

**NURSES' AND PHYSICIANS' EXPERIENCE OF CARING FOR
CRITICALLY ILL PATIENTS IN TANGA REGIONAL
REFERAL HOSPITAL TANZANIA**

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**MSc. Nursing (Critical Care and Trauma) Dissertation
Muhimbili University of Health and Allied Sciences
October, 2015**

**NURSES' AND PHYSICIANS' EXPERIENCE OF CARING FOR CRITICALLY
ILL PATIENTS IN TANGA REGIONAL REFERRAL HOSPITAL - TANZANIA**

By

Halima Msengi

**A Dissertation Submission in (Partial) Fulfillment of the Requirement for the Degree
of Master of Science Nursing in Critical care and Trauma of
Muhimbili University of Health and Allied Sciences**

**Muhimbili University of Health and Allied Sciences
October, 2015**

CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by Muhimbili University of Health and Allied Sciences a dissertation entitled *Nurses' and Physicians' experience of caring for critically ill patients in Tanga Regional Referral Hospital*, in partial fulfillment for requirements for the degree of Masters of Science in Critical Care and Trauma Nursing of Muhimbili University of Health and Allied Sciences.

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Date



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Department of Nursing, Umeå University

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Date

DECLARATION AND COPYRIGHT

I, **Halima Msengi**, declare that this **dissertation** is my original work and that it has not been presented and will not present to any other university for similar or any other degree award

Signature

Date.....

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ACKNOWLEDGEMENTS

The completion of this work would not have been possible without the guidance, assistance and support by many people. My gratitude and thanks to God almighty that makes everything possible. Deeply indebted to Dr Lilian T Mselle from MUHAS for her supervision, constructive criticism and guidance provided. I am Gratefully to Dr. Elisabeth Lindahl from Umea University for encouragement, commitment and support throughout work. I would like to express my sincere gratitude to Ms. Isolide who made the input on the interview guide.

I like to express my sincere thankfulness to Nurses and Physicians at Tanga Regional Referral Hospital without their willingness to participate the effort would be put to waste. I thank the Ministry of Health and Social Welfare for financial support provided throughout the study. I am so gratefully to the moral and emotional support provided by school of Nursing at MUHAS with special thanks to faculties and my class mates. Lastly but the most I would like to acknowledge the patience, understanding and the sacrifice from my mother Habiba, and my beloved son Rafii.

DEDICATION

I dedicate this work to Rafii, (son), Habiba Msengi (mother) and Khamis Msengi, (late farther) for their physical and emotional support provided throughout my endeavor and to all nurses at Bombo Hospital.

ABSTRACT

Background: Nurses and Physicians at Tanga Regional Referral Hospital (TRRH) are responsible for efficiency care and management of the critically ill patients. Their carrier objectives as medical professionals should be accomplished by giving an optimal care to critically ill patients as patient's needs. Patients' needs are the requirement that is supposed to be met so as to improve their well-being and to address life threatening conditions or indicators which might endanger their lives, family as well as the community at large. In order to facilitate wellbeing and improvement of critically ill patients, the specific unit of caring these patients should be identified. Moreover, equipment, drugs and supplies, specialized personnel in the field should be considered.

Material and Methods: A qualitative descriptive design was used to explore experience of nurses and physician in caring for critically ill patient at TRRH. Nurses and Physicians experience and challenges were assessed through in-depth interviews. Study participants were 15, 10 nurses and 5 physicians who are working in 5 departments at TRRH. These Departments were surgical, medical, peadiatrics, outpatient, obstetrics and gynecology. Purposive sampling was used to recruit the participants who had working experience of not less than three years from the selected departments. Analysis of data was guided by qualitative content analysis.

Results: Four themes emerged from the data: be present and staying close, being powerless, failure to protect patient's privacy, lacking of caring ability.

Conclusions; Nurses and Physicians at Tanga Regional, Referral, Hospital, faces multifaceted experiences when caring for critically ill patients. Because of not having a specific unit where these critically ill patients could be cared for, lack of equipment, supplies and medicine, and the lack of expertise in caring these patients, made them feel powerlessness in providing optimal care to critically ill patients at TRRH. The experience and challenges recognizes demand for strategies to improve efficiency management and optimal care for critically ill patients in the hospital.

Recommendations: Short and long training on management of critically ill patients to nurses and physician are crucial to provide ability for these health professionals to assume their caring role effectively. Further, an equipped ICU should be established at the Regional hospital. Further study concerning care of critically ill patients in the ward to other regional hospital in Tanzania is recommended.

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LIST OF ABBREVIATION

A&E	Accident and emergency
APCU	Acute pediatric care unit
AMO	Assistance medical officer
EN	Enrolled nurse
ECG	Electrocardiograph
ICU	Intensive care unit
MD	Medical doctors
MOHSW	Ministry of Health and Social welfare
MUHAS	Muhimbili University of health and Allied Sciences
NHIF	National Health Insurance Fund
RN	Registered nurse
TRRH	Tanga Regional Referral Hospital
IDI	In-depth interview

DEFINITION OF TERMS

Intensive care unit: Is a unit specifically designed and equipped facility staffed by skilled personnel to provide comprehensive and continuous care to critically ill patients (Bala, Kaur, & Yaddanapudi, 2010) The unit is a specialized actual dedicated care given by a team to a patient who is critically ill. The team include: medical staff, nursing staff, unit director, respiratory care personnel, and other physician subspecialties. Thus the name ICU makes an attention to anyone who practices medicine (Bala et al., 2010).

Critically ill patients: Are those patients who are at high risk or actual potential life threatening health problems (Olariu, Olariu, & Szabo, 2012) The more critically ill the patient is the more likely he or she is to be highly vulnerable, unstable and complex, thereby requiring intense and vigilant nursing care (Clamohoy, Garcia, Jungco, Kempis, & Makiputin, 2011).

Critical care: Is a specialized care of patients whose conditions are life-threatening and who require more comprehensive care and constant monitoring compared to other patients who are not critically ill usually in intensive care units (Elliott, Aitken, & Chaboyer, 2012).

OPERATIONAL DEFINITIONS

Intensive care unit is the unit designed according to hospital needs for caring those patients who need a vigilant care with specialized personnel in the field as well as sophisticated equipment such as cardiac monitor, mechanical ventilation with oxygen therapy, following their life threatening health conditions.

Critically ill patients are those patients with most seriously illness with multiple health complications, and or organ failure from health alignment like congestive heart failure, and myocardial infarction from cardiovascular compromise, respiratory distress from respiratory system, neurological system among others. Critically ill patient could be most victim patients from violence, burns, motor vehicle collision drowning and or falls.

