بسم الله الرحمن الرحيم

Shendi University

Faculty of post Graduate Studies

And scientific research

Assessment of Nurse's Perception and Concept about Triage in Emergency Military Hospital

A thesis submitted for partial fulfillment requirement of master degree in medical surgicalnursing

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بسم الله الرحمن الرحيم

قال تعالى:-

﴿وَعَلَّمَ آدَمَ الأَسْمَاء كُلَّهَا ثُمَّ عَرَضَهُمْ عَلَى الْمَلاَئِكَةِ فَقَالَ أَنبِئُونِي بِأَسْمَاء هَـؤُلاء إِن كُنتُمْ صَادِقِينَ{31} قَالُواْ سُبْحَانَكَ لاَ عِلْمَ لَنَا إِلاَّ مَا عَلَّمْتَنَا إِنَّكَ أَنتَ الْعَلِيمُ الْحَكِيمُ{32} ﴾

صدق الله العظيم

سورة البقرة

الإهداء

الهي لا يطيب الليل إلا بشكرك ولا يطيب النهار إلا بطاعتك ولا تطيب اللحظات إلا بذكرك ولا تطيب الآخرة إلا بعفوك ولا تطيب الجنة إلا برؤيتك الله جل جلاله.

إلي من بلغ الرسالة و أدي الأمانة و نصح الأمة إلى تبني الرحمة و نور العالمين

سيدنا محمد صلي الله عليه وسلم.

إلي ملاكي في الحياة إلى معني الحب والي معني الحنان و التفاني إلى بسمة الحياة و سر الوجود إلى من كان دعائها سر نجاحي و حنانها بلسم جراحي إليك يا نبض قلبي المتعب إليك يا شذي عمري إليك أنتي يا أمي أقول حفظك الله لنا نورا يضئ لنا الحياة

إلى أغلي الحبايب أمي (حياة)

إلى من كلله الله بالهيبة والوقار إلى من علمني العطاء بدون انتظار إلى من أحمل اسمه بكل افتخار أرجو من الله أن يمد في عمرك لتري ثمارا قد حان قطافها بعد طول انتظار

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Abbreviation

E.D	Emergency Department
C.P.R	Cardio Pulmonary Resuscitation
B.L.S	Basic Life Support
A.L.S	Advance Life Support
E.N.P.C	Emergency Nurse Pediatric Course
T.N.C.C	Truma Nurse Core Course
G.E.N.E	Geriatric Emergency Nurse Education
C.E.N.A	Collage of Emergency Nursing Australians
I.V	Intravenous
I.C.U	Intensive Care Unit
A.T.S	Australian Triage Scale
A.C.T.A.S	Canadian Triage and Acuity Scale
PT	Patient

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Abstract

This was descriptive cross-sectional study aimed to assess nurse's perception and concept about triage in emergency Omdurman military hospital. In period of seven months, fifty nurses were participated in this study selected randomly by used questionnaire, and data analyzed by using the statistical package for social sciences software program SPSS version 16.

The study showed that half of the study group had poor knowledge about conditions included in triage levels, and near to half (48%) of them had good knowledge about primary and secondary assessment, on the other hand Majority (82%) of them said the triage was based on protocol. The study showed that majority (82%) of the study group had good knowledge about factors affecting patient outcome (patient factors) and two third (66%) of them had good knowledge about factors affecting patient outcome regarding to environmental factors, this study found significant relationship between challenges faced nursing during work in triage and patient outcome (p value 0,00).

Majority (82%) of study group had good attitude regarding emergency patient.

The study was recommended that reinforces the need for sustained education and training for triage implementation, and utilize advance in nursing practice for emergency nurses.

ملخص الدراسة

أجريت هذه الدراسة الوصفية بمستشفي أم درمان العسكري لتقييم معرفة ومفهوم الممرضين عن فرز المرضى بقسم الطوارئ في الفترة من ابريل إلى نوفمبر 2014م وتم جمع البيانات عن طريق الاستبيان لخمسين من الممرضات وتم تحليل البيانات باستخدام الحزم الإحصائية للتحليل الإحصائي.

ومن أهم ما توصلت إليه الدراسة أن اقرب الي نصف مجموعة الدراسة (48%) لديهم معرفة ضعيفة عن الحالات التي يتضمنها المستويات المعروفة في الفرز وأن نصفهم(50%) لديهم معرفة جيده عن التقييم الأولى والثانوي للمرضى ، وان معظمهم (82%) أدلى بأن الفرز يتركز على البروتوكول .

وأن معظمهم (82%) لديه معرفة جيده عن العوامل التي تؤثر على نتائج المريض (عوامل تتعلق بالمريض) وأن ثلثي(66%) مجموعة الدراسة لديهم معرفة جيده عن العوامل التي لها علاقة بالبيئة التي حول المريض . وأن معظم مجموعة الدراسة (82%) لديها سلوك جيد تجاه مريض الطوارئ

حيث توصلت الدراسة الي ان هنالك علاقه ارتباط ذات دلاله معنويه احصائيا بين المعوقات التي تواجه الممرض اثناء عمله في الفرز و نتائج المريض حيث كانت القيمه المعنويه علي النحو التالي:0.00

وأوصت الدراسة بالتعليم والتدريب للكوادر،والاستفادة من التقدم في ممارسة التمريض لمرضى الطوارئ .

CHAPTER ONE

Introduction

Rationale

Objective

1.1. Introduction:

Emergency department (ED) generally provides immediate care 24 hours every day. The unpredictable numbers of patients coming to ED suffer from various conditions with unknown severity, urgency, and definite diagnosis. The patients who are suffering from life threatening conditionsuch as cardiac arrest, airway obstruction, and shock should be prioritized to provide them an early immediate care to save their lives. However, the over crowdedness of patients visiting to ED can have an impact on the quality of care by diversifying the resources intended for patients, who are in need of emergency care to the individuals who have potentially less urgent needs).(Mukhamad Fathoni, etal: 2013).

In 2005–06, nearly 4.8 million people presented to emergency departments in larger Australian hospitals. Only 12 per cent were non-urgent cases. Sixty nine per cent of people were seen within the time recommended for their triage category, with half of this numberseen in less than 24 minutes. (Tonyabot: 2007)`.

Triage in emergency care is a process of collecting pertinent patient information and initiating a decision-making process that categorizes and prioritizes the needs of patients seeking care. A triage nurse is a registered nurse is adequately prepared to function as a triage nurse to perform triage with a high level of accuracy and competence, complete a triage-specific educational program, as well as other appropriate courses and certifications, and should demonstrate qualities thatfacilitate successful triage. Additional education to enhance triage knowledge, skills and attitudes Include: Completion of both a cardiopulmonary resuscitation (CPR) course and a standardized Advanced Life Support (ALS) course. Completionof Emergency Nurse Pediatric Course(ENPC).Completion of Trauma Nurse Core Course (TNCC)

andGeriatricEmergencyNurse Education (GENE).She had ability to provide patient education throughout triage process, Strong interpersonal skills, able to work collaboratively with interdisciplinary team members and excellent communication skills. **(Bond: 2011).**

The purpose of a triage system is to ensure that the level and quality of care that is delivered to the community is commensurate with objective clinical criteria, rather than administrate or organizational need. In this way, standardized triage systems aim to optimize the safety and the efficiency of hospital-based emergency services and to ensure equity of access to health services across the population. The use of a standard triage system facilitates quality improvement in emergency department, because it allows for comparisons of key performance indicators (i.e. time-to-treatment by triage category), Since the early 1990s the use of computerized information systems in Australian EDs has permitted the precise calculation of time-to-treatment against a variety of patient outcomes, including triage code, chief complaint, diagnosis and discharged destination. **(Tonyabot: 2007).**

The responsibility of nurses in triage is composes of primary and secondary triage decision .Primary triage decision is related to the procedures of the primary assessment and allocation the patients to appropriated treatment,
Andsecondarytriagedecision is related to initiation of nursing intervention, and provides comfort to the patients; triage skill is one of the most competenciesrequired for the emergencynurses. **(Mukhamad Fathoni, etal: 2013).**

1.2. Rational:

Accuracy of triage decisions had a major influence on patient outcomes. Triage nurses' knowledge and experience have been cited as influential factors in triage decision-making**(Fitzgerald, etal: 2009).**

Nurse triage would lead to earlier medical assessment and treatment and whether this benefit would carry on for the rest of the day when normal triage had resumed.

