بسم الله الرحمن الرحيم

Republic of Sudan

Ministry of Higher Education and Scientific Resear

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Faculty of Graduate Studies and Scientific Research

Nurses' Knowledge and Awareness Regarding Early Management of Sever Burned Patients in AL Ribat University Hospital (2018)

A thesis submitted in partial fulfillment for the requirement of the master degree in critical care nursing

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قال تعالي :

الم نشرح لك صدرك () ووضعنا عنك وزرك ()الذى انقض ظهرك() ورفعنا لك زكرك , ()فان مع العس يسرا() ان مع العسر يسرا() فاذا فرغت فانصب() والى ربك فارغب()

صدق الله العظيم

سورة الشرح

DEDICATION

I dedicate this piece of work

To my father and my mother, who suffered a lot for my happiness and supported me always

To my husband

To my sisters and brothers

To my teachers... and special dedication to *Prof., higazi Awad* With great respect for all

ACKNOWLEDGEMENT

Thank god who gave me the strength to accomplish this work, my deep thanks to my ever inspiring professor and guide supervisor Prof. Higzi Awed for his helpful supervision, suggestions, continuous support, guidance, advice, and assistance during the course of this study**.** I am highly indebted to Head of Department of emergency in Ribat University and nursing staff for their helpful, expert guidance, encouragement, support throughout my course and dissertation.

My thanks and appreciations are due to my colleagues, for their continuous help in many ways.

Thank to every one helped me during this study.

ABSTRACT

Background: Burn injury is a significant cause of mortality and morbidity. Approximately 27 million burn cases requiring professional treatment occur worldwide each year and of these 7 million will require hospitalization and more than a million will die as a direct result of their burns.

Materials: A descriptive study included all nursing staff who's working at emergency department and surgery department in AL Ribat University Hospital from December 2017 to March 2018. The main objective was to assess the nurses' knowledge and awareness regarding early management of severely burned patients.

Results: The study reveal that 45% of the nurses had good knowledge while 30% had excellent knowledge and 25% had poor knowledge regarding early management of sever burned cases. Majority of the participants 62% are between the ages 20-30 years old, 35% between the ages 30-40 and 2.5% are between 40-50 years old. Almost half of the nurses had experiences between 1-5 years while 40% had experiences around 6-10 years 5% had between 11-15 years. According to their qualification, majority are B.Sc. holder 82.5% while 12.5% were master degree and 5% were diploma. Regarding their training results, 73% had no training while 27% had training during their profession.

Conclusion: The study highlighted that in Alribat hospital the nurse's staff had poor knowledge regarding burn wound care and they were lacking the training & the experience. Creating awareness and developing knowledge among the staff nurses in relation to Burn wound care is the key factor to plan for comprehensive nursing care for better prognosis of the patient and to reduce disability and improve the quality of life of burn patients.

ملخص الأطروحة

الخلفية:تعتبر الإصابة بالحروق سببًا مهمًا للوفيات والمراضة .ما يقرب من 27 مليون حالة حرق تتطلب علاجًا مهنيًا تحدث في جميع أنحاء العالم سنويًا ، ومن هذه الـ 7 ملايين حالة ستحتاج إلى دخول المستشفى ، وسوف يموت أكثر من مليون شخص كنتيجة مباشرة لحروقهم.

الطريقه: شملت هذه الدراسة الوصفية جميع العاملين في التمريض في قسم الطوارئ وقسم الجراحة في مستشفى جامعة الرباط في الفترة من ديسمبر 2017 إلى مارس 2018. وكان الهدف الرئيسي هو تقييم معرفة ومعرفة الممرضات بشأن الإدارة المبكرة للمرضى الذين يعانون من حروق شديدة.

النتائج:كشفت هذه الدراسة أن 45٪ من الممرضات لديهم معرفة جيدة بينما 30٪ لديهم معرفة ممتازة وأن 25٪ لديهم معرفة ضعيفة فيما يتعلق بالإدارة المبكرة للحالات المحروقة .غالبية المشاركين 62 ٪ تتراوح أعمارهم بين 20-30 سنة ، 35 ٪ بين سن 30-40 و 2.5 ٪ تتراوح أعمارهم بين 40-50 سنة .ما يقرب من نصف الممرضات خبرات تتراوح بين 1-5 سنوات في حين أن 40 ٪ لديهم خبرة حوالي 6-10 سنوات كان 5 ٪ ما بين 11-15 سنة .وفقا لمؤهلاتهم ، فإن الغالبية هيخريجي بكالريوس 82.5 ٪ في حين أن 12.5 ٪ كانوا على قد حصلو على درجة الماجستير و 5 ٪ كانوا دبلوم .وفيما يتعلق بنتائج التدريب ، فإن 73٪ لم يتلقوا أي تدريب ، في حين أن 27٪ منهم تلقوا تدريباً خلال مهنتهم.

الخلاصة: وأبرزت الدراسة أن موظفي الممرضين في مستشفى الرباط كان لديهم معرفة ضعيفة فيما يتعلق برعاية الحروق ، وأنهم كانوا يفتقرون إلى التدريب والخبرة .يعد خلق الوعي وتطوير المعرفة بين الممرضات العاملين فيما يتعلق برعاية الحروق الجارفة هو العامل الرئيسي في التخطيط للرعاية التمريضية الشاملة لتحسين تشخيص المريض وتقليل العجز وتحسين نوعية حياة مرضى الحروق.

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ABBREVIATION

ER	Emergency Room
ABLS	Advanced Burn Life Support
ABCDE	Air way /Breathing / Circulation / Disability / Exposure Approach
EMS	Emergency Medical Services
BUN	Blood Urea Nitrogen
CVP	Central venous pressure
ECG	Monitor electrocardiogram
TBSA	Total body surface area

1.1 INTRODUCTION

Burns are one of the common causes of injury with which patients present to emergency units. Much of the damage caused by burns can be prevented or reversed with appropriate emergency management in the emergency unit. Burns have significant short- and long-term consequences for patients and their families, and are one of the most serious injuries to mankind. Although the outcome for burn patients has improved dramatically over the past years, burns still cause substantial morbidity and mortality. [1]

If a burn is critical depends on two things: how deep it goes (how far into the layers of skin the burn damage extends) and how wide it is (how much total body surface area it covers). Depth is measured in degrees of burns. First degree burns are superficial and don't open you up to infection or cause you to lose fluid. Second-degree burns, also known as partial-thickness, have damaged not only the outermost layer of skin, but extend into the main part of the skin where the hair grows and the sweat glands weep. Third-degree burns are also called full-thickness and have killed the skin all the way to the fatty tissue underneath (or even into the muscle).