Critically ill patient are the patient where by their illnesses pose life-threatening, by multisystem diseases, and or multiple organ failure

Physician; in this study a physician is a medical doctor or a general practitioner with a qualified certificate to practice legal medical services in a community.

CHAPTER ONE

1.0 INTRODUCTION

1.1: Background

Tanga Regional Referral Hospital (TRRH) is a government hospital located in Northern zone part of Tanzania in Tanga region. It has a bed capacity of 412. and serves 113923 outpatients per year and (16520) inpatients from all districts of Tanga region as well as neighboring country Kenya It is a secondary referral hospital for 9 districts with population of 273,334 (NBS 2012). The hospital is staffed by 410 personnel including registered nurses (RN) 93 enrolled nurses (EN) 99, medical doctors (MD) 27, assistant medical officers (AMO) 18 and 22 clinical officers (CO) and , 7 specialists includes: 3 Medical doctor in Medicine. (MMED) 3 gynecologists, 1 surgeon, and other supportive clinical staffs (annual hospital report 2014) There is no specialist in critical care or emergency care and there is no equipped Intensive Care Unit (ICU) at the hospital.

TRRH is a teaching hospital for intern doctors, Assistant medical officer students (AMO) and Nursing. The hospital provides the following services radiography (X-ray) and laboratory (hematology, biochemistry, and parasitology). Critically ill patients with various conditions are usually admitted in the general wards. Patients admitted at TRRH have an average stay of 4 days (hospital annual report 2014) However; the average stay for the critically ill patients in these wards differs in lengths. It can be less or even longer depending with patient's disease severity. Critically ill patients are the most seriously ill patients in the wards. They have multiple organ failure such as respiratory failure, cardiovascular, renal, and or brain death.

Critically ill patients are mostly victim patients from motor vehicle crashes, violence, burns, drowning, falls, patients with multiple complications from health alignment like myocardial infarctions, congestive heart failure, or cerebral vascular accidents (Bala et al., 2010). Moreover, in the low-income countries most of the critically ill patients are younger and have less comorbidity (Riviello, Letchford, Achieng, & Newton, 2011). Furthermore, emergency and critical care becomes the weakest part of health care system with significant deficits such as infra-structure and training (Okafor, 2009).

Hospital care for the most severely ill patients affects overall mortality especially in the facilities with lack of personnel who have skills and knowledge on assessing severity of illness and priorities in patient care. Even though sub-Saharan Africa faces burdens of acute injury and illness, few clinical facilities are configured to take an integrated approach to resuscitation and stabilization (Reynolds, Mfinanga, Sawe, Runyon, & Mwafongo, 2012).

Patient care prioritization can be performed due to disease priority, according to guidelines for ICU admission, discharge, and triage (Riviello *et al.*, 2011). In 1999, the American College of Critical Care reported that critically ill patients should be cared for according to the severity of the disease they suffer (Squiers, King, Wagner, Ashby, & Parmley, 2013). Most of health facilities in Tanzania including, TRRH lack an integrated approach to triage thus affecting overall critically ill patients care. As well as the failure of prioritization and where to care for these acutely ill patients (Reynolds *et al.*, 2012).

Optimal, fast and professional care is highly needed to stabilize critically ill patients. Therefore care of critically ill patients should be carefully planned, including various medical sub specialties as well as the patients' family. Nevertheless nurses and physicians should be able to assist the patient to cope with stress, pain and anxiety during their stay in the ICU, and also be able to support the family from being worried of losing their beloved ones. Further they need to provide good care at the end of life (Obogo, 2010).

Although the global burden of the critical illness in highly developed countries is difficult to quantify literature shows that 90% of trauma death, 90% of global maternal mortality, and 90% of death from infectious diseases including pneumonia and meningitis occur in low and middle income country (Baker *et al.*, 2013).

Furthermore, according to researcher's experiences it is estimated that 80% of critically ill patients being admitted in TRRH who need special ICU care died due to substandard care. These patients include, post-operative major surgeries, complications related to deliveries such as abruption placenta and eclampsia. Patients with acute or severe medical conditions such as diabetic keto acidosis, acute respiratory failure, following a number of reasons such as failure to identify and address life threatening conditions, inadequate equipment as well as lack of specialized personnel in critical care as a consequences sub optimal care is provided (TRRH annual report 2012). Department of Health (DH) and urgent and emergency care 2011 state that

an effective ICU care can be influenced by the best practice of care at any accident and emergency (A&E) at causality in any hospital level. Reynolds 2011 states that few clinical facilities in Tanzania are configured to take an integrated approach to resuscitation and stabilization for critically ill people consequently. Being critically ill or injured may result in an emergency admission to ICU. Hence hospital staff might contribute to risking patient's life (Bhengu & Bultemeier, 2011) According to DH and emergency care the best practice of care at any (A&E) causality should be applied ensuring that:

There are adequate and functional resuscitation equipment such as suction machine, laryngoscope and blades, Bag-valve masks (BVM), Oxygen gas cylinders, suturing packs, basic dressing packs, essential drugs for emergency care such as Morphine injection, nitroglycerine and Aspirin tabs, Defibrillators, cardiac monitors and mechanical ventilators, a functional lab and an X-ray machine. Nevertheless, there are well trained staffs that can resuscitate and stabilize any patient at A&E. The expected scope of practice is that a nurse shall be able to identify signs and symptoms of a critically ill patient whose breathing status is compromised, bleeding profusely, with altered level of consciousness and abnormal heart rate and do carry out simple interventions like opening the airway, doing head tilt chin lift, assessing the rate of breathing, looking for radial/carotid pulse and participating in an effective cardiopulmonary resuscitation (CPR).

On the other hand it is expected that nurses and physicians will be able to monitor and interpret electrocardiography (ECG), administer first line resuscitation drugs, carry out defibrillation, intubate a patient who is not breathing, do cardio version or pacing and order basic investigations (radiological and laboratory). In addition, there is adequate number of skilled personnel to stabilize critical patients and transfer them to theatre or wards and or ICU. Last but not the least; all the required resuscitation drugs are available in casualty and in a resuscitation tray/trolley. These drugs could be Adrenaline, atropine, oxygen gas, Ergometrine, calcium bicarbonate, calcium gluconate, 50% dextrose, Nitroglycerine. Activated charcoal, anti-snake venom, Chlorpheniramine etc Resuscitation protocol which states how to activate an alarm, the responders and their roles, the constitution of a resuscitation team, the equipment they respond with, the treatment/ resuscitation guidelines, drugs used, monitoring equipment, how to consult and when to expect a consultant. But there might be some challenges on meeting these best practice at accident and causality level, ward as well as at an ICU.