Most of Sudanese's nurses are not know and apply triage in proper way, Omdurman military hospital is thefirst hospital in Sudanwhichhad facilities and capability to apply triage so this study is conducted to assess their knowledge andattitude in triage.

1.3. Objectives:

General objective:

Assessmentofnurses' perception and concept about triage in emergency Omdurman military hospital.

Specific objective:

- To assessnurses' knowledge about triage.
- To identifynurses'concept about immediately assessment in triage.
- To assessnurses' attitude regarding emergency patient's.
- To determine nurses' perception regarding triage levels and conditions.
- To identify nurses' role in application of triage protocol.

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CHAPTERTWO

Literature Review

2. Literature Review

2.1: Definitions:

2.1.1.The term ‘triage’ is derived from the French work trier, meaning to pick or to sort ,A triage system is the basic structure in which all incoming patients are categorized into groups using a standard urgency rating scale or structure**.(Tony Abbott:2007).**

2.1.2. Triage : is the process of categorizing ED patients according to their need for medical care, irrespective of their order of arrival or otherfactorsincluding: age, socioeconomic status, insurance, etc. **(N, A, Qureshi: 2010).**

2.3. Triage and health professionals:

Triage is usually performed in the ED by nursing staff who allocate a triage designation and initiate emergency care before the patient is examined by a doctor**.(N,A,Qureshi:2010).**

2.4. Effect of triage on waiting times:

Nurse triage aims to redistribute the workload of the ED. The key issue is not increasing or reducing waiting times overall but theeffectiveness with which triage nurses allocate shorter waiting times tothe highest priority patients, thus redistributing patient waiting times according to need. Waiting times in the ED affectpatients’ satisfaction with care but may also have serious complications that adversely affect health outcomes Prolonged waiting times at triage sites are

the most common reason for patients' and families' dissatisfaction with ED care **(N.A, Qureshi: 2010).**

2.5. Function of triage:

Triage is an essential function underpinning the delivery of care in all EDs, where any number of people with a range of conditions may present at the same time. Although triage systems may function in slightly different ways according to a number of local factors, effective triage systems share the following important features:

2.5.1. A Single-entry point: for all incoming patient(Ambulant and non-ambulant), so that all patients are subjected to the same assessment process.

2.5.2. A physical environment: that issuitableforundertaking brief assessment. Itneedsto include easy access to patients which balances clinical, security and administrative requirements, and the availability of first aid equipment and hand-washing facilities.

2.5.3. **An organizedpatientprocessingsystem:** that enable essay flow ofpatientinformation from point of triage through to ED assessment, treatment and disposition.

2.5.4. **TimelydataonEDactivitylevel:** including system for notifying the department to for incoming patients from ambulance and other emergency services**.(Tony Abbott:2007).**

2.6. Categories of triage: There is a range of categories of triage that include: ED triage (Emergency room), inpatient triage (ICU, Surgery, Outpatient etc.), incidence triage (accidents, fire, air crashes etc.), military triage (battle-Field), disaster triage (mass casualty incidents, bomb blasts),

and telephonic triage (over the phone, referral services**).(Sardarali,etal:2013).**

2.7. The development of triage: Triage has its foundations in the military setting. Napoleon's chief surgeon,Baron Dominique Jean Larry, published in the 19th century therational behind the development of the flying ambulances, ambulance Volant, where injured soldiers could be attended too much faster, and thus the likelihood of saving more lives increased (Larry 1812). In addition, Jean Larry introduced a new way of prioritizing the wounded: instead of attending to the injured based on rank, the order of priority was based on the need for surgical interventions(Richardson 1974).

Modern civilian and military triage has the same aim as described Centuries ago, namely to ensure that the sickest and potentially salvageable patient is treated first, the civilian setting triage can be performed in several environments, including prehospital care (e.g., a mass casualty situation or a disaster situation), non-prehospital setting (e.g. primary healthcare).
(Andrén 1993).

In prehospital triage, and especially in a disaster situation, the triage decision is based not only on the injured persons' condition but also on the Limitation of resources and other casualties'. In ED triage, however, unless there is a disaster situation, the triage decision. Is not dependent on the amount of resources, other health care seeking Patients' need for care, or waiting times, but rather it is based on eachIndividual's need for emergency care (Levasseu. 2001). Moreover, triage is performed in both somatic and mental health areas, as well as in pediatric and adult care facilities (Gary. 2003**).(Katarina Göransson: 2006).**

2.8.principles of triage:

The principal purpose of ED triage is to ensure that the patient receives the level and quality of care appropriate to clinical need(Clinical justice) and that departmental resources are most usefully applied (efficiency) to this end. Clinical justice is based on the premise that patientsPresenting to EDs has a variety of complaints some very urgent and others relatively not urgent. Clinical justice, including:

2.8.1. Ensure that the patient receives careappropriate to need and in a timely fashion,

28.2. Triage systems facilitate the initiation of further assessment and treatment, 2.8.3comfort and reassurance.

2.8.4. Documentationof Patients and their need.

2.8.5. Communication with them and theirfamilies regarding the nature of their problem and the process of Care likely to follow, initiation of infection control procedures and education regarding illness prevention and control**(Fitzgerald, etal: 2009).**

Not all patients presenting to EDs require the same level of treatment and resources, so a simple head count of patientstells little of the mix of complexity. The growing demand for emergency healthcare, access block and associated ED congestion adds to the need for a better description of workloads and relative resource requirements. Organizational efficiency is achieved by applying the resources in a timely and appropriate manner, providing information on the diversity of workloads for policy, planning and performance management purposes and providing a means of ensuring quality control, staff Support and research. While these may be achieved by lessformal approaches, the principal

value of formalizedtriage Systems lies in the support provided to staff and the ability to Compare and contrast performance over time and with other Institutions**(Fitzgerald,etal:2009).**

2-9.National Triage Scale:

National Triage Scale	Color	Time to be seen by doctor
Immediate resuscitation	Red	Immediately
Very urgent	Orange	Within 5-10 minutes
Urgent	Yellow	Within 1 hour
Standard	Green	Within 2 hours
Non-urgent	Blue	Within 4 hours

(**Wyatt, etal: 2005).**

On arrival at A&E, dedicated triages nurse (a senior, experienced individual with considerable common sense), will undertake the process. Optimally, this individual should initiate investigations to speed the patient's journey through the department (such as ordering appropriate X-rays) and provide specific immediate interventions (such as elevating injured limbs, the application of ice packs, splintage and analgesia). Patients should not have to wait to be triaged. It is a brief assessment which should take no more than a few minutes.(Wyatt, etal: 2005).

