. Demonstration/simulation ☐
    f. Practice ☐
    g. Lecture method (explanation and description) ☐
    h. Discovery/problem solving ☐
    i. Question and answer session ☐

21. Which of the following teaching tools are used for teaching children?

a. Story books

b. Dolls ☐

c. Puppet play ☐

d. Health fair ☐

Attitude to Patient Teaching

Instruction: Please indicate whether you strongly agree (SA) Agree (A) Disagree (D) Strongly Disagree (SD) on the following statements

S/n	**Items**	4	3	2	1
		SA	A	D	SD
22	As a nurse I view patient teaching as a core responsibility for nurses				
23	I value my teaching role as a nurse				
24	I like teaching patients				
25	I see patient teaching as a mere waste of time				
26	I do not allow any nursing duty to prevent me from teaching patients				
27	To make way for patient teaching, I try to be friendly to my patients by introducing myself to them on admission				
28	I usually assess patients on admission to identify their learning needs				
29	As a habit, I read patient folders to assess areas where teaching is required				
30	I always engage in extensive reading of my patientôs different conditions to increase my knowledge as to give first hand information to them				

Practice of Patient Teaching

31. Do you engage in patient teaching? Yes ☐ No ☐

32. If yes to question 31, what are your reasons for teaching your patients (please write in your reasons)

a.é ..

bé é

cé é

dé é

33. How often do you engage in patient teaching?

a. Once weekly ☐

b. Twice weekly ☐

c. Daily ☐

d. Monthly ☐

34. Do you have a special time allocated to patient teaching? Yes ☐ No ☐

35. If no to question 31, what are your reasons for not teaching your patients (please write in your reasons)

a.é é

b.é é

c.é é

dé é

36. Do you plan for patient teaching? Yes ☐ No ☐

37. Which method of patient teaching do you use often?

a. Planned (formal/structured method) ☐

b. Open method ☐

c. Unplanned (informal or spontaneous/on the stop) method ☐

d. Closed method ☐

38. Do you evaluate you patient teaching? Yes ☐ No ☐

39. If yes to 38 how often do you evaluate your teaching?

a. Always ☐

b. sometimes ☐

c. Rarely ☐

d. Not at all ☐

40. What are your reasons for evaluating your patient teaching?

aé é

bé é

cé é

dé é

41. Do you document your patient teaching Yes ☐ No ☐

42. If yes to 41, how often do you document your patient teaching?

a. Always ☐

b. Often ☐

c. Rarely ☐

43. If you document your patient teaching, state what you document

a. é

bé .

cé é

dé é

44. Do you have a special chart for documenting your patient teaching?

Yes ☐ No ☐

45. If no, where do you document your patient teaching?

(a) Nurses chart ☐ (b) Plain sheet ☐

46. What challenges do you encounter with teaching patients?

a. é

bé é

cé é

APPENDIX II

INFORMED CONSENT

Introduction: My name is Okoro Happiness Nnenna, a Post Graduate student of the Department of Nursing Sciences, faculty of Health Sciences and Technology University of Nigeria, Enugu Campus.

VOLUNTARY NATURE OF PARTICIPATION: Subject participation in this study is entirely voluntary. You have the right to withdraw consent and discontinue participation in the study at any given time.

STUDY PROCEDURE: I am carrying out a study on knowledge, Attitude and Practice of Patient Teaching among Nurses in Tertiary Health Institution in Enugu State. In this study, you will be required to fill the questionnaire. Please feel free to ask for clarification on any question you do not understand.

RISK: The process of filling the questionnaire will not cause you any harm or injury.

CONFIDENTIALITY: Please, note that information you give will be kept confidential and your name will never be used in connection with any information you give.

FEED BACK: In case of any clarification, you can contact me on 08033830375

RESPONSE: The study has been explained to me and I finally understand the consent of the study process. I will be willing to participate in the study described above.