1.2. Problem Statement

Overseas et al., (2011) report that; most of referral hospitals in Tanzania have no ICU for caring for critically ill patients. Critically ill patients at TRHH are managed in the wards rather than in an ICU where critically ill patients are supposed to be treated and taken care off. The management and care of critically ill patient who are admitted in the ward has said to be suboptimal due to absence acting up on premorbid adverse sign of events that can be identified. Therefore treatment and management can be delayed too (Morrice A, 2007). Studies show that critical care; when managed in ICU is managed in a holistic manner and therefore promotes healing of patients and of their families. Hence critically ill patients can benefit from being cared for in ICU, connected to sophisticated mechanical ventilator, with infusion pumps running smoothly, and complete monitoring (Waydhas, 1999). Moreover patients who are admitted in the general ward may exhibit premonitory signs of adverse events, which may be observed but cannot be acted upon by nurses and physicians because of human and non-human resources scarcity and not appropriate environment (Morrice A, 2007).

Experiences and challenges of caring for critically ill in ICUs have been reported in some studies globally and also in Africa including Nigeria and South Africa, (Bhengu & Bultemeier, 2011; Matlakala et al., 2014; Okafor, 2009). In Tanzania, the study reported on the needs of the family of critically ill patients and their satisfaction with care (Obogo, 2010). Nevertheless, none of these studies provide an account of experiences of health care providers on providing care to critically ill patient in the situation where an ICU does not exist. While the study by Fowler, Adhikari, & Bhagwanjee, (2008) depict the difficult to manage critically ill patients in the wards due to their vulnerabilities. Nurses and physicians experience and challenges of caring for critically ill patients in the general wards at TRRH have never been reported. Therefore, this study will explore experiences of nurses and physicians when providing care to critically ill patients.

1.3 Objective of the Study

The objective of the study was to explore experiences and challenges of nurses and physicians in caring for critically ill patients in Tanga regional referral hospital.

1.3.1 Specific Objectives

1. To describe nurses and physicians experiences of caring for critically ill patients at TRRH
- 2 .To describe challenges encountered by nurses and physicians when providing care to critically ill patients at TRRH

1.4 Rationale

The study was designed to explore experience of nurses and physicians in caring for critically ill patients in TRRH where there is no ICU. The study describes experiences of nurses and physicians in providing care for critically ill patients in TRRH as well as challenges. Moreover; the study will precipitate for further study concerning caring for critically ill patients in the country.

1.5 Research question

What are the experiences and challenges nurses and physicians are facing during caring for critically ill patients at TRRH?

1.6 Theoretical framework

The study was focused on ICU through the tele ICU / ICU partner model, the model was used as a theoretical view The tele-ICU/ ICU partner model (Aliso Viejo, 2013) in the establishment and sustainability of health work environment. Addressing health work environment standards that apply to the overlap areas of care provided to critically ill patients, the standards are skilled communication, true collaboration, and effective decision making. Tele ICU nurse have a broad experience to all standards with demonstrating knowledge and skills in bed side critical care as well as ward critically ill patient who are admitted in the wards.

Caring for critically ill patient needs not only the skilled nurses but also physicians, as well as other staffs, physical environment for care, and the complexity of patients' needs. Consequently every patient, nurse, physician and facility care is different (Stewart & Mcelligott, n.d.). The tele ICUs are similar to other ICUs that both are staffed with expert resources including nurses, physicians, and other support staffs. Each ICU has a nursing and physician managerial supervision. Extensive technology provides mutual access to patient data, including real-time waveforms provided by electrocardiography or arterial catheters, medication history, laboratory results, radiology images, clinical documentation, and other pertinent data. Each staff member is accountable for demonstrating competency, identifying patient safety concerns, contributing to teamwork, and improving quality (Aliso Viejo, 2013). Moreover an ICU counterpart's includes staff perform rounds, assessing patient's status and communicating the need for care changes. An ICU can be classified according to a specific care being provided for example a highly dependency unit where close monitoring, resuscitation, and short term ventilation <24 hours has to be performed, more prolonged ventilation with nurses, physician and other allied sciences and the one that provide all aspect of an ideal ICU (Ferdinande, 1997).

Individually, each requires the health work environment (HWE) standards of meaningful recognition, appropriate staffing, and authentic leadership to achieve staff satisfaction, but the realization of those standards may differ. Although working in separate environments, both teams overlap at a single point of care, at the patient's bedside. To the contrary the major different between tele ICU and other ICUs is that, the assessment and communication by tele-ICU are done remotely using camera and speakers located in patient's room but does not replace

bed side resource instead it encompasses with constant supportive and adjunctive care (Aliso Viejo, 2013).

Therefore to achieve optimal critically ill care as well as patient outcome care providers must identify strategies that can build team work with an initiative health work environment that should be very effective in the provision of optimal care and in an effort to improve care to critically ill

Factors experienced by health care workers adopted from partners in patient care model in ICU

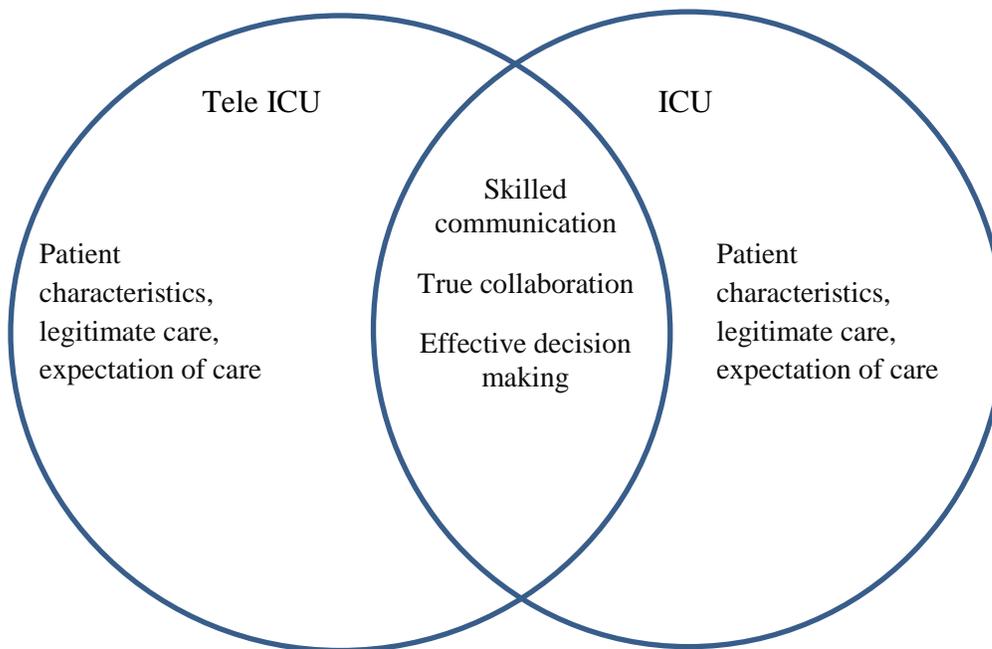


Figure 1 shows how experience interlinked with other factors that provide the opportunity to share in optimizing care.