The width of the burn is expressed as a percentage of the body's surface area. We only count burns that are at least second-degree. First-degree burns do not need specialty treatment and are not considered critical. Burns that are at least second-degree and that cover more than 10 percent of the body's surface area are generally considered to be critical in most locations, but be sure to follow your local protocols. To determine the total burned surface area in the field, use the Nines. Specific Critical Burns Most burns are determined to be critical by the depth and width of the burn. However, burns on important parts of the body can be considered critical regardless of the overall size of the burn itself. Burns still must be second-degree or worse to be considered critical. First-degree burns are never

counted. Burns to these areas are considered critical, even if this is the only thing burned Face, Burns that completely encircle the hands or feet, Genitals. [2]

According world health organization (WHO) Burns are a global public health problem, accounting for an estimated 180 000 deaths annually. The majority of these occur in low- and middle-income countries and almost two thirds occur in the WHO African and South-East Asia regions. [3]The American Burn Association reports that 500 000 patients per year seek medical treatment for burn injuries in the USA, and the mortality is 4 000 per year or 0.8% of those patients seeking medical treatment.[4]

In Africa, there are 6.1 burn related deaths per 100,000 population per year compared to 1.0 burn related deaths per 100,000 population per year in high income countries.[5]

Nurses play a pivotal role in the overall management of the burn patient. They must be well versed in the different available protocols that can be used during the Management of the burn patient. Management involves medical care and the psychological support of the patient and family. Optimal care of the burn patient requires a multi-disciplinary team approach. The burn nurse is at the core of this team. He or she is the coordinator of all patient care activities. During all the phases of management of the burn patient, the nursing assessment should focus on early detection or prevention of complications that are associated with minor to major. Burns. Severe burns require intensive monitoring during the resuscitation and initial treatment phase. [6]

1.2Problem statement

Burn injuries continue to cause morbidity and mortality internationally. Despite international collaborations and preventative measures, there are still many cases reported in low-income countries. The treatment of these patients is often protracted and requires extensive resources. The adequate resuscitation of these patients coupled with meticulous wound care can have a huge impact on their outcome.

nurse must not only continue to learn about the new advances required in burn care, but should also participate actively in learning skills for developing their inner knowledge, intuition, and wisdom as well as the discipline to integrate such skills into daily practice.

1.3 Justification

Risk of increase mortality rate According to WHO statistics (2012) estimated number of (195000) death every year is caused by burn wounds.

Despite major advances in burn wound management and other supportive care regimens, infection remains the leading cause of morbidity in the thermally injured patient. Changes in nursing practices and patient isolation have played a significant role in reducing the incidence of burn wounds and other complication. [7]

Lack of knowledge about protocol of early nursing management for severely burned patients.

Poor practice about early nursing management for severely burned patients.

1.4 Objective

General objective:

Nurses' knowledge and awareness regarding early management of severely burned patients In AL Ribat University Hospital

Specific objective:

- To determine nurse's knowledge about early management of severely burned patient.
- To assess nurses awareness about early management of severely burn patient.
- To assess nurses knowledge about complication of burn.
- To identify training and level of experience about early management of severely burn patients received by nurses.

2.1 Literature review

Burns are one of the most common and devastating forms of trauma. Patients with serious thermal injury require immediate specialized care in order to minimize morbidity and mortality.

During a rotation to the emergency room (ER), surgical sector or burn unit, residents under training should pay attention to the pathophysiology and classification of burns, treatment, and the latest updates in burn science including burn injury prognosis [8] Managing burn cases in the first 24 hours represents one of the biggest challenges in burn care and will indeed reflect the degree of morbidity and mortality. Therefore, a guide for treatment during the first 24 hours can be very helpful.

This practical guide is drawn to make it easy for nursing staff to understand the basic principles of management that should be carried out in each burn case during the first 24 hours. Any nurses should understand indeed his/her responsibility for these unique patients and should identify the management process in comprehensive way. This does not only mean covering of all wounds but also to bring the patient to his or her normal status including the psychological, social and of course the physical aspect.

Advanced Burn Life Support (ABLS) Course by American Burn Association provides guidelines in the assessment and management of the burn patient during the first 24 hours post injury [9].

The reintroduction of burn wound excision and the use of biologic dressings have significantly decreased the incidence of invasive burn wound infection and have contributed to the improvement in the survival that has occurred over the past four decades. The currently available skin substitutes are imperfect, and research endeavors continue in the effort to develop a no antigenic disease-free, readily available, physiologically effective tissue that will promptly effect wound closure, reduce scar formation and thereby improve cosmetic results, and reduce the need for reconstructive surgery. As monitoring and physiologic support techniques

improve and additional advances in wound care occur, the morbidity and mortality of burn patients will be further reduced. [10]

Improving Burn Nursing Skills and Knowledge with Burn Specific Competencies conducted study to determine if education was beneficial and/or increased knowledge of burn care.

Of 23 clinical nurses employed on the burn unit, 21 participated in the project.

Pre-assessment surveys indicated knowledge level of burn care and comfort level of performing burn-specific care varied.

Post-assessment surveys showed marked improvement of clinical staff knowledge and comfort level.

Pre- and post-assessment surveys reiterate the need for annual burn specific competency evaluations.[11]

In Egypt a study conducted in famous university faculty of nursing Associate professor of Medical Surgical Nursing Department about Nursing Guidelines and Its Effects on Nurses' Knowledge and Patient Safety Regarding Nosocomial Infection Control Measures in Burn Unit In conclusion, this study found that nursing guidelines is highly effective in improving knowledge and practice for nurses regarding nosocomial infection in burn unit as well as patient outcome. There is statistically significant difference between studied subjects (patients) pre and post implementation of nursing guideline regarding sign and symptoms of infection [12]

Other studies conducted in department of Clinical Nursing Science, College of Nursing, and University of Kirkuk, Iraq about Assessment of Nurses Knowledge Regarding Nursing Care for Patients with Burn The main purpose from this study was to identify Socio demographic characteristics of burn nurses, compare their knowledge concerning burn and nursing care, burn treatment, their experiences and complications of burn between both Azady Teaching hospital/Kirkuk City and Western Emergency hospital/Howler City.