2.9.1. Three important points require emphasis:

2.9.1.1. Triage is a dynamic process. The urgency (and hence triage category) with which a patient requires to be seen may change with time. For example, a middle-aged man who hobbles in with an inversion injury to the ankle is likely to be placed in triage category 4 (green). If, however, in

the waiting room he becomes pale, sweaty and complains of chest discomfort, he would require prompt re-triage into category 2 (orange).

2.9.1.2. Placementin a triage categorydoes not imply a specific diagnosis, nor even the lethality of a condition. For example, an elderly patient with colicky abdominal discomfort, vomiting and absolute constipation would normally be placed in category 3 (yellow) and a possible diagnosis would be bowel obstruction. The cause of the bowel obstruction may be a local neoplasm which has already metastasized and is hence likely to be ultimately fatal.

2.9.2.3.. Triage has its own problems. In particular, patients in non-urgent categories may wait inordinately long periods of time, whilst patients who have presented later, but with conditions perceived to be more urgent, are seen before them. Patients need to be aware of this and to be informed of likely waiting times. Uncomplaining elderly patients can often be poorly served by the process.

Recent initiatives have explored ways of using senior staff to assess, treat and discharge patients with minor injuries and problems in a more rapid fashion Local policy will dictate how this works.

(Wyatt, etal: 200).

Other triage scale:

2.9.2. The Australasian Triage Scale (ATS)

Scale	Time to physician assessment
ATS 1	Immediate
ATS 2	10 min
ATS 3	30 min
ATS 4	60 min
ATS 5	120 min

(Tony Abbott: 2007).

2.9.3. Canadian Triage and Acuity Scale (CTAS)

Scale	Time to physician assessment
Resuscitation	Immediate
Emergency	<15 min
Urgent	<30 min
Less urgent(semi-urgent)	<1h.
Non urgent	<2 h

(Fitzgerald, etal: 2009).

2.10. **Priorities of Care and Triage Categories:**

Standardized triage categories are usually developed within each ED. Most common triage systems consist of five levels of acuity.

2.10.1. Triage Level1 (Resuscitation):

Conditionsrequiring immediate nursing and physician assessment. Any delay in treatment is potentially life- -threatening.

- Includes conditions such as:
- Airway compromise.
- Cardiac arrest.
- Severe shock.
- Cervical spine injury.
- Multisystem trauma.
- Altered level of consciousness.

2.10.2. Triage Level II Emergent:

Conditions requiring nursing assessment and physician assessment within 15 minutes of arrival.

Conditions include:

- Head injuries.
- Severe trauma.
- Lethargy or agitation.
- Conscious overdose.
- Severe allergic reaction.
- Chemical exposure to the eyes.
- Chest pain.
- Back pain.
- GI bleeds with unstable vital signs.
- Stroke with deficit.

- Severe asthma.
- Abdominal pain in patients older than age 50year.
- Vomiting and diarrhea with dehydration.
- Fever in infants younger than 3 months.
- Acute psychotic episode
- Severe headache.
- Any pain greater than 7 on a scale of 10.
- Any sexual assault.
- Any neonate age 7 days or younger.

2.10.3. Triage Level IIIUrgent:

Conditionsrequiring nursing and physician assessment within 30 minutes of arrival.

Conditions include:

- Alert head injury with vomiting.
- Mild to moderate asthma.
- Moderate trauma.
- Abuse or neglect.
- GI bleed with stable vital signs.
- History of seizure, alert on arrival.

2.10.4Triage Level IVless Urgent:

Conditions requiring nursing and physician assessment within one hour.

Conditions include:

- Alert head injury without vomiting.
- Minor trauma.
- Vomiting and diarrhea in patient older than age 2 without evidence of dehydration.
- Earache.
- Minor allergic reaction.
- Corneal foreign body.
- Chronic back pain.

2.1o.5. triage Level Vnonurgent:

Conditions requiring nursing and physician assessment within two hours.

Conditions include:

- Minor trauma, not acute.
- Sore throat.
- Minor symptoms.
- Chronic abdominal pain.

(Nettina; etal: 2006).

2.11. Triage decisions:

Triage decisions are complex clinical decisions often made under conditions of uncertainty with limited or obscure information, minimal time and with little margin for error. Triage nurses must also be able to discriminate useful cues from large amounts of information in order to perform triage safely. It is the responsibility of the triage nurse to rapidly

identify and respond to actual life-threatening states and to also make a judgment as to the potential for life-threatening states to occur.

Triage decisions are made in response to the patient's presenting signs or symptoms and no attempt to formulate a medical diagnosis is made. The allocation of a triage category is made on the basis of necessity for time-critical intervention to improve patient outcome, potential threat to life or need to relieve suffering. The decisions made by a triage nurse are a pivotal factor in the Initiation of emergency care. Therefore the accuracy of triage decisions is a major influence on thehealth outcomes of patients. As all of these characteristics make triage decision-making inherently difficult, it may be argued that triage nurses require advanced clinical decision making expertise.

Triage decisions can be divided into primary and secondary triage decisions. Primary triage decisions relate to the triage assessment, allocation of a triage category and patient deposition whilst secondary triage decisions relate to the initiation of nursing interventions in order to expedite emergency care and promote patient comfort.

Primary triage decisions should be based on both objective and subjective data as follows:

2.11.1. Primary survey:

"Airway, breathing, and circulation are the prerequisites of life and … their dysfunction are the common denominators of death.The triage nurse is the first person that a patient encounters when presenting for emergency care. Given this, the triage nurse should be highly skilled in interpersonal and communication skills.

The triage nurse has a responsibility to be polite, professional and reassuring whilst eliciting the information he or she requires making a triage decision.

The collection of subjective data should occur simultaneously with the collection of objective data. Examples of subjective data collected during the triage assessment include:

- Chief complaint;
- Precipitating event / onset of symptoms;
- Mechanism of injury;
- Risk factors for serious illness or injury;
- Relevant past history.

The collection of subjective data should be performed in a timely and efficient manner. The triage nurse should however be aware that in general, when patients (and others) present to the EDthey are experiencing a certain level of crisis. This level of crisis may not always correspond with that expected for the severity of presenting complaint. The triage nurse must cognizant be of the fact that patients (and others) may have heightened sensibilities when they present to the ED and may misinterpret what is intended as effective, efficient questioning as rude or dismissive. In the ideal world, the triage assessment would occur in a quiet non-threatening environment that is free from interruptions. In reality, there may be a queue of ambulant patients stretching to the door, the telephone ringing and multiple ambulances arriving at once. The best of managementstartby:

- addressing the patient by name (this may be particularly easy if they present with a doctor's letter or with their Medicare or hospital card already available); excusingyourself if you need to answer the

telephone or attend to another patient, for example "I'm sorry Mrs. Smith, I'll just need to attend to this gentleman / ambulance /telephone call. Please take a seat over there, I won't be long" and re-establishing contact when you return, for example "I'm sorry, now you were telling me about ……..";

- ❖ altering your communication style to suit the patient from whom you are trying to elicit information, for example, kneeling down if talking to a child;
- ❖ Adjusting the type of interview questions, for example, the use of multiple closed questions to rapidly establish information, for example "do you have pain right now?";
- ❖ Ask one question at a time and avoid questions that contain long lists, for example "do you have chest pain, shortness or breath, nausea or dizziness?" Even though it may take a little longer to ask the questions, it will help to gather more accurate information;
- ❖ Avoid "why" questions, for example, "why didn't you come to hospital sooner?"; "why have you come today when you've had this for three days?" These questions may be interpreted as accusatory. If there is a need for patient education, advice should be constructive and not condescending, for example, "next time you have chest pain you should come to the hospital Straight away - it is really important because …..";

2.11.2. Secondary triage decisions:

Secondary assessment and interventions often occur once the patient is in their allocated Cubicle but under some circumstances these may occur at triage or in the waiting room.