Health care providers give different working experience depending on their working environment standards, including patient's characteristics, illness status and their expectation of care they provide. The tendency of criticize while responding to the question during interview there is legitimate difference in a number of experience in health care and reflection of appropriate adaptation of care to patients who are not critically ill and those who are critically ill. The privilege to have diverse experiences may give individual several perspectives on leading practice in health care provision, give a chance to experience.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 General overview

According to literature, critical care has been important and visible since 1850s. During the Crimean war Florence Nightingale placed the most seriously ill patients in beds close to the nursing station so they could be watched more closely (Vincent, 2013). Over the past 60 years since the first ICU was initiated high improvements have been made in terms of technological advances and understanding of the pathophysiology and pathogenesis of the disease processes that affect critically ill patients (Vincent 2013). Despite this, or as a consequence of this critically ill patients are fully dependent upon nurses care, this is obvious, even though the nurses may find difficulties in caring for these patients in the environment that is not suitable for practicing critical care (Brahmbhatt, Murugan, & Milbrandt, 2010). Bala et al; 2010 state that nursing care is crucial because substandard nursing care may be associated with increased risk of infectious complications, leading to increased use of more resources among critically ill patients. Thus critically ill patients condition can be worsening and life become more threatened due to sub optimal care. Although according to the review of the literature, there are a number of challenges in Africa and sub Saharan Africa concerning critically ill care and its specialty and emergency

2.2 Caring for Critically Ill Patients

Caring for critically ill patients involves the demands for a holistic approach as for any other patients who are not critically ill

The review of literature shows that the most important thing in caring for critically ill patient is the staff's ability to recognize these patients with initial approach to those patients whose conditions have been deteriorating to potentially critically ill while admitted in the ward (Frost, 2007). Based on appearance and clinical observation it should be possible to categorize patients in critically ill, potentially critically ill and not critically ill, are the vital steps to indicate the appropriate management (Frost, 2007). TRRH might experience difficulties implementing this because of the existing environmental care for the critically ill patients. However, according to Rose (2012) there is no evidence available about the patient's categorization. Therefore, critically ill patients should be thoroughly cared for and hence prevented from permanent disability and or dying (Rose, 2012).

Majority of Tanzanian referral hospitals including TRRH lack special units for caring for critically ill patients optimally which may result in permanent patient disability and or death (Overseas et al., 2011). Giving optimal care to the critically ill who are admitted in the ward requires identification of these patients as well as effective leadership for supportive supervision of implementing the effective care (Naved, Siddiqui, & Khan, 2011; Rose, 2012). This will include addressing of hemodynamics monitoring which include early resuscitation guided by ABCD survey (Air way, breathing, circulation and disability). This would make it possible to monitor life threatening indicators such as hemorrhage, air way occlusion, and respiration difficulties. However, this process would be even more effective when performed in ICU. Moreover, identification of the critically ill could be done timely while in the ward (Plan, 2013). Because of the basis of giving optimal care to critically ill patients, but those identified conditions may not be addressed adequately due to present environments of care (Plan, 2013). In order to provide effective care to critically ill suboptimal care should be evaluated prior and after referral and be reviewed aggressively focused on patients conditions and life threatening indicators as well (Plan, 2013). Therefore the evaluation of care for critically ill is well addressed when the patient is being cared in ICU (“Acutely ill patients in hospital,”2007).

2.3 Nurses and physicians caring experience

Nurses and physicians in acute and critical care settings are involved in patients care management, reinforcement of practice guidelines to optimize outcome for critically ill patients in the ICU, in acute, urgent, and sub-acute care settings (Kleinpell, Ely, & Grabenkort, 2008). Studies show that nurses and physicians care for dying patients in the ICUs experiences moral distress. The most listed item as a source of moral distress for both nurses and physicians was pressure to continue with aggressive treatment in situations where they did not think such treatment was warranted (Hamric & Blackhall, 2007).

2.4 Challenges on providing care to critically ill patients.

Globally the major challenges on providing critical care in less developed countries are influenced by several factors such as limited infra-structure for delivering health care in general. This might lead to suboptimal care (Fowler et al., 2008). According to Fowlers et al; (2008) The World Health Organization (WHO) does not track global ICU beds availability or capacity to treat critically ill. For this reason an ICU is considered as a less prioritized area of considerations

in health care system especially in low developed countries. Moreover, numbers of challenges in the critical care discipline globally include poor organization, rare specialties in critical care and emergency field and under use of the available sophisticated equipment for critically ill patients (Fowler et al., 2008). In addition morbidity and mortality are the evidence of other challenges in this field due to premorbid conditions such as obstetrics, perinatal complaints trauma and others that may lead an individual to become critically ill (Fowler et al., 2008). According to Okafor (2009), there are some improvements with government willingness to invest in health care in most Sub Saharan African countries and the restriction on resource diversion in some countries such as Nigeria. Although there are still challenges which could be studied to improve the wellbeing of patients and the use of scientific evidence in order to ensure best practice in hospital and the health care system at large (Sorensen, Iedema, & Severinsson, 2008).

CHAPTER THREE

3.0 METHODOLOGY

The purpose of this chapter is to describe the study method, the procedure of recruiting participants, data collection, data management, and data analysis, ethical issues are also described in this chapter.

3.1 Study Design

Qualitative descriptive design (Patton & Cochran, 2002) was used. This approach allowed gaining in-depth understanding of nurses' and physician's experiences and challenges when caring for critically ill patients in the facility where there is no specific room/place or an ICU. Therefore the method allowed to obtain in depth subjective views into individual experience (Patton & Cochran, 2002).