_____	_____	_____
Signature of participant	Signature of witness	Signature of Researcher
_____	_____	_____
Date	Date	Date

In case of enquiries, please contact Dr. (Mrs) N.P Ogbonnaya Department of Nursing Sciences, Faculty of Health Sciences and Technology, University of Nigeria Enugu Campus.

APPENDIX III

Reliability

Scale: all variables

Case processing summary

		N	**%**
Cases	Valid	41	97.6
	Excided	1	2.4
	Total	42	100.0

Reliability statistics

Cronbach's Alpha	**N of Items**
7.89	**112**

APPENDIX IV

Distribution of Target Population in Terms of Ranks among the Hospitals

Hospital	DDN	ADN	CNO	ACNO	PNO	SNO	NO1	NOII	Total
UNTH	1	6	160	54	67	129	18	240	675
NOHE	-	-	64	24	18	46	56	95	303

Sample

40% of the population is

$\frac{40}{100} \times \frac{978}{1} = 391.2$

Add 10% Attrition rate = + 39.12

$\frac{10}{100} \times \frac{391.2}{1} = 39.12$

391.2 + 39.12 = 430.32

A sample = approximate 430 nurses

Proportionate sampling distribution among hospitals

ADN $\frac{6}{675} \times \frac{297}{1} = 2.64$ Approximately 3

CNOS $\frac{159}{675} \times \frac{293}{1} = 70.4$ approx. 70

ACNO $\frac{54}{675} \times \frac{297}{1} = 23.76$ approx. 24

PNOS $= \frac{67}{675} \times \frac{293}{1} = 29.48$ approx. 30

SNOS $= \frac{129}{675} \times \frac{297}{1} = 56.76$ approx 57

No 1 $= \frac{18}{675} \times \frac{297}{1} = 7.92$ approx. 8

N0 II $= \frac{240}{675} \times \frac{297}{1} = 105.6$ approx. 106

Add Total =

ANDS 2.64

CNOS 70.4

ACNO 23.76

PNO 29.48

SNO 56.76

N01 7.92

NO II 105.6

293.56 approx. 297

Distribution of NOHE sample among the different cadres of nurses

CNO = $\frac{64}{303} \times \frac{133}{1} = 28.1$

ACNO = $\frac{24}{303} \times \frac{133}{1} = 10.55$

PNO = $\frac{18}{303} \times \frac{133}{1} = 7.9$

SNO = $\frac{43}{303} \times \frac{133}{1} = 20.19$

N01 = $\frac{56}{303} \times \frac{133}{1} = 24.58$

N0II = $\frac{95}{303} \times \frac{133}{1} = 41.69$

CNO = 28.1

ACNO = 10.55

PNO = 7.9

SNO = 20.19

N01 = 24.58

No11 = 41.69

133.01 approx. 133

DEPARTMENT OF NURSING SCIENCES
FACULTY OF HEALTH SCIENCES & TECHNOLOGY
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Your Ref: .....

Our Ref: UN/CM/DNS/44

Date: 18-2-2013

HEAD: A.N. ANARADO M.Sc, RN, RM, FWACN.

TO WHOM IT MAY CONCERN

LETTER OF IDENTIFICATION

RE: OKORO HAPPINESS N. (Phone No. 08033838303

REGISTRATION NO: PG/Msc/05/45304

The above named is a post-graduate student of the Department of Nursing Sciences, University of Nigeria, Enugu Campus.

He/She is writing a project in partial fulfillment for the award of M.Sc. degree in Nursing and therefore, needs to collect data.

Kindly render him/her the necessary assistance.

A.N. Anarado
Head of Department.

APPENDIX V

APPENDIX VI

UNIVERSITY OF NIGERIA TEACHING HOSPITAL
IKU- OZALLA, P.M.B. 01129, ENUGU
TEL: 024-252022,252573,252172,252134,fax:042-252665
E-mail: cddunth@infoweb.abs.net
cmduntr2011@yahoo.com

Chairman UNTH Management Board
(Mrs.) A. C. OKAFOR
Director Administration/Secretary
UNTH Management Board

Dr. C. C. AMAH, MBBS, FWACS, FICS, FIAM, FYOM,
Chief Medical Director

Dr. (Mrs.) ANNE C. NDU, MBBS, FWACP, M
Chairman Medical Advisory Committee

Our Ref..... UNTH/CSA/329/Vol.5 Date.....13th.May,.2013.....