A comparative study, using the assessment approach was conducted on nurses from 12th June, 2011 to 17th July,2012. A purposive (non-probability) sample of (20) nurses (males and females) whom working in burn center at both Azadi Teaching hospital/Kirkuk City and Western Emergency hospital/Howler City were selected for the study. Conclusions of this study The nurses' knowledge of burn and nursing care were moderately adequate at Azady hospital in compare to adequate knowledge at western hospital knowledge regarding treatment showed adequate knowledge at both
hospitals and their knowledge of complication of burn were moderately adequate at both hospitals.[13]

Complication of burn:

Deep or widespread burns can lead to many complications, including: [14]

- **Low blood volume.** Burns can damage blood vessels and cause fluid loss. This may result in low blood volume (hypovolemic). Severe blood and fluid loss prevents the heart from pumping enough blood to the body.
- **Dangerously low body temperature.** The skin helps control the body's temperature, so when a large portion of the skin is injured, you lose body heat. This increases your risk of a dangerously low body temperature (hypothermia). Hypothermia is a condition in which the body loses heat faster than it can produce heat.
- **Breathing problems.** Breathing hot air or smoke can burn airways and cause breathing (respiratory) difficulties. Smoke inhalation damages the lungs and can cause respiratory failure.
- **Infection.** Burns can leave skin vulnerable to bacterial infection and increase your risk of sepsis. Sepsis is a life-threatening infection that travels through the bloodstream and affects your whole body. It progresses rapidly and can cause shock and organ failure.

- **Bone and joint problems.** Deep burns can limit movement of the bones and joints. Scar tissue can form and cause shortening and tightening of skin, muscles or tendons (contractures). This condition may permanently pull joints out of position.
- **Scarring.** Burns can cause scars and ridged areas caused by an overgrowth of scar tissue (keloids).

Guideline nursing management of severely burned patient:

Burns vary in size (percentage of total body surface area burned) (TBSA %) and severity (depth) based on temperature and time of exposure to the burn source. Familiarize yourself with the appearance of first, second, third, and fourth degree burn.

It's important to recognize that the first priority for burn patients is not the treatment of the wound. Rather, the priority is to implement the ABCDE approach, a methodical response that ensures life-threatening complications of burn emergencies are addressed rapidly and effectively. [15]

- **Airway** evaluation and maintenance with cervical spine protection must always be your first priority. It is also important to protect the cervical spine if there is obvious or suspected traumatic injury. Burn patients frequently become edematous because of the marked increase in capillary permeability, which occurs as a response to the burn injury. Edema is a frequent culprit in compromising the airway of burn patients. Therefore, once emergency medical services (EMS) have arrived, intubation will be required if the airway is compromised.
- **Breathing** and ventilation is the next step. Burns of the chest may restrict the expansion of the chest wall because of the stiffening of the dermis in deep burns, which can impact respirations. Inhalation of smoke impairs gas

exchange (oxygen and carbon dioxide) at the alveolar level. Any patient with suspected smoke inhalation injury must be started on high-flow oxygen (15 L/min at 100%) using a non-rebreather oxygen mask. You should suspect an inhalation injury if the fire occurred in an enclosed space, if the patient has singed nasal hair, facial hair, or both, or soot around the nose/mouth. Keep in mind, however, that respiratory distress can also be caused by a condition not related to the burn, for example, a patient with preexisting diagnoses such as congestive heart failure or asthma.

- **Circulation** and cardiac status (with hemorrhage control in cases of trauma) is the third step in the emergency burn care process. In addition to evaluating the patient for hemodynamic stability, it is important to remember that edema can impair peripheral circulation. Your assessment may include evaluation of heart rate, peripheral pulses, and skin color (of unburned skin). Pre hospital personnel will insert large-bore I.V. catheters for fluid administration. Larger burns will require high volumes of continuous I.V. fluids to accommodate for the shift of plasma into the interstitial tissue, which occurs as part of the physiological response to burn injury.
- **Disability**, the fourth priority in the ABCDE evaluation, refers to neurologic deficit and gross deformity. Once again, keep in mind that a trauma injury may result in deformities such as open fractures. When this happens, these traumatic injuries must also be included in your assessment and treatment. Neurological assessments must be performed. With the exception of smoke inhalation, burns should not necessarily affect the level of consciousness. Therefore, if you assess altered level of consciousness, consider other problems such as head trauma, carbon monoxide poisoning, hypoxia, preexisting medical conditions.
- The fifth and final step in the emergency burn care process is Exposure to examine for major associated injuries and maintaining a warm environment. Remove any clothing or jewelry that is restrictive or covering the body part

that was burned. Quickly look for other injuries and then cover the patient. If the patient is wearing contact lenses, these should be removed immediately to prevent corneal damage from edema. You may cool the burn with water for a few minutes.

- **Never** use ice or cold water because it will restrict peripheral circulation locally, increasing the depth of the burn, and it may decrease body temperature. It is imperative to prevent hypothermia in burn patients, as body temperatures below 97.7° F (36.5° C) in the first 24 hours are associated with increased mortality. Cover the patient with a clean, dry covering such as a sheet or blanket to prevent evaporative heat loss.[16]

Monitoring and Managing Potential Complications:

- Acute respiratory failure: Assess for increasing dyspnea, stridor, changes in respiratory patterns; monitor pulse oximetry and ABG values to detect problematic oxygen saturation and increasing CO^2; monitor chest x rays, assess for cerebral hypoxia (e.g., restlessness, confusion); report deteriorating
- Respiratory status immediately to physician; and assist as needed with intubation.
- Disruptive shock: Monitor for early signs of shock (decreased urine output, cardiac output, pulmonary artery pressure, pulmonary capillary wedge pressure, blood pressure, or increasing pulse) or progressive edema. Administer fluid resuscitation as ordered in response to physical findings; continue monitoring fluid status.
- Acute renal failure : Monitor and report abnormal urine output and quality, blood urea nitrogen (BUN) and creatinine levels; assess for urine hemoglobin or myoglobin; administer increased fluids as prescribed.

- **Compartment syndrome:** Assess peripheral pulses hourly with Doppler; assess neurovascular status of extremities hourly (warmth, capillary refill, sensation, and movement); remove blood pressure cuff after each reading; elevate burned extremities; report any extremity pain, loss of peripheral pulses or sensation; prepare to assist with escharotomies.
- **Paralytic ileus:** Maintain nasogastric tube on low intermittent suction until bowel sounds resume; auscultation abdomen regularly for distention and bowel sounds.
- **Curling's ulcer:** Assess gastric aspirate for blood and pH; assess stools for occult blood; administer antacids and histamine blockers (e.g. ranitidine [Zantac]) as prescribed.
- **Hart failure:** Assess for fluid overload, decreased cardiac output, oliguria, jugular vein distention, edema, or onset of S3 or S4 heart sounds.
- **Pulmonary edema:** Assess for increasing CVP, pulmonary artery and wedge pressures, and crackles; report promptly. Position comfortably with head elevated unless contraindicated. Administer medications and oxygen as prescribed and assess response.
- **Sepsis:** Assess for increased temperature, increased pulse, widened pulse pressure, and flushed, dry skin in unburned areas (early signs), and note trends in the data. Perform wound and blood cultures as prescribed. Give scheduled antibiotics on time.
- **Visceral damage (from electrical burns):** Monitor electrocardiogram (ECG) and report dysrhythmias; pay attention to pain related to deep muscle ischemia and report. Early detection may minimize severity of this complication. Fasciotomies may be necessary to relieve swelling and ischemia in the muscles and fascia; monitor patient for excessive blood loss and hypovolemia after fasciotomy.