3.2 Setting

The study was conducted at Tanga Referral Regional Hospital. This hospital was selected because it was a regional referral and teaching hospital offering health care services to clients including critically ill patients. TRRH, as a teaching hospital is used as a clinical placement for intern doctors, nursing, and assistance medical officer students. It has capacity of 412 beds, and admits approximately 16,520 patients annually (annual hospital report 2014). Critically ill patients were usually nursed in different wards or departments. These departments were outpatient department (casualty), medical, obstetrics and gynecology, surgery and pediatrics) basing on their disease condition because the hospital has no ICU where critically ill patients commonly are admitted and cared.

3.3 Participants and Recruitment

Participants for this study were physicians, registered nurses and enrolled nurse comprising the target population. The participants were recruited from 5 departments namely obstetrics and gynecology, pediatrics, medical, surgical and outpatient department.

The study participants were selected through purposive sampling (Palinkas et al., 2013) The technique implies that participants are selected because they are likely to generate useful data for the study. The method was used to enroll 15 participants working in the different department at

TRRH. Among them 5 were registered nurses, 5 enrolled nurses and 5 physicians from 5 departments of the hospital. The inclusion criteria were nurses and physicians that had been working at TRRH for at least 3 years and willing to take part in the study. The exclusion criteria were the registered nurses as well as enrolled nurses who were working at Reproductive and Child Health (RCH) clinics and follow up clinics because they are less likely to have contact with critically ill patients during their routine daily working activities. It was important to include both nurses and physicians because both are involved in managing critically ill patients in acute and critical care settings (Kleinpell et al., 2008), therefore, much as their experiences could be different basing on their education background, both work in the similar environment of scarce human and non-human resources.

The head of unit / department were asked by a researcher to give the information for nurses and physicians working experience in the department according to the inclusion criteria so that a researcher can easily identify them for purposefully selection. The benefit of the study was told to the participants that the study would have a potential for improving critically ill care. Participants were told that there will be no direct financial benefit for participating in the study. The participants were told that their participation in the study will not interfere with their daily activities so they were given an option to discuss the time for interview with the researcher.

3.4 Data collection

After obtained permission from heads of the departments, participants from each department were interviewed. 15 in depth interviews (IDI) were conducted with nurses and physicians caring for critically ill patients. The principle of saturation guided the recruitment of participants (Elmusharaf, 2012).

The technique involved conducting intensive individual interviews with a small number of participants to explore their perspectives on a particular situation (Boyce & Associate, 2006). Using IDI participants may feel more comfortable having conversation with a researcher about their situation (Boyce & Associate, 2006). The interview guide was used that had two sections, section one related to experiences of nurses and physicians on caring critically ill patients and section two was related to challenges encountered by nurses and physicians on caring critically ill patients. The interviews were conducted within the hospital wards at the side room which was quiet suitable for the interview. The interview sessions was conducted during working hours.

All interviews were conducted by the researcher and were audio recorded with permission from participants. However, initial identification of participants was done by the research assistant. The research assistant who was taught about the objective of the study, how to collect data, how to manage data, and how to reach and approach the participants, was given a list of selected participants so that she can make a contact with participant to alert the participant one hour before the interview session start. The research assistant has to confirm with a participant for the session before the last session finished, two interview sessions was conducted per day. Before each interview, demographic data were collected first before the interview began, the demographic data included age, sex, marital status, educational level working experience professional qualifications.

3.5 Data Analysis

Qualitative content analysis Graneheim and Lundman (2004) were used for data analysis. Qualitative content analysis was chosen because, as a concrete analytical framework, it could be readily applied. The transcripts were read through several times to enable a general understanding of the whole text. Paragraphs or pieces of the text referring to specific experiences were identified and formed into meaning units. These meaning units were further condensed into codes that were sorted according to their similarities or differences into sub-categories, categories then the theme was obtained. (See table 1)

An example of content analysis

Table 1: Content analysis

Meaning unit	Condensed meaning unit	Codes
Equipments should be added it's like nothing, the big hospital like this. Only one oxygen concentrator has to rotate.	Equipments should be added Only one oxygen concentrator has to rotate	Equipments should be added.
Sometimes you find a patient cannot breath at all, you need to intubate the machine for intubation are not present	You need to do intubation the machine for intubation not present.	You can't do intubation no machine for intubation

Codes	Sub-categories	Categories.
Equipments should be added	Equipments are not enough	Equipment are lacking
You can't do intubation no machine for intubation	No machine for intubation	

3.6 Ethical Consideration

Ethical approval was obtained from the director of research and publications of Muhimbili University of Allied Health Sciences (MUHAS) and also from TRRH management. Participants were informed about the importance of the study, the selected participants were asked to participate in the study voluntarily and they were asked to make an informed consent, they had the right to withdraw from the study at any time. Moreover, participants were explained that there will be no any penalty that will be given to a participant who will decide to withdrawal or to refuse to participate.

The Participant was given an original consent to sign and a copy of signed consent was given to the participant, and the original signed was retained by the researcher in the file. The participants were used a number to identify them instead of their names during interview inorder to protect participant's confidentiality.

3.7 Dissemination of Findings

It is intended that the results of this research reach many readers and stakeholders. Therefore the results will be disseminated to;

1. Department of school of nursing MUHAS
2. Tanga regional referral hospital
3. Ministry of health and social welfare
4. Academic journals

CHAPTER FOUR

4.0 RESULTS

Introduction

This chapter presents the findings of the study that was carried out at Tanga regional referral hospital in Tanga region. The chapter starts with the description of characteristics of participants and provides results pertaining “nurses and physician experience and challenges on caring for critically ill patient in Tanga regional referral hospital. The results are presented as themes and are illustrated by quotations from the interviews.

Characteristics of study participants

The 15 medical staffs (nurses and physicians) were enrolled in this study comprised of 3 males and 12 females with working experience in working with critically ill patients ranged from 3 to 43 years. They were between 59 and 32 years of age. Among them about 50% were married (see Table 2).

Table 2: Characteristics of Participants (n=15)

No	Age	Sex	Marital status	Working Experience	Education Level	Professional qualification	Department
1	32	M	Single	3years	Degree	MD	Surgical
2	52	F	Married	25 years	Diploma	RN	Pediatric
3	45	F	Single	20 years	Diploma	AMO	Medical
4	53	F	Married	31 years	Diploma	RN	Surgical
5	37	F	Married	9 years	Diploma	RN	OBGY
6	32	M	Married	5 years	Degree	MD	OBGY
7	40	F	Single	4 years	Diploma	RN	OPD
8	59	F	Married	43 years	Certificate	EN	Pediatric
9	48	F	Widow	29 years	Certificate	EN	OBGY
10	48	F	Married	5 years	Certificate	EN	Medical
11	40	F	Single	5 years	Certificate	EN	Medical
12	58	F	Divorce	35 years	Certificate	EN	Surgical
13	30	F	Single	3 years	Degree	MD	OPD
14	40	F	Widow	7 years	Certificate	EN	OPD
15	37	M	Married	4 years	Degree	MD	Pediatric

Key:**OPD=outpatient department****OBGY=obstetrics and gynecology****MD=medical doctor****AMO=assistant medical officer****EN=enrolled nurse****RN=registered nurse**

Four themes emerged from the experiences of nurses and physicians on caring of critically ill patients: being present and stay close, being powerless, failure to protect patient's privacy and lacking of caring ability.