The initiation of nursing interventions is an important aspect of the role of the triage nurse and again relies on the clinical decisions made by triage nurses. Secondary triage decisions may be made independently by the triage nurse, in conjunction with guidelines or protocols or after obtaining doctor's order.

2.11.2.1The aim of initiation of nursing interventions at triage is to:

- Provide basic life support as required;
- Expedite definitive management within the emergency department;
- Promote patient comfort; and Maximize patient satisfaction with emergency care.

2.11.2.2. Nursinginterventions intriage (Nursing role):

- Administration of analgesia.
- Administration of antipyretics.
- Administration of oral rehydration.
- Administration of oxygen therapy;
- Blood glucose measurement;
- Collection of blood for pathology studies;
- First aid (BLS, splinting, eye irrigation);
- Facilitating referral to related services;
- IV cannulation;
- ordering of X-rays for patients with
- Isolated limb injury;
- Plaster of Paris checks;
- Urinalysis;
- Weight;
- Wound management.

All nursing interventions should be in accordance with organizational guidelines and policies**. (Sandra Levasseu, etal: 2001).**

2.12. Factors affecting in triage decision-making:

2.12.1. Personnel factors:

- Experience.
- Assessment skill.
- Being an expert.
- Power of decision-making.
- Organizing skill.
- Passed educational courses.
- Acuity .
- Relationship method.
- Flexibility.

2.12. 2.Nonpersonnel factors:

- Inter-unit factors.
- Unit crowdedness.
- The possibility of injury to the patient.
- Work volume.
- Medical team coverage.
- Nursing team coverage.
- Funding

(Sdadashzadeh A, etal: 2013).

2.13. Psychological consideration:

Trauma is an insult to physiologic and psychological homeostasis; it requires physiologic and psychological healing.

2.13.1. Approach to the Patient:

- Understand and accept the basic anxieties of the acutelytraumatized patient.
- Be aware of the patient's fear of death, mutilation, and isolation.
- Personalize the situation as much as possible. Speak, react, and respond in a warm manner.
- Give explanations on a level that the patient can grasp.
- An informed patient can cope with psychological/physiologic stress in a more positive manner.
- Accept the rights of the patient and family to have and display their own feelings.
- Maintain a calm and reassuring manner" helps the emotionally distressed patient or family to mobilize their psychological resources.
- Understand and support the patient's feelings concerning loss of control (emotional, physical, and intellectual).
- Treat the unconscious patient as if conscious.
- Touch, call by name, and explain every procedure that is done
- Avoid making negative comments about the patient's condition.
- Orient the patient to person, time, and place as soon as he or she is conscious; reinforce by repeating this information.
- Bring the patient back to reality in a calm and reassuring way.
- Encourage the family, when possible, to orient the patient to reality.

- ❖ Be prepared to handle all aspects of acute trauma; know what to expect and what to do. This alleviates the nurse's anxieties and increases the patient's confidence.

2.13.2.Approach to the Family:

- ❖ Inform the family where the patient is, and give as much information as possible about the treatment he or she is receiving.
- ❖ Consider allowing a family member to be present during the resuscitation.
- ❖ Assign a staff person to the family member to explain procedures and offer comfort.
- ❖ Recognize the anxiety of the family and allow them to talk about their feelings.
- ❖ Acknowledge expressions of remorse, anger, guilt, and criticism.
- ❖ Allow the family to relive the events, actions, and feelings preceding admission to the ED.
- ❖ Deal with reality as gently and quickly as possible; avoid encouraging and supporting denial.
- ❖ Assist the family to cope with sudden and unexpected death. Some helpful measures include the following:
- ❖ Take the family to a private place.
- ❖ Talk to all of the family together so they can mourn together.
- ❖ Assure the family that everything possible was done; inform them of the treatment rendered.
- ❖ .Allow family to talk about the deceased permits ventilation of feelings of loss.
- ❖ Encourage family to talk about events preceding admission to the ED.

- ❖ Encourage family to support each other and to express emotions freely, grief, loss, anger, helplessness, tears, disbelief.
- ❖ Avoid volunteering unnecessary information (eg, patient was drinking).
- ❖ Avoid giving sedation to family members "may mask or delay the grieving process, which is necessary to achieve emotional equilibrium and prevent prolonged depression.
- ❖ Be cognizant of cultural and religious beliefs and needs.
- ❖ Encourage family members to view the body if they wish" to do so helps to integrate the loss (cover mutilated areas).
- ❖ Go with family to see the body.
- ❖ Show acceptance of the body by touching to give family permission to touch and talk to the body.
- ❖ Spend a few minutes with the family, listening to them.
- ❖ Encourage the ED staff to discuss among themselves their reaction to the event to share intense feelings for review and for group support. **(Nettina, etal: 2006).**

2.14. Documentation for triage:

Accurate documentation is an inseparable part of triage andshould include:

- ❖ Basic patient data.
- ❖ Vital signs with timing.
- ❖ Brief details of injuries (preferably on a diagram) and treatment given.
- ❖ In addition Date and time of triage assessment;
- ❖ Name of the triage nurse.

- ❖ Chief complaint / presenting problem.
- ❖ Limited relevant history.
- ❖ Relevant assessment findings.
- ❖ Triage category.
- ❖ Assessment and treatment area allocated.
- ❖ Diagnostic.
- ❖ First aid or treatment initiated at triage.
- ❖ A system of color-coded tags attached to the Patient's wrist or around the neck is employed by emergency medicalservices, thecolor denotes the degree of urgency which a patient requires treatment. **(Norman S. Williams: 2008).**

2.15. College of Emergency Nursing Australasia (CENA):

Aset of minimum standards for the triage nurse, triage practice and the triage environment:

2.15.1. Standard 1: Clinical practice

The Role of the Triage Nurse is to:

i. Undertake patient assessment and allocate the ATS category based on;

a. Findings of the primary survey

b. Risk assessment

ii. Initiate appropriate nursing interventions and organizational guidelines (e.g. first aid and emergency interventions) to improve patient outcomes and secure the safety of patients and staff of the department;

iii. Ensure continuous reassessment and management of patients who remain in the waiting room.

iv. Provide patient and public education where appropriate to facilitate

a. health promotion and education

b. injury prevention

c. community resourcing and information

v. Act as the liaison for members of the public and other health care professionals

215.2. Standard 2: Education, Training and Professional Development

The Triage Nurse:

a. is a qualified and experienced registered nurse who demonstrates and maintains clinical expertise in emergency nursing prior to undertaking the role of triage nurse.

b. successfully completes a comprehensive triage education program prior to

Commencing the triage role;

C. participates in research processes to audit and evaluate triage practice;

d. participates in annual education, training and professional development in triage and related emergency nurse and emergency care activities

All triage nurse education programs must as far as possible be appropriately reviewed and endorsed by the hospital executive or state health department, and if outside of these areas by the relevant professional groups. CENA recommends the following theoretical and practice elements as core components of triage nurse training:

I. history, science and practice of triage

ii. The Australian health care system

iii. The role of the Triage Nurse

iv. the Australasian Triage Scale (ATS)

v. effective communication skills

vi. Legislative requirements and considerations

vii. Epidemiology and population health

viii. Primary and secondary surveys

ix. Assessment and triage decision making by presentation type

a. Trauma

b. medical and surgical emergencies

c. pediatrics emergencies

d. obstetric and gynecological emergencies

e. mental health emergencies

f. rural and isolated triage practice

g. environmental emergencies

x. quality and safety in health care

2.15.3. Standard 3: Equipment and Environment:

The triage environment must provide safety for the public, the triage nurse, staff and patients of the Emergency Department and the hospital. The environment:

a. must be immediately accessible and well sign posted

b. must have access to an area for patient examination and primary treatment

c. must be designed to maximize the safety of the triage nurse, staff and patients.

d. must be equipped with emergency equipment

e. must enable care to be provided with regardtostandard and additional precautions for infection control and prevention.

f. should enable and facilitate patient privacy.

