CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT AT SELECTED PUBLIC HOSPITALS IN MOPANI DISTRICT, LIMPOPO PROVINCE

By

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[redacted]

Dissertation

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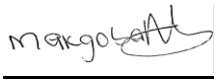
DECLARATION

I, Makgoba Mmaseshoka Charmaine declare that the dissertation "**CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT AT SELECTED PUBLIC HOSPITALS IN MOPANI DISTRICT, LIMPOPO PROVINCE**" hereby submitted for the degree Master of Nursing Science to the University of Limpopo has not previously been submitted by me for a degree at this or any other university, that it is my own work in design and in execution, and that all material contained herein has been duly acknowledged.

Makgoba Mmaseshoka Charmaine:  Date: 22/08/2022

DEDICATION

The study is dedicated to my mother Makgoba Magdeline, my brother Makgoba Khele, and my sister Makhanani Makgoba; I also dedicate this study to all the nurses working in Limpopo Province. Most of all, I would like to dedicate this study to my supportive husband Victor Mnisi and our lovely four children Grace, Blessing, Victoria, and Dorah Mnisi.

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ABSTRACT

Background

Resuscitation of patients in an emergency unit has been one of the greatest challenges for nurses. Many deaths in hospitals happen within 24 hours of admission. Some of these deaths could be prohibited if the patients were effectively identified quickly and treatment commenced without delay. Emergency care has always been a weak and under-emphasised component of African healthcare systems.

Purpose

To determine the challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani District, Limpopo Province**.**

Research Method

A qualitative explorative, descriptive and contextual research design was used to conduct this study. Data was collected using a one-to-one semi-structured interview with an interview guide. The interviews were audiotaped and field notes were taken to capture the non-verbal cues. Data was collected from professional nurses working in the emergency unit sampled through a purposive sampling method. Data collection was conducted until data saturation was achieved with eighteen participants. Data were transcribed verbatim and analysed using Tech's open coding method with the assistance of an independent coder. Measures to ensure trustworthiness, credibility, conformability, transferability and dependability were all ensured. Ethical considerations, ethical clearance, permission, informed consent, privacy, confidentiality, anonymity, beneficence, non-maleficence and the principle of justice were adhered to throughout the study.

Results

The findings of the study revealed the perceptions of nurses' toward the resuscitation process with challenges experienced by nurses during resuscitation in the emergency unit. Nurses also reported the effect such as inadequate medical equipment, inadequate pharmaceutical supplies, inadequate infrastructure,

inadequate multi-disciplinary support services, inadequate support services (transport, EMS, cleaning, security services), and inadequate managerial and organisational support effects of challenges on their work during resuscitation in the emergency unit and verbalised their developed coping mechanisms with resuscitation in the emergency unit. The nurses also indicated their suggested coping mechanisms, which they contemplate could assist them during the resuscitation of patients in the emergency unit to minimise the traumatic experiences following unsuccessful resuscitation.

Recommendations

The study, therefore, recommended that supporting, debriefing sessions, group therapy and counselling should be provided by the hospital to the psychologically affected nurses. The hospital management has to motivate the provision of an adequate number of nurses and material resources in the emergency units to maintain acceptable emergency care. A sufficient number of nurses should be awarded study leave to register for post-basic training on advanced trauma to increase capacity in the emergency unit.

Keywords: Challenge, nurse, resuscitation, emergency unit and coping mechanism

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

CPR	Cardio Pulmonary Resuscitation
DOH	Department of Health
ED	Emergency department
EU	Emergency unit
NHA	National Health Act
SANC	South African Nursing Council
TREC	Turfloop Research Ethics Committee
RSA	Republic of South Africa
EMS	Emergency medical services
PPE	Personal Protective equipment

DEFINITION OF CONCEPTS

Challenge

Merriam-Webster dictionary (2020) defines a challenge as an objection to something as not being correct or proper to a person. In this study, the concept ‘challenge” will refer to any situation that prevents nurses from achieving a successful resuscitation of patients in the emergency unit.

Nurse

A nurse refers to a person who is registered with the South African Nursing Council (SANC) under section 31(1) in a category to practice nursing and midwifery (Nursing Act no 33, 2005). In this study, a nurse refers to trained personnel hired to render patient care and maintain physical and mental health in an emergency unit.

Resuscitation

Dorland (2010) defines resuscitation as the restoration of life or consciousness of a patient dead. In this study resuscitation, it means the use of chest compressions in combination with artificial respiration, intravenous medications, and cardiac defibrillators to revive unconscious and near-dying patients.

Emergency unit

An emergency unit is a section or department in a hospital setting that is staffed and equipped with qualified healthcare personnel to provide emergency care to patients (Deuter, Bradley & Turnbull, 2015). In this study, an emergency unit refers to the area or department in the hospital responsible for the administration and provision of immediate medical and surgical care to critically ill and emergency patients.