- **Contractures:** Provide early and aggressive physical and occupational therapy; support patient if surgery is needed to achieve full range of motion.
- Impaired psychological adaptation to the burn injury:Obtain psychological or psychiatric referral as soon as evidence of major coping problems appears.[17]

METHODOLOGY

Study designs: Descriptive study design from December 2017 to March 2018

Study area:

The study was conducted In Khartoum state in (burri mahas city).Khartoum state it's one of the eighteen states of the Sudan although it is the smallest state by area (22,142 km2), it is the most populous (5,274,321 in 2008 census).burri mahas city a Sudanese neighborhood located in the state of Khartoum in the city of Khartoum, one of the neighborhoods of old Khartoum.Burri is located in the east of the Khartoum.

Setting:

The study was conducted in Alribat university hospital its police governmental hospital established in 2000, to serves police community and public it contains many major specialties a surgery medicine pediatrics, etc. in additional of emergency Department. Surgery department contains 90 beds and high depended unit (HDU) contains 6 beds. Emergency department (Hot Area) contain (20 beds, minor surgery room, high dependent unit contain 6 beds, resuscitation room).

Study population:

Nursing staff at working in emergency department and surgery department

Inclusion criteria: Qualified nurse (diploma, B.Sc. and master and PhD)

Exclusion criteria:

Staff not available during data collection, nurses under training.

Sample size:

Random selection method was used according the total number of participant was 39 nurses.

Data Variables:

Dependent variables:

Knowledge and awareness about early management of burned patient

Independent variables:

Age, training courses, level of education, years' of experience

Data collection tools:

The data was be conducted by predesigned questionnaire with direct interview with participant.

Data collection technique:

Data analysis:

The data collected by predesigned questioner and filled by direct interview with participants and observation check list .the collected data by using statistical package for social science (SPSS) descriptive result presented as tables and graph.

Ethical consideration:

Proposal approved from faculty and Consent was be obtained from ethical committee at the University and provided to the study area.

Nurse's consent was be obtained verbally after explaining nature and purpose of the study.

RESULT

Burns are now a major health problem with its implication for both patient who suffer and for nurses who care for them. Nurses represent the care of the patient with a complex situation, where valuation is not easy and the need of comprehensive care which requires an immediate response to prevent damage, aesthetic, functional, psychological and sometimes even death. This study was aimed to investigate nurses' knowledge and awareness regarding early management of severely burned patients in AL Ribat University Hospital from December 2017 until March 2018.

The study reveal that 45% of the nurses had good knowledge while 30% had excellent knowledge and 25% had poor knowledge regarding early management of sever burned cases as shown in figure 1.

Majority of the participants 62% are between the ages 20-30 years old, 35% between the ages 30-40 and 2.5% are between 40-50 years old. We compare the nurses' knowledge and their age to see if there is any association and results reveal that those at the age 20-30 most of them [56%] had good knowledge while those who are between the ages 30-40 [42%] had good knowledge and between 40-50 [100%] had good knowledge. Those who had poor knowledge were 20% between 20-30 years old and 35% between 30-40 years old and there is no association between the them [P value .232] as shown in figure 2.

Almost half of the nurses had experiences between 1-5 years while 40% had experiences around 6-10 years 5% had between 11-15 years. We also investigate their experience vs their knowledge and results shows there is no association between them [p value .410]. Those who had 11-15 years of experience 50% had good knowledge and 50% had excellent knowledge. Those who had 6-10 years of experience 43.8% had excellent knowledge 31.3% had good knowledge and 25% had poor knowledge while among those who had 1-5 years of experience 18.2%

had excellent knowledge, 31.3% had good knowledge and 27.3% had poor knowledge as shown in figure 3.

According to their qualification, majority are BSC holder 82.5% while 12.5% were master degree and 5% were diploma those diploma holders shows 50% with good knowledge and 50% had poor knowledge while BSC holders 21.2% had poor knowledge, 48.5% had good knowledge and 30.3% had excellent knowledge and master holders results shows 40% had excellent knowledge and 20% had good knowledge and 40% with poor knowledge [P value .609] as shown in figure 4.

Regarding their training results, 73% had no training while 27% had training during their profession. Those who did not get any training shows 48.3% had good knowledge, 27.6% had excellent knowledge and 24.1% had poor knowledge [p value.784] as shown in figure 5.