Being present and staying close:

Participants reported that critically ill patients need to be monitored closely because of their critical conditions, and therefore health staff would be required to be close to them.

“..... you can give the commitment for one staff so that he can work close caring for the critically ill patients in the ward but you can found that, the close monitoring is not there; For example you may decide to check vital signs after each half an hour according to the patients conditions now you find that you can't afford to do those things after each half an hour. Instead of half an hour you can do may be after an hour, or after two hours due to the scarcity of the staff. You need those facilities like monitoring to help you found that they are lacking therefore we use only manually which we have.....” (P3, F, AMO, medical)

The need to keep equipments and supplies closer with these patients was also given prominent. This was the response from the participants when they were asked about caring for critically ill patients in terms of equipments.

“On experience, the critically ill patients if it is in the ward they need to be close because we don't have an ICU and the nurses have to be close to the patients. Critically ill should be on the first's beds so that they can be cared easily. We used to put a screen only to know that these (patients) needs close care we prepare oxygen concentrators, suction and other equipment and keep them close to patients who need close supervision.....” (P10, F, EN medical).

Caring for critically ill patients in the same room as other patients who are not very sick was described as a barrier to provision of appropriate care:

‘I mean standards for example your there in the ward you have 50 patients lets say. Then you have four serious patients of which you are supposed to care for them, to change position after every two hours, to give a bed bath, your supposed to look for a catheter to empty the urinal bag. At the same time there is a ward round and you find that there is a doctor and a nurse, both of them are supposed to performe the ward round together. Therefore how can we devide ourselves regardless the Protocol for patient's care but we as service providers we are few.....’ (P13, F, MD, OPD).

Being powerless

Participants describe their inability to provide care in situations with lack of drugs, equipment, supplies, lacking of caring room, lack of adequate staff, and personnel specialized on the critical care management. Nurses and physicians encountered difficulties to find family members of the critically ill patients to buy medicine when their patients require medicine that are not available in the hospital:

“People come bringing a patient to hospital, and they say they have just helped the patient to reach to the hospital. Therefore you cannot leave the patient you should help him so you have to look for an exemption as a government policy said, but you find that the drugs needed are not available at hospital. Then you need to look for other alternatives, to look for help from other sources (P4, F RN surgical).

It was reported that it was easier for patients’ who had National Health Insurance Fund (NHIF):

“The ones with health insurance are very easy for us to treat and care for them because at least most of supplies especially drugs are being available by insurance. But for those patients who do not have a health insurance even their relatives they run away from them, we suffered for these patients alone so there is a problem” (P4, F, RN surgical).

Other participants also shared their experiences of working in the situation of inadequacy of drugs supplies:

“Drugs ,a doctor might prescribe some medicines for patient and then the relative goes to the shop (hospital pharmacy) unfortunately they come with none of the drug , then you start looking elsewhere other family members has no money now you fail to help the patient” (P5, F, RN obgy)

Participants were concerned with lack of a special room/an ICU where patients who are critically ill are cared of. For them this was a major challenge in providing adequate care to critically ill patients:

“For example you come from operating theater after performing an operation on the patient, you come with your patient he develops cardiopulmonary or we say patient has developed cardiac arrest. This patient needs to be sent to ICU,sent to ICU so that either intubation can be done or patient can be kept to monitors , so that patient can get continuous ventilation, so you find that here in the ward you cannot do, therefore you can do only the little that you can be able do” (P1, MD, M Surgery.)

Because of shortage of staff, participants reported feeling overworked, understaffed and having inadequate time for caring for normal patients while critical ill patients were waiting for their services:

“So as a supervisor I will run and try to supervise everywhere now you can't, you are only two on duty , there are may be three serious cases it becomes more overloaded, there is a post-operatives, there is a dressing, responsibilities are getting bigger truthfully it is becoming a problem. For the situation like this truthfully people are getting much trouble a nurse or a physicians may not have even a time to eat something because of over responsibilities....” (P 4 RN F).

The staff availability regardless of specialization reported to be prominent problem in caring for critically ill patients:

“The scarcity of the staff you can give the commitment for one staff so that he might do that work of caring for the critically ill patients in the ward but you may find that, the close monitoring is not there; For example you may decide to check vital signs after each half an hour according to the patients conditions now you find that you can't afford to do those things after each half an hour. Instead of half an hour you can do may be after an hour or after two hours due to the scarcity of the staff.....” (P3, F, AMO, medical).

Failing to protect patient's privacy:

Participants also reported that caring for critically ill patients in the general wards made care difficulty especially the need to maintain ethical principle of privacy and confidentiality:

“Critically ill patient need privacy, of course all patients’ need privacy, but because the critically ill is not the same as other patients who are not critically ill. Many relatives/visitors will start wondering on the critically ill patients who usually have tubes and machines (oxygen concentrator) around them and during this time nurses will be unable to continue caring for these patients.....” (P8, F, EN peadiatrics)

Lacking caring ability

Lack of formal ICU training was also reported by participants to be an obstacle in provision of adequate care to critically ill patients. Participants reported that they experienced difficulties to provide the actual (optimal) care to critically ill patients due to lack of formal training on how to take care and manage the critically ill patient. Personnel specialized in critical care management is also lacking:

“For here at the hospital truly I have never seen (silent moment...). I mean, since I started working in this hospital twenty years ago, I have never saw any one going for special ICU training.....”(P3, AMO,F medical)

Participants mentioned that they had no orientation on the specific equipment needed for critical care.

“...you can find that at times equipment such as oxygen concentrator is available but a staff member does not know how to operate it especially on a patient. Because he/she was not taught how to handle it Majority did not get special training to manage critically ill patients’ (P10, F, and EN medical).

“...No one is taught how to take care of a critically ill patients, we just teach ourselves through experience we have not got any sort of training at all like that you are shown that this is a critically ill patient your supposed to do this and that.....”(P2, F, RN peadiatrics).

Participants mentioned that they have to make use of their own experiences when dealing with the critically ill patients.