Coping mechanisms

Good (2020) defines a coping mechanism as strategies or adaptation and behaviours that a person relies on or adopts to adjust and manage stress or distress while maintaining their emotional wellbeing. In this study, coping mechanisms refers

to the behaviour or strategies nurses employ to deal with problems, difficulties, and stressful situation that arise from the resuscitation of patients admitted at the emergency unit of a public hospital.

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION AND BACKGROUND

Resuscitation of patients is one of the essential therapeutic interventions performed in Emergency Units (EU) where emergency equipment and different fluids are used to save human lives (Sehatzadeh, 2014). Patients suffering from trauma, and medical and surgical conditions need to be given immediate resuscitation intervention in the emergency unit to improve their chances of survival and prevent mortality associated with unsuccessful resuscitation (Atakro, Gross, Sorpong, Armah & Akuoko, 2018). Moreover, some of these patients in the EU are supported or stabilised using Cardio Pulmonary Resuscitation (CPR) which was first introduced in 1960 as a stabilising intervention for patients that experienced sudden cardiac arrest (Sehatzadeh, 2014). Therapeutic intervention has now become a routine practice over the past years for several patients with life-threatening conditions and illnesses. Nurses in the EU have challenges due to excessive levels of acute, chronic stress and exhaustion related to work-environment factors like emergency unit, overcrowding and fatigue (Amini, Munesan, Kariman, Dolatabadi, Hatamabadi, Shahrami & Shojaee, 2014).

Nurses are considered the foremost respondents to disasters that require emergency care in the EU (Hammad, Arbon, Gebbie, & Hutton, 2017). A study conducted in France revealed that the EU suffers from overcrowding, increased patient intake, poor capacity for patient outtake, the lack of medical personnel, high patient demand standards, and elevated managerial skill demands on nursing and medical staff (Becker, Lopes, Pinto, Campanharo, Barbosa & Batista, 2015). Effective emergency arrangements and preparedness are essential to delivering safe and caring emergency health to patients' resuscitation. Resuscitation are therapeutic intervention to revive the dying patient and restore function, which occurs daily in the emergency unit. The practice involves the simultaneous integration of multiple tasks and interventions to save a critically ill patient's life (Atakro et al., 2018; Andersson, Jakobsson, Furåker & Nilsson, 2012).

In another study conducted by Citolino, Santos, Silva, and Nogueira (2015) in Brazil, factors that affected the quality of CPR included lack of a harmonious relationship among team members, lack of material and/or equipment failure, family members' presence and healthcare professional stress. A study conducted by Arrowaili (2016), also revealed that a high workload for healthcare providers, delayed the arrival of team members, equipment, technical challenges, and communication barriers are some of the challenges in trauma resuscitation.

In South Korea, emergency unit nurses' experiences of performing CPR show that nurses had some form of anxiety regardless of their ability to perform CPR and suffered psychologically after the resuscitation (Lee & Cha, 2018). Some nurses experience burnout, fatigue, stress, and tiredness due to the long hours of standing, handling emergency equipment and the kind of patients managed at EU (Andersson *et al*., 2012; Kim & Yeo, 2020; Han & Yoo, 2016). In an attempt to deal with the challenges of resuscitation of patients in the EU, nurses' resort to various strategies, and mechanisms to adapt and cope with the stressors and reduce the stress levels to improve the quality of life. The coping mechanisms are adopted as a reaction to the situation and measures to continue the care (Alharbi & Alshehry, 2019).

In Nigeria, the findings of a study conducted by, Zha, Ariyo, Olaniran, Ariyo, Lyon, Kalu, Latif, Edmond, and Sampson (2018) found that staff shortage, lack of knowledge, inadequate pieces of equipment, and medication, contributing factors to the delay in the initiation of resuscitation interventions for patients at the EU. Similarly, Rajeswaran and Ehlers (2013) in Botswana identified several organisational challenges that affect patients` resuscitation in the EU such as staff shortage, communication problems, doctors' attitude, inadequate equipment and supplies, inadequate space for resuscitation, and lack of resuscitation policies and guidelines. In addition, Atakro, Ninnoni, Adatara, Gross and Agbavor, (2016) reported a lack of emergency trained nurses as a factor affecting the kind of emergency care including resuscitation rendered at the EU. Another study conducted in Mpumalanga Province of South Africa reported a shortage of skilled staff and a shortage of medical equipment as one of the challenges to nursing care in a rural district hospital (Moyimane, Matlala & Kekana, 2017). Furthermore, South

Africa remains one of the countries with high levels of mass casualty incidents such as trauma from motor-vehicle accidents among others. Thus, nurses working in the EU have to match up with the demands and needs while dealing with the challenges that come along (Moyimane *et al*., 2017). Limpopo Province is predominantly rural with an estimated population of approximately 5.5 million people. Thus, healthcare professionals working in poor-resourced hospital settings experience several challenges in meeting the healthcare needs of their Patients (Netshisahulu, Malelelo-Ndou & Ramathuba, 2019.