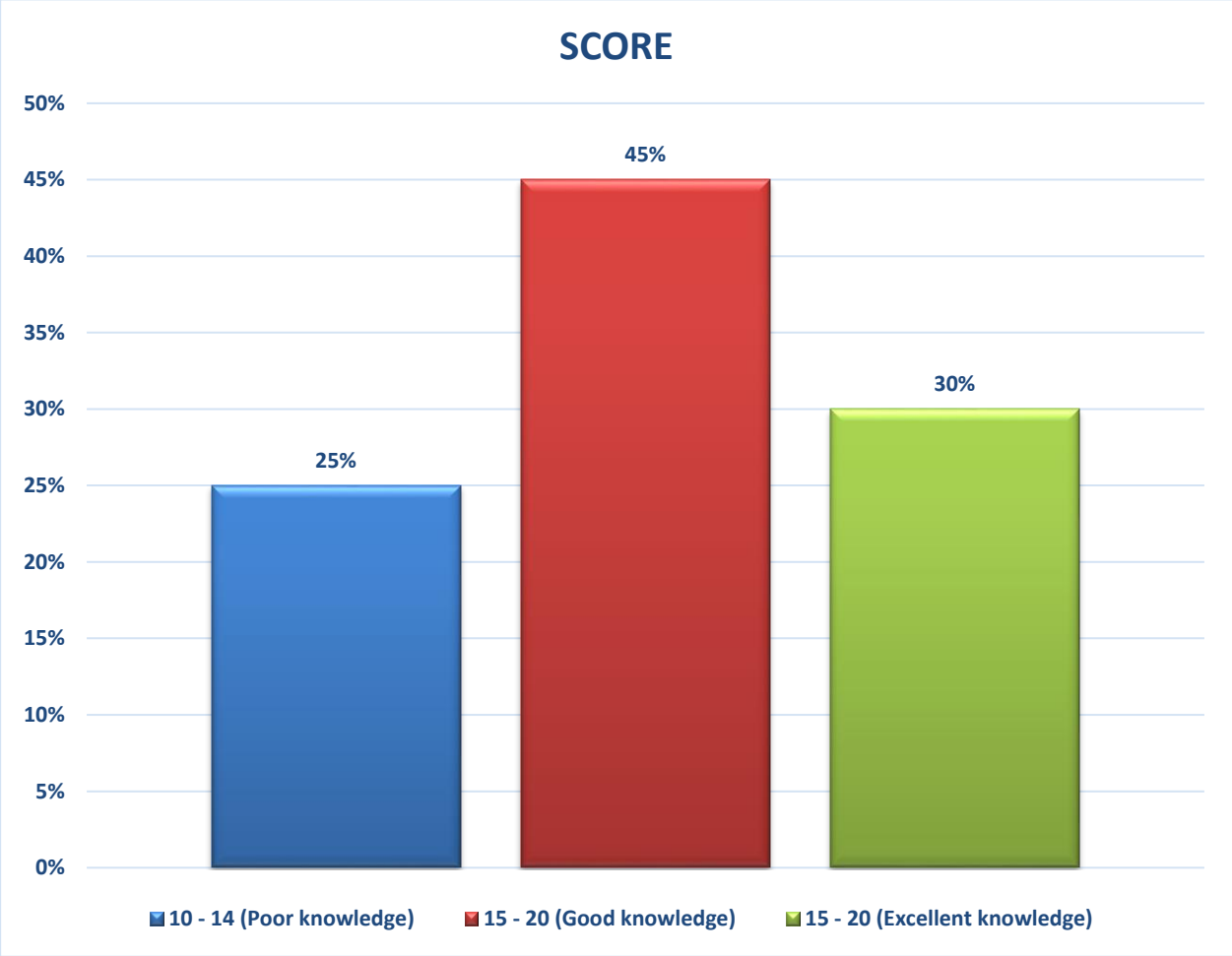


Figure 1: Distributions of nurses according to their knowledge.