NHREC/05/01/2008B - FWA00002458 – IRB00002323

ETHICAL CLEARANCE CERTIFICATE

TOPIC: KNOWLEDGE, ATTITUDE AND PRACTICE OF PATIENT TEACHING AMONG NURSES IN TERTIARY HEALTH INSTITUTIONS IN ENUGU STATE

BY: **OKORO, HAPPINESS NNENNA**

FOR: A DISSERTATION FOR A MASTER OF SCIENCE DEGREE IN NURSING SCIENCES OF THE DEPARTMENT OF NURSING SCIENCES, FACULTY OF HEALTH SCIENCES AND TECHNOLOGY UNIVERSITY OF NIGERIA

This research project on the above topic was reviewed and approved by the University of Nigeria Health Research Ethics Committee. This certificate is valid for **one year** from date of issue.

Prof. R.E Umeh
Chairman Health Research Ethics Committee

Date: 15/05/13

APPENDIX VII

Dept. of Nursing
School of Post Graduate Studies
UNEC
8th May 2014

The Deputy Director/HOD
Nursing Services Division
U.N.T.H
Ituku/Ozalla
Enugu

Madam,

PERMISSION TO CARRY OUT A RESEARCH STUDY IN THE DEPARTMENT

I wish to apply for permission to carry out my project work in your department.

I have already obtained the Ethical clearance certificate from the Health Research Ethical Committee of your hospital.

Thank you for your anticipated co-operation.

Attached is the photocopy of the ethical clearance certificate.

Yours faithfully,

Okoro Happiness N.

APPENDIX VIII

NATIONAL ORTHOPAEDIC HOSPITAL
P. M. B. 01294 ENUGU-NIGERIA

INSTITUTIONAL REVIEW BOARD

Ethical Clearance Certificate

IRB/IIEC NUMBER: S1313/837/1

PROTOCOL NUMBER: 139

PROJECT TITLE: KNOWLEDGE ATTITUDE AND PRACTICE OF PATIENT TEACHING AMONG NURSES IN TERTIARY HEALTH INSTITUTIONS IN ENUGU STATE

INVESTIGATOR (S): OKORO HAPPINESS NNENNA

DEPARTMENT /INSTITUTION: NURSING SCIENCES

DATE APPROVED: 8TH MAY, 2014

DECISION OF THE COMMITTEE: APPROVED

VALIDITY PERIOD: SIX MONTHS

CHAIRMAN: DR. I. S. OGBONNAYA

Signature: ..... Date: 9.5.2014

Institutional Supervisor or Coordinator: MRS IGBOKWE L. U.

DECLARATION BY INVESTIGATOR(S)

PROTOCOL NUMBER (Please quote in all enquiries) IRB.....

To be completed in four and three copies returned to The Secretary, **Institutional Review Board**, National Orthopaedic Hospital, Enugu Nigeria.

In line with the requirements of the Medical Research Ethics Committee, you are requested to treat with utmost confidentiality the identity of your subject(s) in places where pictures are to be used in the publication.

I/We fully understand the conditions under which I am/ we are authorized to conduct the above-mentioned research and I/we guarantee that I/we will ensure compliance with these conditions. Should any departure contemplated from the research procedure as approved, I/we undertake to resubmit protocol to the Institutional Review Board.

Name (s) OKORO HAPPINESS N.

Signature ..... Date: 12/05/2014

APPENDIX IX

Dept. of Nursing
School of Post graduate studies
UNEC
12th May 2014

The Deputy Director/HOD
Nursing Services Division
NOHE
Enugu

Madam,

PERMISSION TO CARRY OUT A RESEARCH STUDY IN THE DEPARTMENT

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