1.2 PROBLEM STATEMENT

The resuscitation remains one of the most essential parts of emergency care in the hospital setting. Nurses working in the EU are the principal caregivers when it comes to emergency care including resuscitation. However, working in a public hospital, nurses are faced with several challenges and have to use coping mechanisms to deal with the challenges when attending to the resuscitation needs of the patients (Chhugani & James, 2017). For example, Mopani District is a predominantly rural area with various hospitals providing 24-hour emergency services to all patients in the municipality of greater Tzaneen. However, trival is known about nurses' challenges and coping mechanisms during the resuscitation of patients in the EU.

Moreover, there is a significant amount of literature regarding work-related burnout and stress. The perceived challenges, and coping mechanisms amongst nurses during patients` resuscitation in an EU were hardly studied. The reaction to challenges has also shown that gender, age, religion, and geographical dissemination, require a selection of coping mechanisms for the experienced challenges (Mason, Mountain, Turner, Arain, & Weber, 2014).

The researcher is a registered professional nurse with experience working in an EU and has personally witnessed some of the challenges during the resuscitation of patients. There is an increased rate of unsuccessful resuscitation amongst nurses, leading to lawsuits and stress amongst the nurses allocated in the EU. The majority of the emergency nurses seem to be not coping well with the experienced challenges during a patient’s resuscitation in the EU. This research study seeks to

determine the challenges and coping mechanisms for the nurses involved in patient resuscitation in the EU in selected public hospitals in the Mopani District, Limpopo Province.

1.3. AIM OF THE STUDY

The aim of the study is:

- To determine the challenges and coping mechanisms of the nurses involved in resuscitation of patients in an emergency unit at selected public hospitals in Mopani district, Limpopo province.

1.4. OBJECTIVES OF THE STUDY

- To explore and describe the challenges and coping mechanisms of nurses during the resuscitation of patients in the EU at selected public hospitals in Mopani district, Limpopo province.
- To suggest strategies based on the study findings that would enhance the effective coping mechanism of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani district, Limpopo province.

1.5. RESEARCH QUESTIONS

- "What are the challenges and coping mechanisms of nurses during the resciscitaion of patients in the EU at selected hospitals in Mopani District, Limpopo Province"?
- "What strategies can be suggested to enhance the effective coping mechanism of the nurses involved in the resuscitation of patients in the EU at selected hospitals in the Mopani District?"

1.6 OVERVIEW OF RESEARCH METHODOLOGY

A qualitative research method was used in this study to accomplish the research aim and objectives. An exploratory, descriptive and contextual research design was used

to explore the challenges experienced by the nurses during the resuscitation of patients in the emergency unit. The population were all professional nurses working in an emergency unit. Purposive sampling was used to select professional nurses in the study. Semi-structured one-to-one interviews were used to collect data from professional nurses. Data analyses were done from 18 participants working in and EU. Which are twelve female and eight male professional nurses. Ethical standards and principles were observed before the commencement of data collection. The trustworthiness of data is ensured applying the four criteria of the Lincoln and Guba model: credibility, confirmability, dependability and transferability. Detailed research methodology is discussed in Chapter 3.

1.7. THE OVERVIEW OF THE THEORETICAL FRAMEWORK OF THE STUDY

A theory is a planned, logical, and abstract of reality, which includes explanation, enlightenment, and a prediction of the phenomenon as well as control of some reality (Brink, Van der Walt, & Van Rensburg, 2018). The study will be guided by Roy's Adaptation Model, one of the prominent theories in nursing practice developed in 1976 (Master, 2015). The theory views an individual as a set of interrelated systems composed of biological, psychological, and social aspects (Master, 2015). Roy's theory defines adaption as the process where a group or an individual does conscious decisions to cope with his or her situation (Phillip & Harris, 2014).

Interaction with the changing environment and the source of such stimuli which are the environment around them. The theory further states that adaptive responses give individuals the ability to cope and reach goals and that a bad situation can be integrated into successful adaption which can help in compensation of the problem (Sherman, 2013). Adaptation occurs when people respond positively to environmental changes. Individuals need to be able to consciously adapt to environmental changes, processes, and outcomes, creating both human and environmental integration. An individual uses coping mechanisms, both innate and acquired, which are biological, psychological, and social in origin (Master, 2015).