(© College of Emergency Nursing Australasia Lt:2007).

CHAPTER THREE

Material and Methods

3.1 Methodology

3.1.1. Technical Design:

Technical design of the study includes Studydesign, study area, setting, study population, and tools of data collection

3.1.2Study design:-

This study was Descriptive, cross-sectional hospital-based study, done to assess nurse's perception and concept about triage in emergency from the period from April to November 2014.

3.1.3 Study area:

This study was conducted in Omdurman city, which is the largest city in Sudan and Khartoum state, lying on the western bank of the river Nile opposite the capital, Khartoum, Omdurman city has population of 2.577.780 (2010) and is the national center of commerce, with Khartoum and Khartoum Bahri,it forms the cultural and industrial heart of the nation there are several universities as:

Karary, Omdurman Islamic, university of the holy Quran and Islamic science.Ahfad University for women.

Important hospitals include: Omdurman Teaching hospital, Omdurman maternity hospital, Omdurman military hospital, Altigani Almahi hospital, Asia and Blue Nile private hospital.

There are many famous places in Omdurman include the Mahdi tomb Omdurman's main mosque Alhilal club, Almarikhclub, youth palace, and Sudan Television and Radio.

3.1.4 Setting:

Omdurman military hospital: located east of Omdurman, consist of the following departments: Medicine, surgery, Orthopedic, Pediatric, Obstetrics and gynecology, intensive Care Unit, Cardiac Care Unite, Theater, Laboratory Unite consisting of Routine, specialized laboratory, blood bank and research laboratory , radiological department consisting of X-Ray, Magnetic Resume Image, Computerized Tomography.

And initiated Emergency Department; it was established in 2004 and consists of Triage level which includes the following categories:

1. Level I Resuscitation.
2. Level II (Emergent).
3. Level III (Urgent).
4. Level IV (semi-Urgent).
5. Level V (Non urgent)

3.1.5 Study population:-

Study was covered most nurses' work in emergency military Omdurman hospital estimated number of nurses about (102) nurses during the three shift in period from 10 October to 25 October With the following criteria:-

Nurse with Diploma, bachelor, and Master degree,

Nurse who has been working in the triage.

3.1.6. Sampling:

1- Sample techniques:-

The sample was taken from most nurses' work in emergency military Omdurman hospital during all days of the week by Simple random sampling.

2-**Samplesize*:***

Fiftynurses were participated in this study.

3.2 Materials

3.2.1 Data collection tools:

Data was collected by closed ended questionnaire designed by researcher based on reviewing of literature, it consists of (26) question to fulfill the purpose of the study.it include:

Section one: Concerned with Socio demographic and qualification, include six structural questions related to nurse's age, sex, educational level, years of experienceandtraining.

Section two: It`s include questions about nurses knowledge about triage meaning, protocol and assessment.

Section three: It`s include questions about nurses knowledge about triagelevelsandConditions and factors affect patient outcome.

Sectionfour: It`s include question about nurses knowledge about nurses role, decision making and documentation of patient data.

Scale system:-

The scale system had been described according to the respondent's knowledge and rated for good, moderateand poor knowledge.

- (5-4). good knowledge.
- (3-2.) . Moderate knowledge.
- (Less than 2). Poor knowledge.

3.2.2 Validity and real ability:-

The questionnaire have been investigated/revised by three expertise's they indicated that some items needed to be modified, and they assured that the tool was achieved the aim of the study, A pilot study was carried before embarking on the actual study (data collection). To test applicability of the tools of data collection, and to estimate the time required for filling the required forms. It was carried out on tennurses who not include in the study to evaluate the content of tools in order to determine whether or not the items were understood by the nurses.

3.2.3. Operational Design:

Operational design includes data collection technique and ethical consideration

3.2.4. Data collection technique:-

In this study the data was collected in 15 days filling by researcher every questionnaire took aboutthree minutes.

3.2.5. Ethical considerations:

The study was approved by ethical committee of research in the faculty of post graduate and scientific research. Before conducting the study, verbal permission was taken from hospital administration and from head nurse.

The purpose of study was explained to each one of nurse them that the data collected from the questionnaire will remain confidential and it's not allowed for any person to identify it.

3.2. StatisticalDesign:

After the data was collected, it was coded and transferred into a specially designed formats so as to be suitable for computer feeding by using the statistical package for social sciences software program SPSS version 16, following data entry, checking and verification process were carried out to avoid any errors during data entry. Cross tabulation, Frequency analysis and manual revision were all used to detect any errors.

The following statistical measures were used:

1. Descriptive measures include: count, percentage, for quantitative data.
2. Statistical test include: Chi square test, was used for quantitative variables for research questions.
3. Correlation between the variable of the study.

The level of significance selected for this study was **P value** equal to or less than **0.05.**

CHAPTERFOUR

RESULTS

4.Results

Table (1): Demographical data of study group (nurses work in triage):

Items		Frequency	Percent
Age:	20-25 years	**27**	**54 %**
	26-30 years	**14**	**28 %**
	More than 30 years	**9**	**18 %**
Total		**50**	**100 %**
Gender:	Male	**4**	**8 %**
	Female	**46**	**92 %**
Total		**5o**	**100 %**
Qualification:	Diploma	**8**	**16 %**
	Bachelor	**41**	**82 %**
	Master	**1**	**2 %**
Years of experience:	1-5 years	**39**	**78 %**
	6-10 years	**11**	**22 %**
Years of working in triage:	1-2 years	**45**	**90 %**
	3-4 years	**5**	**10 %**

This table showed that morethanhalf **(54 %)** of nurses age between **(**20-25 years), on the other hand near to fifth(**18 %)**morethan 30 Years ,notice thatthe majority (**92 %)**of nurses are Female. Most (**82 %**) of them haveBachelor degree and only **2 %**of them haveMaster degree.

Most (**78 %)**of nurseshave experience in nursing between **(**1-5 years), on the other hand majority**(90 %)** of nurses working in triage at range **(**1-2 years).