“In terms of training we still not have enough quality training therefore I have been using my experience that I have at my work place and I continue with that.....” (P6, MD, M, OBGY)

CHAPTER FIVE

5.0 DISCUSSION

This chapter begins with discussion of the study findings, followed by discussion of the study limitations. Nurses and physicians serve as wheels in critically ill care whose their life is in danger and threatening. To provide an optimal and standard care in a holistic approach to critically ill patients at TRRH, nurses and physicians have to be empowered in terms of formal training on caring critically ill patients. Equipped ICU and or special unit for caring critically ill should be identified and established. Also there should be specialized personnel on critical care and emergency at the hospital.

In our study revealed that none of the ward had an identified either room for critically ill patient care or ICU, except the APCU in paediatrics ward. However, the only mentioned equipment facility for critically ill care in the wards was an oxygen and suction. This is in both adults and paediatrics wards as well. Nevertheless the oxygen concentrators were less available at hospital.

The trust and good interpersonal relationship with the participants was created by a researcher Greeting and self-introduction and the study aim was explained to the participants thus making the participants feel safe to explore their experiences. However, participants were assured that the documentation of all raw data & from transcript verbatim will be shared by participants to confirm the accuracy of information provided. Data analysis was verified by qualified transcribers as well. The findings will be transferred to the department which will be included in the study.

Experience of caring critically ill in at TRRH

Caring for critically ill patients in the ward and mixing them with other patients who are not critically ill was experienced by nurses and physicians at TRRH. According to study findings critically ill patients need to be monitored closely following their critical conditions. There was no close monitoring for critically ill patients. Participants declared that it was a risk experience in managing critically ill patients in the ward with no equipments, no personnel or an orientation for critically ill care. The findings are in line with Morris A (2007) who reported that critically ill patients who are being cared in the ward are potentially at risk of serious deterioration. Patients predatory signs may be existing without being acted up on by nurses

and medical staffs. Delayed management and treatment for these highly vulnerable patients may bring about increasing patient mortality and morbidity (Mcgaughey et al., 2009).

Along with study in Canada Mcgaughey et al ;(2009) explains that ward hospital care is the main reason for staff failing to manage basic vital signs. And this can be attributed to delay and seeking advice, failure to recognize clinical urgency, lack of knowledge and skilled in resuscitation, inadequate supervision and organization problems within the hospital settings.

Challenges encountered when caring critically ill patients at TRRH:

Nurses and physicians experience numerous challenges in providing care to critically ill patients in the ward at TRRH. For example resuscitation drugs including IV drips like ringer lactated solution, or normal saline sometime was not available at the hospital. This study was contrary from Baker et al; (2013) in Tanzania illustrate hospitals had well stocked with drugs and equipments necessary for emergency and critical care.

Nurses and physicians experienced more feelings of powerlessness with the urge to save the lives of majority of the critically ill in the wards ,study done in south Africa, Matlakala (2014) reported the supplies which included medicines were insufficient and or delayed from the relevant department which ended up with drugs resistance ,this finding was similar from our study which reported the difficult practicing the close monitoring to critically ill in the wards as other patients who were not critically ill also needed care and attention. That might lead to sub optimal care and inability for the staff to integrate their professional carrier's objectives.

Lacking of caring ability, Nurses and physicians did not have any formal training in the care of critically ill, equipment used for critically ill care, and also on how to handle the equipments needed for critically ill care. Rather used their own experiences from ordinary medical and nursing school.

Maintaining patient privacy was another emerged concern from the participants as ethical dilemmas because of keeping critically ill patients in the wards. It was difficult to attend them in privacy environment.

CHAPTER SIX

6.0 CONCLUSION

This study was aimed to explore the experiences of nurses and physicians in caring for critically ill patients in Tanga Regional Referral Hospital. It is among the few studies done in Tanzania. The study had shown that, nurses and physicians working at TRRH experiences sub optimal care provision to critically ill patients, which includes failure to resuscitate, failure to close patient monitoring and maintaining patients privacy. Nurses and physicians encountered challenges when giving care to critically ill patients the challenges includes lacking of caring room for critically ill (ICU) as well as equipment , lacking of training on critically ill care, lacking personnel specialized for critical care and emergency, inadequate staff and failure to maintain patients privacy. Nurses and physicians reported that they were unable to give an optimal care to critically ill patients. They also experienced competing demand between caring critically ill patients in the ward and other patients who are not critically ill in the same ward.

6.1 Recommendations:

The following recommendations were made for hospital management and the ministry of health and social welfare to establish a unit for caring critically ill at the hospital and or the ICU with the implications of giving optimal care,

1. Recommendations for ICU establishment :

Establishing a specific unit /ICU for caring critically ill patients, creating a respectfully, conducive and privacy environments of caring for critically ill patients. To equip the wards with all necessary equipments for emergency resuscitation. In addition, to identify specific personnel to be trained on critically ill care as mentors for the others. Tanga community should be educated on the important of being close to their critically ill family members and or relatives so that they should not run away from them during the critical period.

2. Recommendations for hospital management :

Hospital management should include on the hospital budget the training budget for critically ill care. In addition the hospital management should consider those staff who practising patients care as well as the e the training (seminars) concern, rather than sending for training those who usually working in the office or other sections within the hospital rather than clinical areas. Last but not the least hospital management should network for donors such as private sectors, religious sectors, government institutions NGOs etc. to educate them on the importance of the critically ill care in order to make a fund for equipments and ICU for critically ill care. In addition, the management has to ensure adequate staff, purchasing more oxygen concentrators at least each ward to have at least two concentrators and suction

3. Recommendations for ministry of health and social welfare :

The ministry of health should increase the budget (OC) other charges for the hospital so as to enable the hospital to plan for equipments for critically ill care and resuscitation. The ministry should identify the other ways of overcoming the challenges that occurs due to health policies by the country incase the donors contracts finished.

4. Recommendation for future research :

Further studies should be done by graduates concerning on how health care providers provide health care services to the critically in the situation with limited staff, equipments and lack of training.

5. Recommendations from the researcher

As the government committed to sponsor for critical care and emergency specialities, there should be a special package for critically ill care that should be included in the ministry budget to enable the Referral hospitals in Tanzania to provide an optimal care to critically ill patients. There should be seminars for hospital staffs especially for clinical practitioners to the referral hospitals to serve the life threatening for individuals patients.

Limitations of the study

The study results can be useful at TRRH alone as the study setting therefore; it cannot be generalized to the whole country.