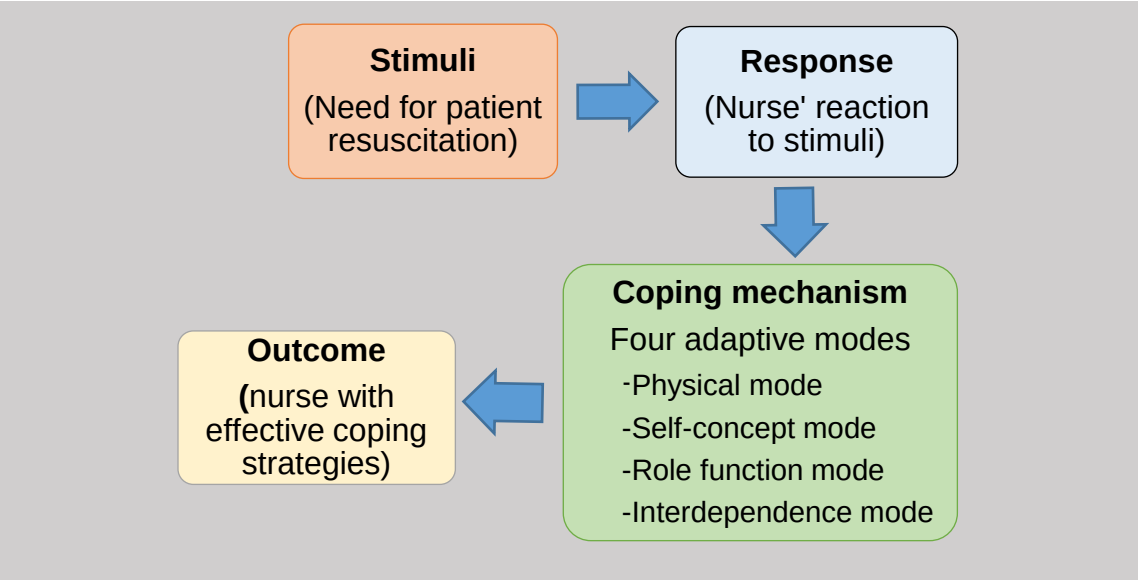

Figure 1.1: Schematic diagram representing Roy Adaption Model adapted from Master(2015)

1.7.1. Stimuli

Most importantly, based on Figure 1.1, Roy Adaptation Model is explained according to four elements: stimulus, response, outcome, and coping mechanism. Roy (2009) defines a stimulus as anything that aggravates a degree of change. Thus, the adaptation level is affected when the accumulated stimuli and the demand of that situation. People are unique beings with bio-psycho-social characteristics who constantly interact with the internal and external environment. According to Roy (2009) stimuli can be classified as focal, contextual, and residual. Focal stimuli are those internal or external stimuli challenging the person most immediately.

Contextual stimuli refers to the surrounding situations present at the time and may contribute to the result of the focal stimuli. Residual stimuli are the environmental factors that have an undetermined effect on human behaviour. Human beings have to make adaptive responses to changing stimuli by using both innate and acquired mechanisms to maintain health (Roy, 2009). When patients come with a need for

resuscitation in an emergency unit. This can be considered as stimuli, the nurses are to react to the experience resuscitation of patients (Master, 2015). Thus, the stimuli will cause different reaction responses to the nurse in respective of the cause and this study can fill the gap in the EU.

1.7.2 Response or coping process

People have different coping processes, which are the cognate coping process and the regulator coping process (Sherman, 2013). The cognate coping process involves cognitive-emotional channels for processing a stimulus and includes information processing, learning, judgment, and emotions. While the regulator coping process involves the use of the basic neural, chemical, and endocrine processes that process stimulus in an automatic conscious way (Sherman, 2013). When a nurse receives a stimulus, which in this instance is a need to resuscitate patients, a quick response is expected from the nurse. The adaptive behaviour refers to the behaviour of nurses' reaction or actions after resuscitation of patients (Master, 2015). Since people are holistic and unique beings, therefore they experience situations and respond differently to every situation (Master, 2015).

1.7.3. Coping mechanism

The model proposes that all people have the need that should be accomplished to sustain integrity and these are accomplished through the four modes of adaptation, namely, the physiologic mode, the self-concept mode, the role function mode, and the interdependence mode (Roy, 2009). The coping mechanism that the nurses will experience after a stressful situation concludes the results of the outcomes. These factors help the nurses in coping with stressful situations and the affects or outcome of the adaptation process, the four modes are outlined below.

- *The physical mode*

The physical adaptive mode is where a person responds as a physical being to stimuli from the environment. The physical modes include the basic physiological needs that an individual needs for survival, which includes nutrition, oxygenation, elimination, rest, and protection.

- *The role function mode*

The role function mode focuses on the roles a person occupies in society. The role function mode is where the individual connects to other people with their behaviour. The most important role function is that every individual ought to be aware that he or she will not exist alone in the world. Every individual needs another individual to survive and should find a way to connect with others. Individuals need others, especially in a work environment. For instance, in this study nurses need patients for them to render quality services whereas on the other hand, patients need to trust the nurses caring for them.

- *The self-concept mode*

The self-concept mode is linked to issues of spiritual integrity. Self-concept is personal self-beliefs and feelings about one self, it involves body sensations and body image. It is a classification of behaviour, which means that an individual needs to know so that they can have a sense of unity, meaning, and purposefulness (Master, 2015). Individuals need to believe in themselves, have confidence in themselves, and have self-value. In this study, nurses need to believe in themselves and be confident about their knowledge of resuscitation of patients without fear and anxiety. If this is not done the nurses will see the emergency unit as an unsafe place to work and will always be stressed and not be able to cope with situations (Master, 2015).

- *Interdependence mode*

According to Sherman (2013), interdependence mode focuses on the close relationship of an individual with the people, individually or collectively, and their purpose, structure, and development. This relationship is important to the individual and can also be regarded as negative or positive effects difficult times.