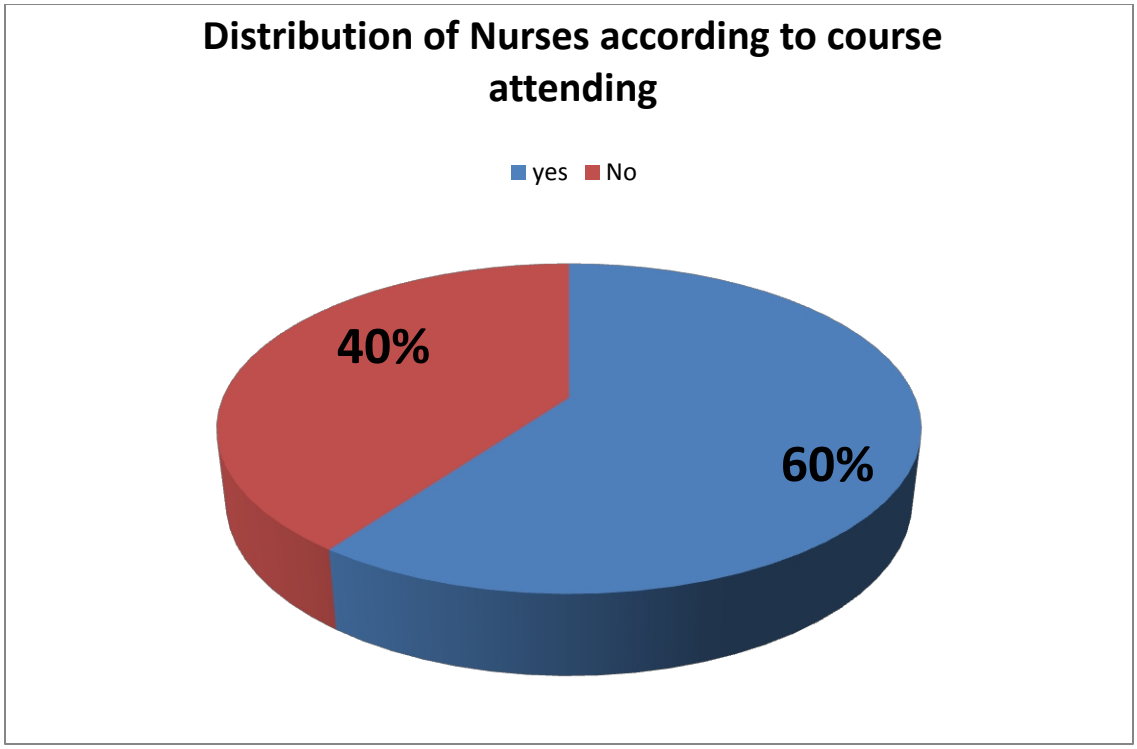

Figure (1) : Distribution of nurses according to attending training courses in triage system :

This figure classify nurses according to attending courses, three fifth (**60**%) of nursesattendance&two fifth **(40** %) not attendance tocoursesintriage.

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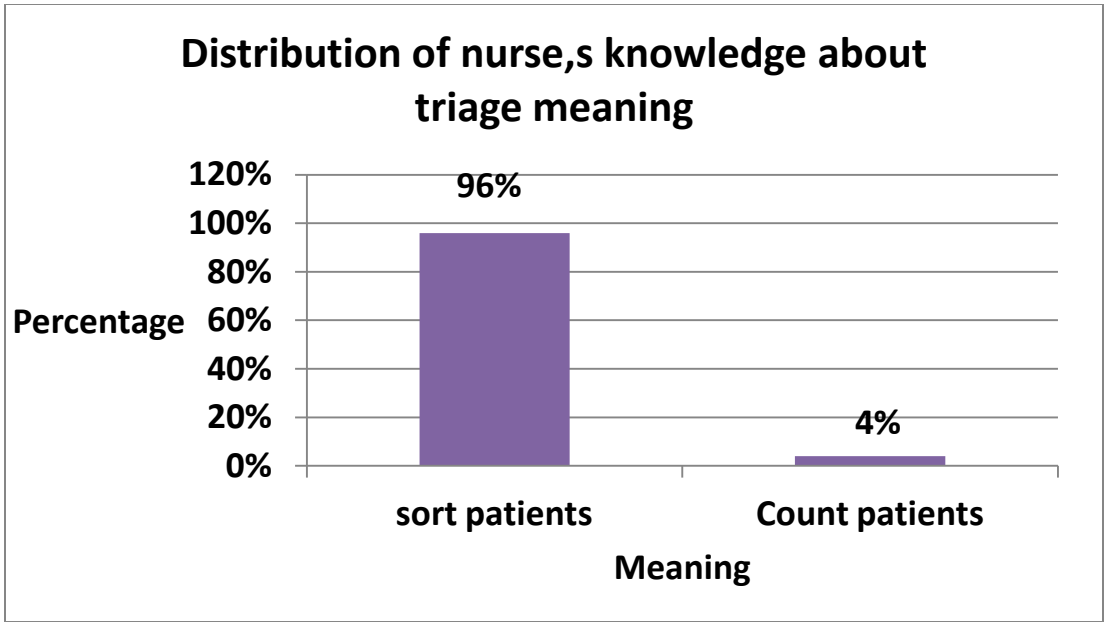

Figure (2): distribution of nurse's knowledge about meaning of triage:

The above figure showed that majority **(96 %**) of nurses said that meaning of triage is to sort patient, on the other hand (**4** %**)** of nurses said that meaning of triage is to count patient.

Table (2): distribution of triage level1 and conditions:

Triage level and conditions		Frequency	Percent
Level 1 in triage is :	Resuscitation	31	62 %
	Urgency	11	22 %
	Emergency	8	16 %
Total		50	100 %
Conditions in level 1 :	Good	20	40 %
	Moderate	6	12 %
	Poor	24	48 %
Total		50	100 %

This table showed that more three fifth (62%) said that level1 is Resuscitation, and near to half (48%) of study group had poor knowledge about condition that included in level1

Table (3): distribution of triage level11 and conditions:

Triage level and conditions		Frequency	Percent
triage level11 is :		0	0
Resuscitation		23	46 %
	Urgency	27	54 %
	Emergency		
Total		50	100 %
Conditions in level11	Good	20	40 %
	Moderate	8	16 %
	Poor	22	44 %
Total		50	100%

This table showed more than half (**54**%) of study group said that level11 is emergency, near to half (**46**%) of them said that is Urgency and near to half **(44**%) had poor knowledge about condition that included in level11

Table (4): distribution of triage level111 and conditions:

Triage level and conditions	Frequency	Percent
Level 111 in triage is : Resuscitation	10	20 %
Urgency	23	46 %
Emergency	17	34 %
Total	50	100 %
Conditions in level 111 include : Good	20	40 %
Moderate	8	16 %
Poor	22	44
Total	50	100 %

This table clarified near to half (**46%**) of study group said that level 111is Urgency, one third (**34**%) of them said that was emergency and near to half **(44**%) had poor knowledge about condition that included in level 111.

Table (5):distribution of triage level1Vand conditions:

Triage level and conditions	Frequency	Percent
Level 1Vn triage is : Urgency	2	4 %
Less urgent	46	92 %
Non urgent	2	4 %
Total	50	100 %
Conditions in level 1V include : Good	18	36 %
Moderate	8	16 %
Poor	24	48 %
Total	5o	100%

This table showed that majority **(92%)** of study group said that level 1Vis less urgent, and near to half **(48%)** had poor knowledge about condition that included in level1V.

Table (6): distribution of triage level V and conditions:

Triage level and conditions	Frequency	Percent
Level V in triage is : Urgency	1	2 %
Less urgent	3	6 %
Non urgent	46	92 %
Total	50	100
Conditions in level V: Good	20	40 %
Moderate	10	20 %
Poor	20	40 %
Total	50	100 %

This table showed that majority (**92**%) of study group said that level was non-urgent, and two fifth (**40**%) had poor and good knowledge about condition that included in level lV,

Table (7): nurse's role in triage for sorting and acting nurse:

Role of nurse in triage	Frequency	Percent
In sorting:		
Take history and physical examination.	**15**	**30%**
Categorize the patient.	**29**	**58%**
Communication b/w emergency department**.**	**6**	**12%**
Total	**50**	**100**
Role of acting nurse:		
coordination	**34**	**68%**
management	**16**	**32%**
Total	**50**	**100%**

Theabovetabledescribetherole of nurses in triage (In sorting) more than half (**58%**) of them said that, the role wasCategorize the patient, on the other hand (**12%)** of them said that, the roleis Communication b/w emergency department, and more than two third (**68%)**of them said that

The role ofacting nurse in triage was coordination.