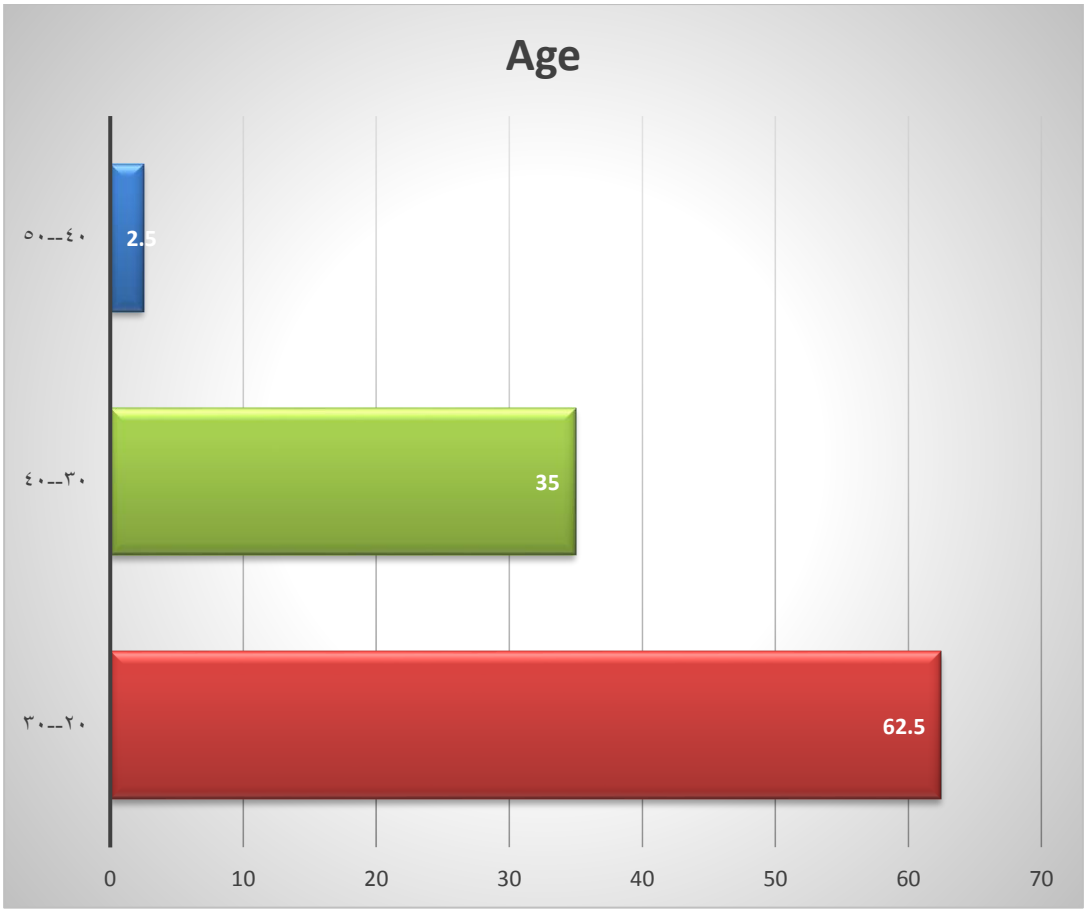
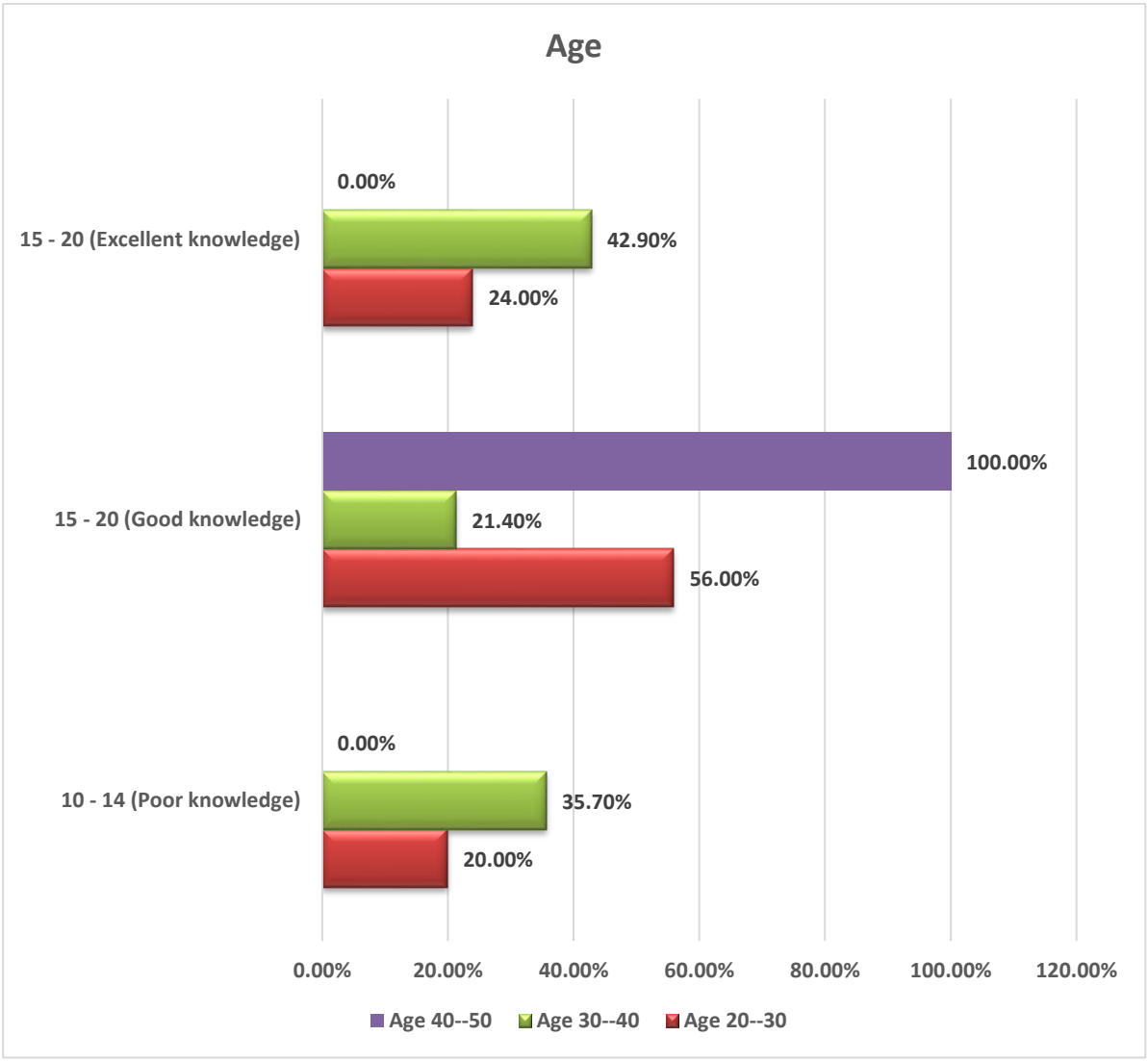
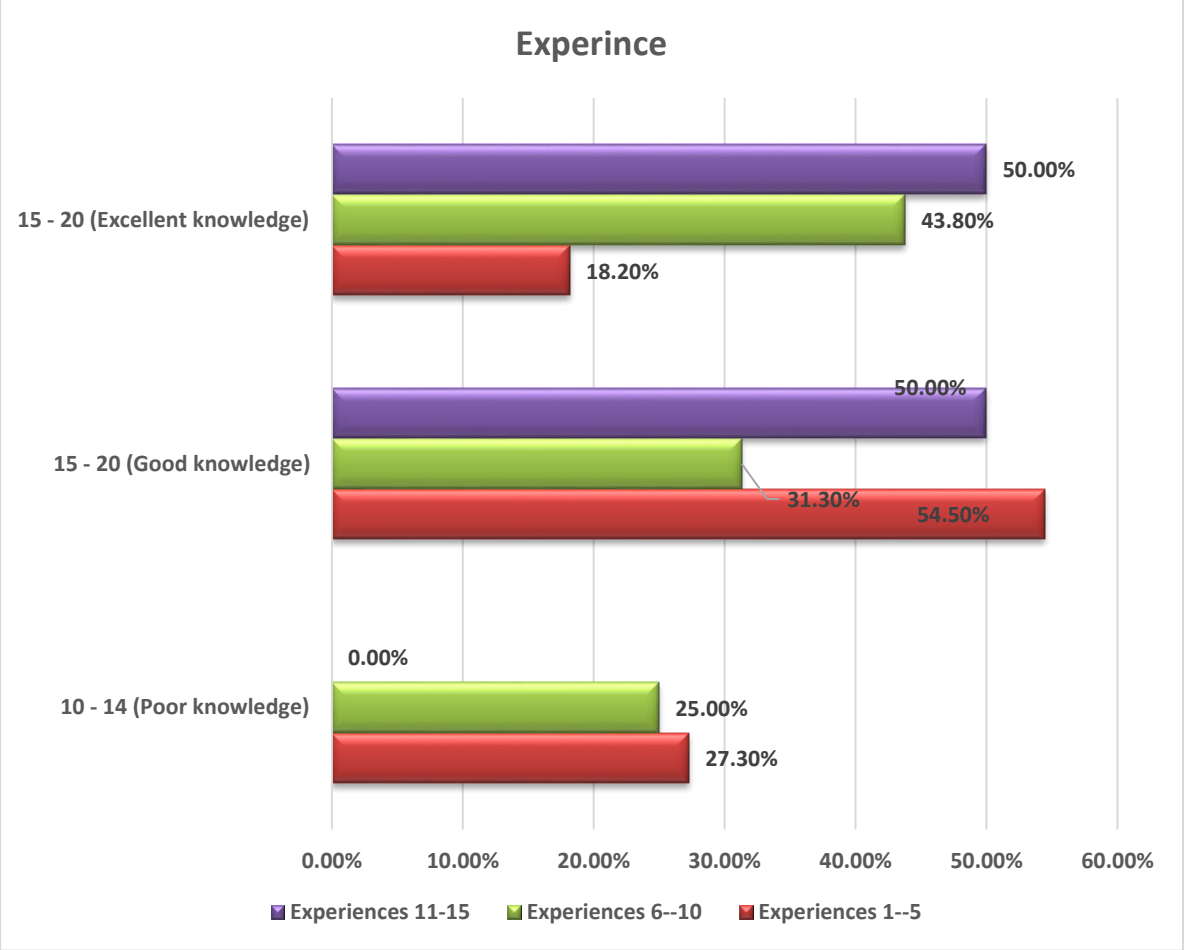


Figure 2: distributions of nurses according to their knowledge and age.