- *Outcome*

The outcome is the result of the coping mechanism it can be either adaptive or non-adaptive. It will depend on how the individual is affected. This will depend on

whether the individual will need the handover to the allied team such as a psychologist (Lund, 2010). In an emergency unit, the operational manager or the supervisor should assess the nurses to check their adaptation abilities, planning should be done on how to improve the adaptation abilities. The improvement should be done when setting the goals, which are achieved by taking steps. Lastly, the implementation has to be evaluated (Sherman, 2013). The management of the nurses in a stressful situation is considered important to resolve adaptation process challenges as if not attended affect the care rendered to their patients.

1.8. THE SIGNIFICANCE OF THE STUDY

The findings of the study may benefit the following:

1.8.1. Patients and community

The findings from the study will reveal challenges and coping mechanisms experienced by nurses in the resuscitation of patients in the EU. Improving the service delivery during resuscitation in the EU will benefit the patients and the community.

1.8.2. Department of Health

Findings from the study will highlight the challenges' the nurses face during resuscitation in the EU and various coping mechanisms developed as part of the process. This will assist the department of health to identify areas that need further strengthening to achieve quality emergency services. The findings may assist the department in the development of interventions and supportive measures to support nurses and other healthcare professionals working in the emergency unit.

1.8.3. Nursing education and research

The findings of this study may also serve to expand the body of nursing education knowledge about the effective resuscitation of patients in emergency units. The findings and recommendations will also present grey areas in resuscitation among

nurses for further research. The findings may also prompt other researchers to explore more on resuscitation in emergency units more.

1.9 ETHICAL CONSIDERATIONS

Ethical clearance was obtained from Turfloop Research Ethics Committee (TREC). The researcher also got permission to undertake research from the Limpopo Provincial Ethical Research Committee, the Chief Executive Officers, and the nursing management of the relevant hospitals. Ethical considerations were followed during the study. The participants were given the most vital information about the aims, goals, and processes to follow. Lastly, the participants were given a written consent to sign after the deliberation of the information.

1.10 DIVISION OF CHAPTERS

Chapter 1: The introduction and overview of the study

Chapter 2: Literature review

Chapter 3: Research methodology

Chapter 4: Presentation of findings, interpretation, and literature control

Chapter 5: Summary, limitations, recommendations, and conclusions of the study

1.11 CONCLUSION

This chapter deliberated on the overview of the study. The study was introduced and background information about the experiences and coping mechanisms is explained from a global context in the public hospitals in Limpopo Province. The research problem and the theory background were described. The aim, research questions, and objectives of the study were outlined. The research methodology with the research design, population, sampling, data collection, and analysis were summarised. Chapter 2 focuses on the literature review of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents the literature review of the challenges and coping mechanisms of nurses involved in the resuscitation of patients in the EU. A literature search was conducted using the keywords: nurses, resuscitation, EU, challenges, coping mechanisms. This was to present the existing body of knowledge that has been conducted on the topic of interest, synthesise the information and present it in an organised manner. In this chapter, the information presented included cardiopulmonary resuscitation, nurses' role in the resuscitation of the patient, nurses' knowledge, skills and attitudes regarding resuscitation, challenges in patient resuscitation in the EU, coping mechanisms and finally, how nurses cope with the resuscitation of a patient.

2.2 CARDIO-PULMONARY RESUSCITATION DURING PATIENT CARE

Resuscitation of patients is one of the essential therapeutic interventions often performed in EU. During patient care in an EU**,** prompt initiation of Cardiopulmonary Resuscitation (CPR) certainly saves lives, however; studies continuously report a low competency of implementing the CPR, mainly due to a shortage of skills (Avisar, Shinyovic, Aharonson-Daniel & Nesher, 2013). The EU is considered one of the necessary hospital departments and serves as a gate of the hospital and its front line. A higher percentage of patients present in the EU are critically ill patients that need urgent care and intervention such as CPR. Nurses and physicians at the EU, including the other multidisciplinary team members, work together to manage these critically-ill patients to effectively stabilise them (Sehatzadeh, 2014).

2.2.1 Historical background and description of CPR

Cardiopulmonary Resuscitation (CPR) was first introduced in 1960. The resuscitation pioneers introduced it as a stabilising intervention for sudden cardiac arrest patients. The procedure of Cardiopulmonary Resuscitation (CPR) has evolved

over time since its initial introduction. Basic CPR was developed as a temporary measure of keeping the patient alive until definitive treatment, such as defibrillation, became available. The CPR therapeutic intervention has become a routine practice over the past years in the healthcare systems for several patients with life-threatening conditions and illnesses (Raza, Arslan & Patel, 2021); (Sehatzadeh, 2014).