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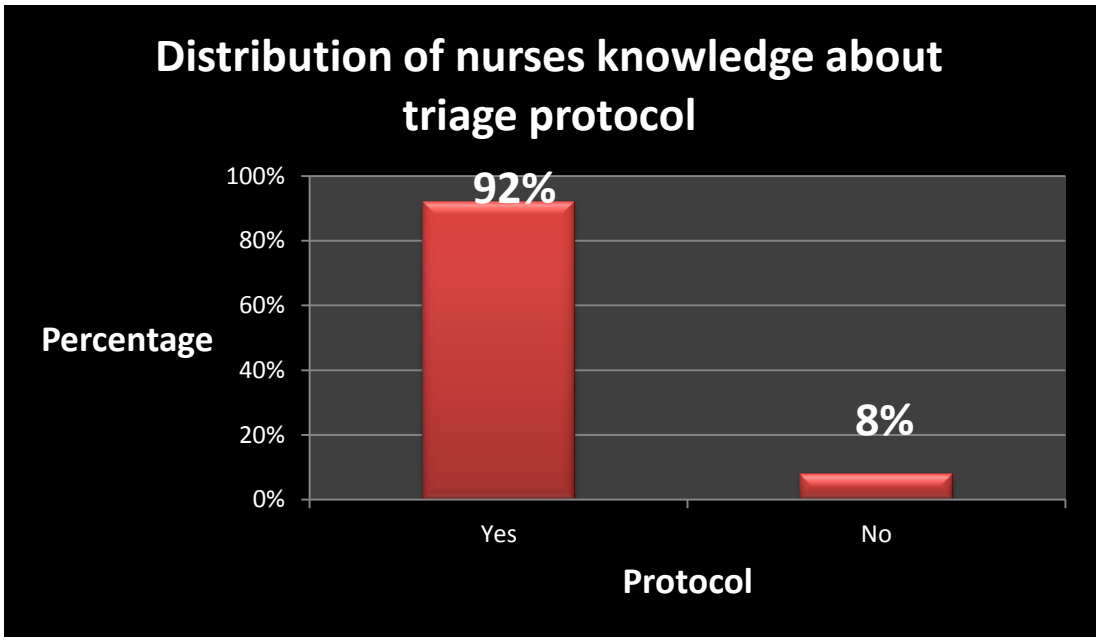

Figure (3): distribution of nurse's knowledge about triage protocol:

The above figure illustrate knowledge of nurses about triage protocol, the Majority (**92%**) ofthem consider the triageisbased on protocol.

Table (8): distribution ofnurse's knowledge about categorizing patient in triage:

Categorize pt. based on	frequency	Percent
protocol	41	82%
Your cognitive	9	18%
total	50	100

The above tableshowedthatmost (**82%**)of nurses said that, the categorizing patient in triage is based onprotocol.

Table (9): distribution ofnurse's knowledge about nursing decision making in triage:

Rapid nurse decision making based on	frequency	Percent
knowledge	19	38%
Skill	19	38%
experience	12	24%
total	50	100

The above tableshowedthatsame percentage (**38%**) of nurses said that nursing decision making in triage based onknowledge and skills, on the other hand near to quarter **(24%)** of nursessaid that nursing decision making in triage basedonexperience.

Table (10): distributionof nurse's knowledge aboutpatient and Environmental factorsaffecting patient outcome:

Factor affecting patient outcome	frequency	Percent
Patient condition:		
good	20	80
moderate	10	5
poor	20	15
Total	50	100%
Environmental factor:		
good	19	66
moderate	10	18
poor	21	16
Total	50	100%

This table explain that majority (**80%**) of study group had good knowledge about factors affecting patient outcome regarding to patient condition, and two third (**66%**) of them had good knowledge about factors affecting patient outcome regarding to environmental factor.

Table (11): distribution ofnurse's knowledge about challenges of nurse in triagework:

Challenge faced nurse during work in triage	Frequency	percent
Good	18	36%
Moderate	11	22%
Poor	21	42%
Total	50	100

This table explain that more than two fifth (**42%)** of study group had poor knowledge about challenges that faced nurse during work in triage.

Table (12): distribution ofnurse's knowledge about Triageassessment, primary and secondary:

Triage assessment	frequency	percent
Primary assessment		
good	23	46%
moderate	9	18%
poor	18	36%
Total	50	100 %
Secondary assessment		
good	23	46%
moderate	9	18
poor	18	36
Total	50	100%

This table explains that near to half (**46%**) of study group had good knowledge about primary and secondary assessment.

Table (13): distribution ofnurse'sknowledge about Factorsthat affecting nurse decision making:

Factor affecting nurse decision making	Frequency	Percent
Good	23	46
Moderate	8	16
Poor	19	38
Total	50	100 %

Thistable explains that near to half (**46%**) of study group had good knowledge about Factors that affecting nurse decision making.

Table (14): distribution of nurse's knowledge about types of documentation used in triage:

Documentation of patient data done	Frequency	Percent
Manual	33	66%
Computerize	17	34%
Total	50	100 %

The above tableclassifiedtoolsofdocumentation patient data in triage bout two third **(66%)** of nurses document manual, on the other hand more than one third **(34%)**of nurses document bycomputer.

Table (15) showed correlation between Years of experiences and Nurses decision making.

Years of experiences	**Nursesdecisionmaking**			**P value**
	knowledge	**skill**	**experience**	
1.5 years	16	14	09	
6.10 years	03	05	03	
total	19	19	12	**0.7**

P.Value:
Significant<**o.o5**
Highly Significant<**0.00**

Table (16) Reflected correlation between Challenges faced Nurses during work in triage and patient outcome.

Challenges faced Nurses during work in triage	**patient outcome**			**P.Value**
	good	**moderate**	**poor**	
good	17	0	1	
moderate	2	8	1	
poor	1	2	18	
Total	20	10	20	**0.000**

P.Value:
Significant<**o.o5**
Highly Significant<**0.00**

Table (17) Explained correlation between Triage assessments and Nurses attending triage training.

Triageassessment	**Nurses attending triage training**		**Pvalue**
	yes	**No**	
good	18	5	
moderate	5	4	
poor	7	11	
total	30	20	**0. 03**

P.Value:
Significant<**o.o5**
Highly Significant<**0.00**

CHAPTERFIVE

DISCUSION

CONCLUSION

RECOMMENDATION

5.1. Discussion

Triage is the process of categorizing ED patients according to their need for medical care, this was descriptive study done to assessnurse's perception and concept about triage in emergency Omdurman military hospital.