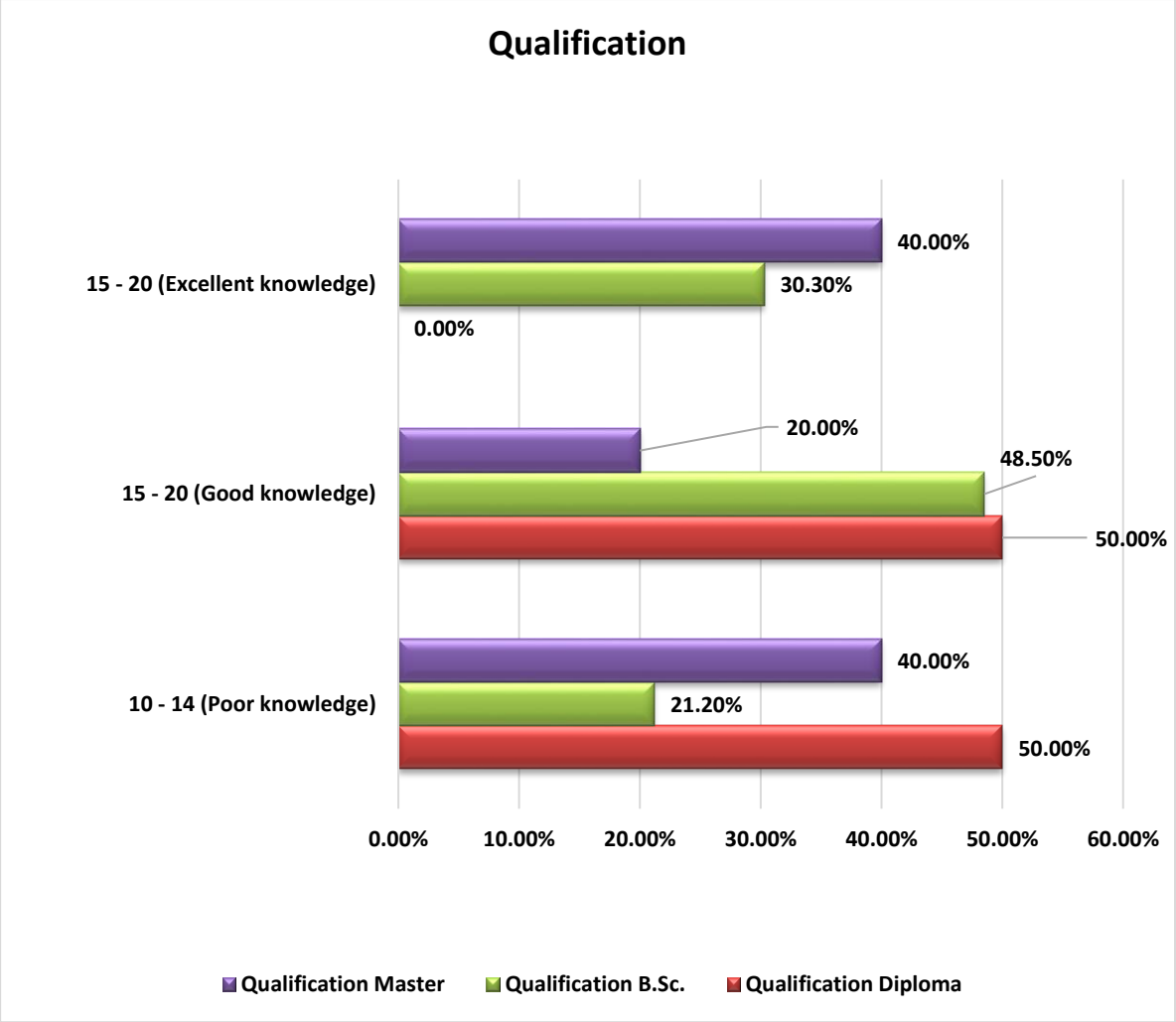
P.value= .232

Figure 3: distributions of nurses according to their knowledge and age.



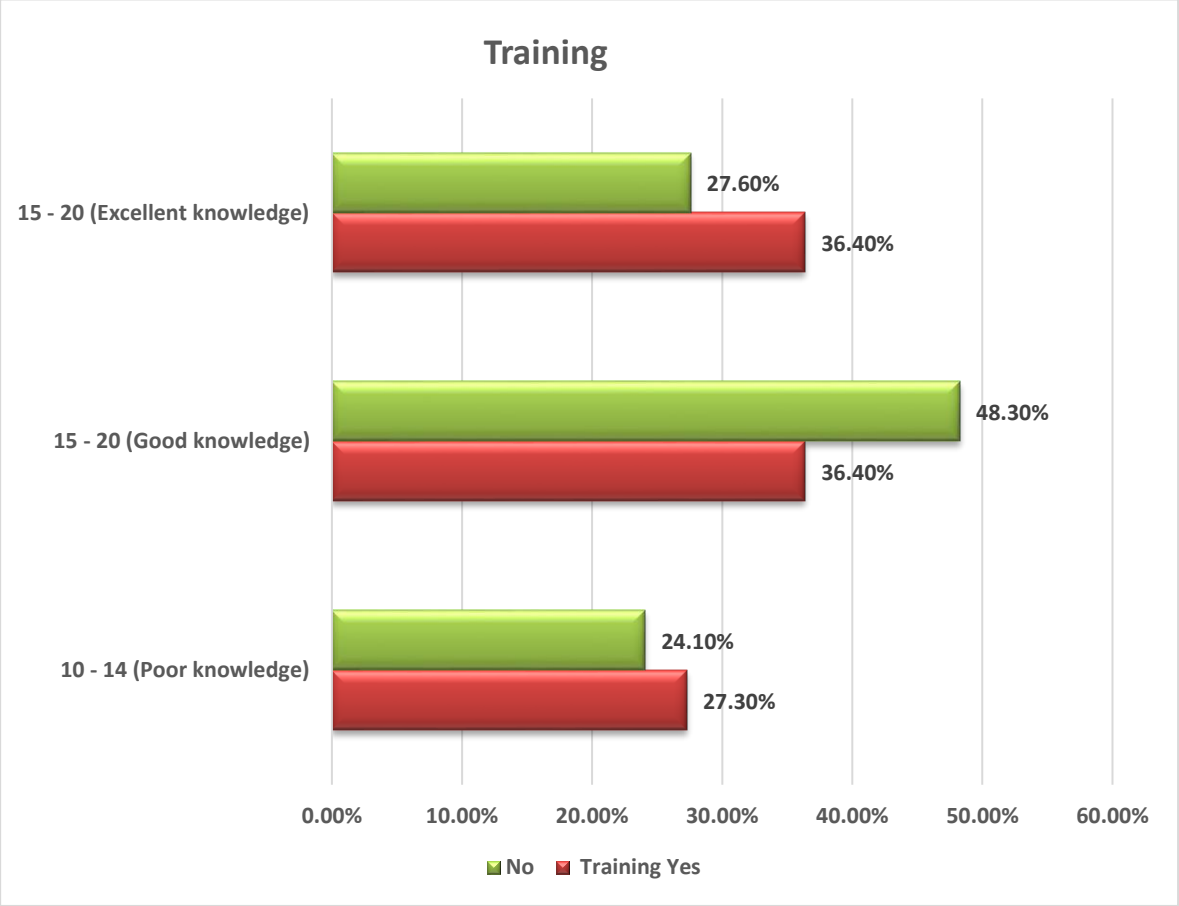
PV= .410

Figure 4: distributions of nurses according to their knowledge and experience.