The American Heart Association (AHA, 2021) defines CPR as "*an emergency lifesaving procedure performed when the heart stops". Raza, Arslan & Patel, 2021).* The procedure involves the combination of chest compression with artificial ventilation to preserve brain function until further measures are taken to restore spontaneous breathing and blood circulation in a victim with cardiac arrest. The goal is to keep blood flow active. According to the AHA's chain of survival, CPR is critical to the chances of survival and recovery for victims of cardiac arrest. According to Goodarzi, Jalali, Almasi, Naderipour, Kalhori, and Khodadadi, (2015). Cardiopulmonary Resuscitation is a procedure that is done when a patient is having heart and lung arrest to restore the function of pulmonary ventilation and heart rate aimed at preventing brain death.

2.2.2 Legislative framework for CPR in South Africa

The nurses in South Africa are expected to practice their profession within the legal framework of the country. The Bill of Rights remains to be the cornerstone of democracy in the South Africa as it covers the rights of all people in the country and upholds the democratic values of human dignity, equality and freedom. Chapter 2 sections 11 indicate that everyone has the right to life and section 27(3) stated that emergency medical treatment must not be refused in the private or public sector; this means that any patient who requires emergency treatment must be provided care by the closest nearby hospital to stabilise the health of the unstable patients. (The constitution of the Republic of South Africa, Act no 106 of 1996).

Furthermore, the National Health Act (NHA) No 61 of 2003 state that health facilities must comply with the relevant quality requirements and standards prescribed by the health minister with the consultation with the National Health Counci (Brauns,

2015). According to South African Nursing Council (SANC), The Scope of Practice for the registered professional nurse (R2598) requires a nurse to be able to assess, diagnose, plans care, do nursing intervention, and evaluate patient responses to care and record nursing care rendered to the patient. This implies that nurses are expected to utilise Cardiopulmonary Resuscitation during their care on patients in EU to stabilise patients and to preserve lives.

2.3 NURSES ROLE IN THE RESUSCITATION OF PATIENT

During CPR, the medical and nursing staffs plays major roles in effectively managing and stabilising patients in the EU. Other members of the multidisciplinary team offer assistance when needed. Nurses are generally described as the first responders to emergency and cardiac arrest (Hejjaji, Chakrabarti, Nallamothu, Iwashyna, Krein, Trumpower, Kennedy, Chinnakondepalli, Malik & Chan, 2021). Therefore, nurses always initiate basic life support while waiting for the advanced cardiac life support team to arrive. Nurses function as a crucial member of the resuscitation team and therefore play essential roles in the resuscitation of patients in the hospital setting. (Olasveengen & Semeraro, 2021).

Traditionally, nurses have had limited roles and duties during CPR. These include: preparing medications to be administered and monitoring of patients vital signs. Reviewed the empirical literature on the new roles that have been given to nurses in the modern resuscitation era (Terzi, 2012). It was found that in the modern resuscitation era, nurses act as rapid response nurses, use automatic external defibrillators, involve in CPR decision making, and administer the correct drugs. (Terzi, 2012). These roles have evolved due to increasing education and training in CPR, patient and family-centred care and technology advancement (Almaze & De Beer, 2017).

Peters, Harvey, Wright, Bath, Freeman, and Collier, (2018) reiterated that nurses are an essential member of the resuscitation team. This cadre of healthcare providers can also manage airway, lines, drugs and tubes during CPR. In some situations, the nurses function as the leading staff in charge of the resuscitation documentation (Clements, Curtis, Horvat & Shaban, 2015). A common practice is

the documentation of the resuscitation details, i.e. the number of doses of drugs delivered, the timing of shocks, their magnitude and the order of resuscitation. Nurses also contribute significantly to leadership, communication and teamwork. Nursing leadership, skills, and communication impacts patient outcomes and identified as part of resuscitation success (Clements et al., 2015).

2.4 NURSES KNOWLEDGE, SKILLS AND ATTITUDES REGARDING RESUSCITATION

The successful initiation of CPR depends on the nurse's knowledge, skills and attitude. As first respondents, nurses are expected to be knowledgeable, skilled and competent in the performance of CPR. Competency in CPR has been defined as acquisition and retention of both practical skills and cognitive knowledge to be able to perform CPR in a sudden cardiac arrest (Nassar, & Kerber, 2017).

The nurse's knowledge, skills and attitudes regarding CPR has been extensively researched over the years. In Botswana, Rajeswaran and Ehlers (2014) evaluated the nurses knowledge level of CPR, skills using a quasi-experimental time-series design, that involved a pre-test intervention, post-test and re-test after three months. Nurses CPR knowledge was below average as indicated by a pre-test mean score of 55.09% compared to the pass standard of 85% set by the AHA. However, after CPR training for respondents, the post-training mean score was 80.63%. The mean score of the nurse CPR skills before training was 9.42%, which indicated a low level of competence. Following CPR training, the post-test mean score increased to 78.31%. The findings indicate that nurse CPR knowledge and skills were inadequate.

Moreover, similar findings were also reported by Vural, Koşar, Kerimoğlu, Kızkapan, Kahyaoğlu, Tuğrul, and İşleyen,(2017) who reported on markedly deficient nurses CPR knowledge and skills. Poor and inadequate CPR knowledge and skills among nurses have the potential to impede the survival and management of cardiac arrest victims (Rajeswaran & Ehlers 2014).