The study showed that more than half **(54 %)** of nurses their age between **(**20-25 years), majority (**92 %)** of nurses were Female. Most (**82 %**) of them have Bachelor degree. This was cross ponding with a study in Australia, in which Gerdtz et al. (2001) found that their subjects had bachelors' degrees in nursing. Most (**78 %)** of nurses have experience in nursing between **(**1-5 years), majority **(90 %)** of nurses working in triage at range **(**1-2 years). The study reflected that, three fifth (**60**%)of nurses were attendance courses in triage, .this study reflected that nurses were attendance courses in triage(in military hospital)more than nurses in Indonesia ,according to study done in Indonesia,This may have been why the mean score for the triage knowledge of the nurses in this study was at a comparatively low level,because few nurses had attended such a course specifically for triage. The mean score for training experience was thus at a low level. This indicated that emergency nurses in Indonesia should spend more time reviewing triage knowledge. Continuing education or training courses related to the Triage process should be provided for them. Such training regarding triage skill could allow Emergency nurses to conduct triage tasks more effectively, thus resulting in better patient outcomes due to reduced triage errors in EDs. (Mukhamad Fathoni:2013).on the other hand the study showed that there is significant relationship between triage training and good triagenursing assessment**(p valueequale0.03).**

.majority **(96 %**) of nurses said that meaning of triage was to sort patient .this studyagree study done in Indonesia.by **(Mukhamad Fathoni: 2013).**

The study showed that, majority **(92%)** of study group had good knowledge about triage levels because it was posted in depart ment, on the other hand near to half (48%) of study group had poor knowledge about conditions that included in triage levels.

In regarded to the role of nurses in triage (In sorting) thestudyreflectedmore than half (**58%**) of them said that, the role was Categorize patient, while the role of nurses in triage (In sorting) is (take history and physical examination, categorize the patient and communication between emergency department). and more than two third (**68%)** of them said that role ofacting nurse in triage was coordination,while the role of acting nurses in triage.is(. coordination , managementand consultation).

The study showed Majority (**92%**) of them said the triage was based on protocol.that good indicator to triage in military hospital was updated.

The study reflected thatsame percentage (**38%**) of nurses said that nursing decision making in triage was based on knowledge and skills.

The study showed that majority (**80%**) of study group had good knowledge about factors affecting patient outcome regarding to patient condition, and two third (**66%**) of them had good knowledge about factors affecting patient outcome regarding to environmental factor. The study reflected that there is highly significant relationship between challenges faced nurses during working in triage and patient outcome, **P valueequal.0.000,(P value equal or less than 0.o5**)this study agree study done in Iran by**(Dadashzaeh:2013)** .

The study reflectedthatthere is no significant correlation between the

Professional'sexperience and the decision-making process in triage, **P.Value (0.07)**, that agrees the studywasdone by **(Alien Marques:2012**) inBrazil.

5.2. Conclusion

Based on results and discussion it was concluded that:

The study showed half of study group had poor knowledge about conditions included in triage level, and near to half (48%) of them had good knowledge about primary and secondary assessment. On the other hand majority (82%) of them said the triage was based on protocol and had good knowledge about factors affecting patient outcome

The study reflected thattwo third (66%) of them had good knowledge about factors affecting patient outcome regarding to environmental factor. The study showed majority (86%) of study group had good attitude regarding \emergency patients.

5.3. Recommendations

1. The study reinforces the need for sustained education and training for triage implementation
2. Utilize any advance in nursing practice for emergency nurses.
3. Revision of job description and role specification should be made.
4. Specific protocols for emergency patients should be tailored to their needs.

APPENDIX

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Shendi University

Faculty of post Graduate Studies

And scientific research

Questionnaire about: assessment of Nurses's perception and concept about Triage in Emergency Military Hospital

1-Age:

a-(20-25) years b.(26-30)years.C-more than(31)years.

2-Gender:

A. Male. B-Female

3-Qualifications

a. Diploma ( ) b. Bachelor ( ) c. Master ( )

4-Years of experience:

a. 1 – 5 years ( ) b. -6-10 years ( ) c-morethan10years

5-Years of working in triage:

a. 1 – 2 years ( ) b. 3- 4 years ( ) c- morethan4years (**:**

6-Doyouattendanytrainingorcourse;

A-Yes b-No

7-Triage means:

a. To sort Pt. ( ) b. To count Pt. ( ) c. To observe Pt. ( )

8-Level(I) in Triage called:

a. Resuscitation :( ) b. Urgency ( ) c. Emergency ( )

9-Condition in level (I) include:

a. Air way compromise ( ) b. cardiac arrest( )

c. Sever shock ( ) d. Cervical Spine injury ( )

e. altered level of conscious ness ( )

10-.Level (II) in triage called:

a. Emergency ( ) b. Urgency ( ) c. Less urgent ( )

11-. Condition in level (II) includes:

a. Head injury ( ) b. Sever trauma ( ) c. Lethargy ( )

d. Chest pain ( ) e. severe asthma ( )

12-Level (III) called

a. resuscitation ( ) b. Emergency ( ) c. urgent ( )

13- Conditions in level (III) include:

a. alert head injury ( ) b. mild to moderate asthma ( )

c. GIT bleeding with stable v/s ( ) d. moderate trauma ( )

e. history of seizure alert on arrival( )

14-. Level (V) called:

a. urgent ( ) b. less urgent ( ) c. Non urgent ( )

15- Conditions in level (V) include:

a. alert head injury ( ) b. minor trauma ( ) c. earache ( )

d. chronic back pain ( ) e. corneal foreign body ( )

16. Level (VI) called:

a. urgent ( ) b. emergency ( ) c. non urgent ( )

17. Conditions in level (VI) include:

a. minor trauma ( ) b. sore throat c. minor symptom d. chronic abdomen pain ( )

18. Role of nurse in triage:

(**A). in sorting**:

a. take history and physical examination( )

b. categorize the patient( )

c. communication B/W emergency department( )

(B). role of acting nurse:

a. coordination ( ) b. management ( ) c. consultation( )

19-. If theirtriagebasedon protocol:

a. Yes ( ) b. No ( )

20- Categorize patient based on:

a. protocol ( ) your cognitive

21-Rapid nurse decision make based on :

a. knowledge ( ) b. skill ( ) c.Experiense ( )

22. **Factor affect patient. outcome:**

A. Patient condition:

I. age ( ). II. Severity of disease ( ) III. Onset of management ( )

IV. I don't know ( )

B. environmental factors:

I. staffing ( ) II .Noise ( ) II. Coordination ( )

IV-overCrowding. ( )

23. **Challenge faced nurse during work in triage**:

a. Transportproblem.( ) b. number of staff ( ) facilities ( )

d. communication ( ) e. overcrowding ( )

24-**Triage assessment derived to:**

A. primary assessment includes:

I. air way ( ). II. Breathing ( ) III. circulation ( )

IV. Disability level of consciousness and pupils reaction ( )

B. secondary assessment includes:( )

I. environmental control (warm Patient)( )

II. Full set of vital signs (BP - P.R - T)( )

III. Pulse oximetry ( ) IV. NGT ( ) V. Urinary catheter ( )

VI. Laboratory study ( ) VII. Reassurance ( )

VIII. Facilitate family presence ( )

25-**FactorsaffectonNurrsedeceisionmaking;**

A-Environmental factors ( )b-Nurse factors.( ) c-PatientCondition( )

26-**Decumentationofpatient data done**.

A-manual. ( ) b-computerize.( )

Researcher……

A privation

E.D	Emergency Department
C.P.R	Cardio Pulmonary Resuscitation
B.L.S	Basic Life Support
A.L.S	Advance Life Support
E.N.P.C	Emergency Nurse Pediatric Course
T.N.C.C	Truma Nurse Core Course
G.E.N.E	Geriatric Emergency Nurse Education
C.E.N.A	Collage of Emergency Nursing Australians
I.V	Intravenous
I.C.U	Intensive Care Unit
A.T.S	Australian Triage Scale
A.C.T.A.S	Canadian Triage and Acuity Scale
PT	Patient