PV=.609

Figure 5: distributions of nurses according to their knowledge and qualification.



PV= .784

Figure 6 distributions of nurses according to their knowledge and training.

DISCUSSION

Emergency room is considered the “front” of the hospital battlefield. It is a distinctive work environment, since the health professionals who work in it are often tested with rapid and dangerous changes with highly complex clinical and traumatic situations which require immediate decisions to be made .since that the case, the assistance of burn patients with the correct administration of initial care is extremely important to prevent the progression of burns and their associated sequel both short and long terms. However, general knowledge of the appropriate initial care procedures in this area is universally poor especially among health workers in emergency units. This is similar to our study given the high percentage 25% of nurses who had poor knowledge regarding early management of severely burned patients In AL Ribat University Hospital this may be associated with the high rate 72.5% of nurses who did not had any training program during their profession. In Azady hospital the nurses' knowledge of burn and nursing care were moderately adequate. [13] Another one concluded that nurses working in the burns specialized units have adequate knowledge on aseptic technique and a major key role to play in the prevention of sepsis during burns patient management, but exhibit fair adherence in practice. Study highlighted that most of the nurse’s experiences was between 1-5 years with good knowledge and the majority of the nurses was bachelor holder half of them had a good knowledge

CONCLUSION

The study highlighted that in Alribat hospital the nurse's staff had poor knowledge regarding burn wound care and they were lacking the training & the experience. Creating awareness and developing knowledge among the staff nurses in relation to Burn wound care is the key factor to plan for comprehensive nursing care for better prognosis of the patient and to reduce disability and improve the quality of life of burn patients.

RECOMMENDATION

1. Increase awareness among nurses in burn wound care to provide proper care and decrease mortality rate due to ineffective burn management.
2. Implement periodic training program targeting new & old staff to refresh their knowledge regarding this issue.
3. Implement health education through posters all around the hospitals with major & critical in formations.

REFERENCES

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Appendix: Questionnaire

university of Shendi

Master of critical care nursing

Nurse's knowledge and awareness regarding early management of sever burn patients

Questionnaire

1. Age: [20-30] ( ) [30-40] ( ) [40-50] ( )

2. Years' of experience: [1-5] ( ) [5-10] ( ) [10-15] ( )

3. Qualification : Diploma ( ) B.Sc. ( ) master ( ) PhD ( )

4. Training course about burn management : [Yes] ( ) [No] ( )

Knowledge and awareness:

Draw a circle around the correct answer letter

5. Which type of fluid should the nurse expect to prepare and administer as fluid resuscitation during the emergent phase of burn recovery?

A. colloids B.crystalliods C.fresh frozen plazma D.packed red blood cells

6. Which is the priority nursing diagnosis during the first 24 hours for a client with burns to the legs and arms that are red in color, edematous, and without pain?

A. Decreased Tissue Perfusion B. Disturbed Body Image
C. Risk for Disuse Syndrome D. Risk for Ineffective Breathing Pattern

7. wich informations obtained by assessment ensure that patient respiratory effort are currently adequate

A. the client able to talk B. the client alert and oriented

C. o_2 saturation 97% D. chest movement are uninhibited

8. which indicated the fluid resustation has been successful for p.t with burn

A. heamatocrit = 60% B. heart rate = 130b\m

C. increase prefral edema D. urine output = 50 ml\hr

. twelve hrs after the patient was initially burned bowl sound are abcent; what is the nurses best action

A. repositioning the patient on to the right side B. DOCUMENT the findingsat the only action

C. notify the emergency team D. decrease i.v flow rate

10. on day3 after a burn, the client develops a temp=100° F ,WBCs = 15,000/mm3, and a white, foul-smelling discharge from the wound. The nurse recognizes that the client is most likely exhibiting symptoms of ?

A. Acute phase of the injury B. Autodigestion of collagen
C. Granulation of burned tissue D. Wound infection

11.What intervention will the nurse implement to reduce a client's pain after sever burn ?

A. Administering pethidin 50mg I.V. B. Administering Hyocin inj.
C. Applying ice to the burned area D. Avoiding tactile stimulation

12.Which finding is characteristic during the emergent period after a deep full thickness burn ?

A. Blood pressure of 170/100 mm Hg B. Foul-smelling discharge from wound
C. Pain at site of injury D. Urine output of 10 ml/hr

13. Which laboratory result, obtained on a client 24 hours post-burn, will the nurse report to the physician immediately?

A. Arterial ph= 7.2 B. Hematocrit, 52%
C. Serum potassium 4 mmol/L D. Serum sodium, 131 mmol/L

14. after aburn when the nurse should be alert for hypokalemia

A. immediately following the injury B. during fluid shift

C. during fluid remoblzation D. during the late acute phase

15. what the intervention used to prevent wound infection during acute phase

A. Changing gloves between wound care on different parts of the client's body.

B. A Using the closed method of burn wound management.

C. voiding sharing equipment such as blood pressure cuffs between clients.

D. Using proper and consistent hand washing.

16. What is the clinical manifestation should alert the nurse to possible CO_2 poisoning

A. pulse oximetry reading of 80 B. xpiratory stridor and nasal flaring

C. cherry red color in mucus membranes

D. presence of carbonaceous particles in sputum

17. Which nursing intervention is likely to be most helpful in providing adequate nutrition while the client is recovering from burn?

A. Allowing the client to eat whenever he or she wants
B. Beginning parenteral nutrition high in calories
C. Limiting calories to 3000 kcal/day
D. Providing a low-protein, high-fat diet

18. complication of burn

A. renal failure B. intestinal obstruction C. renal stone D .skin cancer

19. how the nurse calculate the amount of I.V fluid replacement for patient with burn

A. according to body weight B. according to total body surface area (TBS)

C. according to urine output\24hrs D. according to patient age