In Ethiopia, the attitude and skills level of graduate health professionals with regard to CPR was also found to be insufficient and substandard (Gebremedhn, Gebregergs, Anderson, & Nagaratnam, 2017). Another European observational study conducted by Pettersen, Martensson, Axelsson, Jorgensen, Stromberg, Thompson, and Norekvål, (2018) nurses showed deficits in both theory, and practical regard CPR. These findings highlight nurses' concerns in CPR knowledge, skills and attitudes and further prompt immediate educational interventions for this cadre of healthcare providers.

2.5 CHALLENGES AND FACTORS EXPERIENCED BY NURSES IN THE EU

The nurses encounter several challenges when planning, preparing and performing CPR interventions in the EU or a hospital setting. Nurses play a major role in effectively managing and stabilising patients in the EU. These roles also come along with work stressors, compassion fatigue and distress (O'Callaghan Lam, & Moss, 2020). Several studies have looked at the coping strategies used by nurses working in the various departments of the hospital (Betriana & Kongsuwan, 2020; Forozeiya, Vanderspank-Wright, Bourbonnais, Moreau, & Wright, 2019; Isa, Ibrahim, Abdul-Manan, Mohd-Salleh, Abdul-Mumin & Rahman, 2019).

The following are factors that contribute to ineffective utilisation of CPR when caring for patients in the EU.

2.5.1 Shortage of staff

Rajeswaran and Ehlers, (2013); Zha et al., 2018) reported the shortage of staff and personnels as a major organisational challenge in the resuscitation of patients in the EU. Nurse managers' identified the staff shortage as organisational challenge nurses encounter when performing CPR interventions. The shortage of nurses and doctors, according to the participants, delays the early initiation of CPR for critically ill patients and causes excessive workload. Nurses are compelled to work under extreme pressures and conditions to meet the needs of affected victims and family members (Rajeswaran & Ehlers, 2013).

2.5.2 Nature of the EU

The EU environment's dynamic and unpredictable nature makes the resuscitation of the patient challenging and stressful one for nurses and other healthcare providers. Overcrowding in the EU and the inadequate space for resuscitation has been reported in literature as one of the organisational challenges that nurses encounter during the patient's resuscitation (Esfahani, Ahmadi, Nilashi, Alizadeh, Bashiri, Farajzadeh, Shahmoradi, Nobakht, & Rasouli, 2018; Atakro *et al*., 2016.; Rajeswaran & Ehlers, 2013).

Thus, overcrowding in the EU adversely affect patients' health, access to care and the quality of the healthcare system rendered to consumers of healthcare (Esfahani *et al.,* 2018). Delay in initiating emergency services, the shortage of staffs, and the delay in discharging of admitted patients are some of the causes of overcrowding in the EU. These situations have adverse consequences on patients and healthcare delivery system. Increased workload, increase delay to treatment for patients and dissatisfaction are some of the reported consequences (Esfahani *et al.,* 2018). Overcrowding of patient and family members in the emergency unit contributed to nurses' violation especially when family members' expectations are not met (Albashtawy & Aljezawi, 2016). Yarmohammadian, Rezaei, Haghshenas and Tavakoli (2017) further supported that overcrowding in the emergency unit is associated with increased mortality, decreased patient safety, and delays in the initiation of critical care.

The lack of space in the emergency setting also poses a challenge to the resuscitation of patients (Atakro *et al.,* 2016; Rajeswaran & Ehlers, 2013). Some participants in Rajeswaran and Ehlers (2013)'s study mentioned inadequate space as a barrier to perform CPR. These, according to them, were attributed to the overpopulation of the hospital wards. Similarly, Atakro et al., (2016) added that overcrowding in the EU puts unnecessary pressure on nurses.

2.5.3 Lack of CPR training and inadequate knowledge and skills

Cardio-pulmonary competence is crucial in effective management and stabilisation of critically ill patients in the EU as well as the lack of emergency trained nurses affects emergency care, including resuscitation rendered at the EU (Atakro et al., 2016). The majority of nurses in EU lack CPR knowledge and skills according to research evidence (Atakro *et al*., 2016; Rajeswaran & Ehlers, 2013). These situations have a profound effect on patient care and healthcare providers, especially nurses. The delay in initiating treatment, for instance, further complicates the patient's precondition and increases mortality.

2.5.4 Shortage of emergency equipment and supplies as challenges experienced by nurses in EU

According to a study conducted by Atakro *et al*., (2016) in Ghana, the lack of emergency equipment's and resources at the EU makes emergency care embarrassing and frustrating for nurses. In such situations, nurses are forced to use what they have. Similarly, in Botswana, Rajeswaran and Ehlers (2013) also reiterated that inadequate supplies and equipment made patient resuscitation challenging. According to the study participants, instances such as empty emergency trolley and the absence of defibrillators affected CPR performance. McLaughlin and Skoglund (2015) in the United States also added that drug shortages especially when resuscitating patients was another challenging issue.