6.2 Implication to clinical practices :

Nurses and physicians are within the capacity of individuals life serving and improve the health of the individuals, family, and the community. They are the reason of good health for everyone if empowered to make best practice of care provision. Therefore they should be provided with conducive environments of care such as further education, on job training, increased number of staffs, and have adequate equipments, supplies and drugs.so as to provide optimal quality and standard of care. If the environment is not conducive for care, nurses and physicians may lead to job dissatisfactions, that will have the implications of ending up with poor patients prognosis and assist in job retainment.

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APPENDICES

Appendix I : Interview guide

(This part is to be used by the interviewer as a guide for introducing the discussion topic and probing for further details from the participants)

“Can you please tell me about your daily activities / responsibilities when you report at your workplace/duty station?

Experience

1. Can you tell me what do you understand about critically ill patient?
2. Can you please tell me about your experience of caring for critically ill patients? (Probe experience on equipment, workload, training, etc.)
3. For your experience how do you provide the services/care to critically ill patient?
4. What do you do when you came across critical ill patient?
5. On your experience which ways do you think are the best ways of care for these patients?
6. In which circumstance you decide to give a referral to critical ill patient?
7. Can you explain about any obstacles of which you think can effect on caring for critically ill patient?
8. From your opinion do you think there ways to improve the service of care?

Challenges

1. “What challenges did you meet during caring for critically ill patient”(probe each challenges)
2. Can you explain why do you think these challenges exist?
3. From your opinion what do think should be done to overcome these challenges?
4. Do you have any questions, for me?

Appendix II: Informed consent**MUHIMBIL UNIVERSITY OF ALLIED HEALTH SCIENCES****DIRECTORATE OF RESEARCH AND PUBLICATION MUHAS****ID NO**

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CONSENT TO PARTICIPATE FOR A STUDY ON NURSES AND PHYSICIAN'S EXPERIENCES IN CARING FOR CRITICALLY ILL PATIENTS IN TANGA REGIONAL REFERRAL HOSPITAL

Greetings! My name is Halima Msengi I am a student nurse working on a dissertation to investigate on how nurses and physician provide care to critically ill patient without an ICU in TRRH

Purpose of the study

This study is aimed to describe the nurses and physicians experiences of caring for critically ill patients at Tanga Regional hospital, in absence of ICU and specialized personnel

What Participation Involves

If you agree to participate in this study you will be required to give your views through in depth individual interview on how you as a nurse and or physician provide care to critically ill patients in your respective department /ward or unit at your hospital. The information that you will give will be used for research purposes to be used for generation of the research report on how nurses and physician at TRRH provide care to critically ill patients with no ICU

Confidentiality

The information about you and what you will share in the interview will be treated with confidentiality and used only for research purposes. Your name will not be used for identification during data analysis and report development

Risks

The researcher anticipates no harm to happen to you as you participate in this study.

Benefits

There will be no direct financial benefits to you however; participation in this research has the potential for improving care to critically ill patients through recommendations that will be made for the management team of the hospital and the MOHSW at large. The management and/ or MOHSW may improve services and therefore make nurses and physicians work to manage critically ill patients in a respective environment the ICU.

Rights to Withdraw and Alternatives

Taking part in this study is voluntary. You are free to choose whether to participate or not or to stop participating in this study at any time, even if you have already given your consent. Refusal to participate or withdraw from the study will not imply penalty to your work as a nurse or a physician.

Who to Contact

In case of any emerging concern you may contact the researcher through the following address:

Halima Msengi, School of Nursing, MUHAS P. O. BOX 65004, Dar es Salaam.

Email address: halimamsengi@gmail.com Mobile no **0784 487016**

If you have a serious matter about this research related to violation of your rights, and you feel that the researcher has not been able to help you solve that problem you are free to contact Prof. Mainen Moshi, Chairman of the Research and Publications Committee, MUHAS, P.O. Box 65001, Dar es Salaam, Tel: 2150302-6.

Agreement of participation

I _____, identification number _____, Aged _____ years, am willing to participate in this research

Respondent's Signature _____

Researcher's Signature _____

Date _____

Date _____

Appendix III. Ethical Clearance Approval

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

Directorate of Postgraduate Studies

P.O. BOX 65001
DAR ES SALAAM
TANZANIA.



Tel: +255-(0)22-2150302 Ext 207.
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Ref. No. MU/PGS/SAEC/Vol. XIV/

27th February, 2015

Ms. Halima Msengi
MSc. Critical Care and Trauma
MUHAS.

*Seen
HFM
29/03/2015*

RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED "NURSE'S AND PHYSICIANS" EXPERIENCES OF CARING FOR CRITICALLY ILL PATIENTS IN TANGA REGIONAL REFERRAL HOSPITAL TANZANIA"

Reference is made to the above heading.

I am pleased to inform you that, the Chairman has, on behalf of the Senate, approved ethical clearance for the above-mentioned study. Hence you may proceed with the planned study.

The ethical clearance is valid for one year only, from 26th February, 2015 to 25th February 2016. In case you do not complete data analysis and dissertation report writing by 25th February, 2016, you will have to apply for renewal of ethical clearance prior to the expiry date.

Prof. O. Ngassapa
DIRECTOR, POSTGRADUATE STUDIES

cc: Director of Research and Publication
cc: Dean, School of Nursing

Appendix IV: Grant for Permission to conduct study by TRRH

**THE UNITED PRIME MINISTER'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENTS
REPUBLIC OF TANZANIA**

Tel: 2642997/ 2646683/84
Fax: 2647314 RMO
Fax: 2647360 GIZ



Regional Commissioner's Office,
Regional Medical Office,
P.O. Box 452
TANGA

In Reply Please Quote

Ref. No. RM/R.20/120

25th March, 2015

**TO WHOM IT MAY CONCERN
TANGA REGIONAL REFERRAL HOSPITAL**

RE: RESEARCH CLEARANCE NO. 43 2013/2014

Name of Research	HALIMA K. MSENGI
Research Title	NURSE AND PHYSICIAN EXPERIENCE OF CARING CRITICALLY ILL PATIENT IN TANGA REFERRAL REGIONAL HOSPITAL
Type of Research	DESCRIPTIVE QUALITATIVE STUDY DESIGN
Valid between	MARCH - JUNE 2015

The above named has been allowed to conduct the stated research.

Please accord him/her and his/her assistants the necessary assistance/cooperation.

Sincerely,

Dr. J.J. Karia

**MEDICAL OFFICER IN-CHARGE
TANGA REGIONAL REFERRAL HOSPITAL**

**For. REGIONAL MEDICAL OFFICE
TANGA**