2.5.5 Lack of resuscitation policies and guidelines

Resuscitation policies, guidelines and protocols are useful in managing and stabilising patients in the EU. The lack of standardised protocols affects CPR performance and competence among nurses. Nurse Managers in Rajeswaran and Ehler (2013) study reported that non-existence of standardised CPR policies and guidelines in the EU made CPR challenges. Participants encounter ethical dilemmas because of the absence of the 'do-not resuscitate' policy in the hospital. Similar findings asserted that the absence of clear guidelines negatively affects nurses' CPR

competence and further contributes to substandard practices (Ebben, Vloet, Verhofstad, Meijer, Groot, & van Achterberg, 2013).

2.5.6 Ineffective communication and relationship among the resuscitation team

Most importantly, Arrowaili (2016), in a systematic review, reported that communication barriers as one of the challenges in trauma resuscitation. The finding was supported by that of another study conducted by Citolino Filho, Santos, Silva and Nogueira (2015) in Brazil. The authors added that the lack of a harmonious relationship among team members made resuscitation in EU challenging. A study conducted in Botswana by (Rajeswaran and Ehlers 2013) reported communication problems as another organisational challenge that influence CPR performance in the EU. According to study participants, valuable time is wasted when nurse has to call a doctor who cannot be reached.

2.5.6 Burnout and stress

A study conducted in China by Lu, Sun, Hong, Fan, Kong, and Li, (2015) identified the occupational stress amongst nurses working in the EU. The study found that nurses faced a considerable amount of occupational stress that stemmed from critics, instrument equipment shortages, a lot working documents, a heavy workload and understaffing. Bragard, Dupius and Fleet (2015) also described that the challenges nurses experienced were also work-related. There was also a high level of burnout among nurses that often leads to a low level of job satisfaction. In South Korean, Kim and Yeo (2020) also reported that nurses in emergency units are frequently exposed to post-traumatic stress distress due to traumatic events witnessed routinely. The finding as supported by Atakro *et al.,* (2016), that also indicated nurses experience several forms of stress while providing care in the EU.

2.5.7 Occupational safety for nurses

Nevertheless, nurses face certain occupational health problems while providing care in the EU. These occupational health problems pose a great challenge when it comes to managing and stabilising critically ill patients. Kilic, Ozoglu, Korkmaz, and Ozer (2016) in Turkey focused on the common occupational health problems among

nurses working in the emergency unit. The study reported noise, verbal abuse by patients and their relatives, and viral infections as the most common occupational health problems and the challenges that nurses encountered while providing care in the EU. Other researchers also reported needle stick, waist and back aches (Atakro et al., 2016). Most of the participants in Atakro *et al.,* (2016) also mentioned that the frequent verbal abuse from relatives to nurses was another challenge in EU.

2.6 MECHANISMS TO COPE WITH RESUSCITATION CHALLENGES IN AN EMERGENCY UNIT

Furthermore, coping is non-static but a dynamic process that helps an individual to deal with emotions or distress produced by the situation and the management of the problem causing the distress. It is a strategy that makes use of ones' consciousness or individual's effort to solve the personal and interpersonal problems to resist and reduce stress (Jan & Para, 2017). Coping mechanism or behaviour is an inborn naturally occurring personal response an individual displays when confronted with any stressful situation (Badger, 2015).

In the provision of care in the EU, nurses use different types of coping mechanisms as they meet the needs of patients and support family members. The goal is to maintain professional demeanour, however, provides excellent care to healthcare consumers. The type of coping mechanism or strategy used often depends on the stressful situations in their working areas and interventions rendered (Alharbi & Alshehry, 2019). The two main methods of coping described in literature are a problem-focused and emotion-focused, and each is effective in specific circumstances.

6.1.1 Problem-focused coping

Therefore, the problem-focused coping focuses on the changing or modifying the fundamental cause of stress. This can be an effective method of coping when it is practical, and the stressor is changeable and modifiable. This type of coping focuses on the individual's taking control of the specific relationship between them and the

stressor. Problem-focused coping identified as coping mechanism (Munroe, Al-Refae, Chan & Ferrari, 2021)

6.1.2 Emotional-focused coping

Emotional-focused coping strategies are effective in the management of unchangeable stressors. Problem-focused coping strategies used include seeking social support, painful problem solving, and confronted behaviours. Munroe, Al-Refae, Chan & Ferrari, 2021). These strategies are engaged to manage the problem that causes stress and deal with it. Positive reappraisal, self-controlling, escape-avoidance, accepting responsibility, and distancing emotion-focused coping strategies mentioned in literature (Badger, 2015).

A few studies, however, have focused on the coping strategies used by nurses involved in the resuscitation of patient in the EU. In a recent comparative study Jan, and Para, (2017), revealed that both the problem and emotional-focused coping strategies were used, however, dependent on the situation. A problem-focused coping strategies commonly used are painful problem-solving whereas less often used was confronting coping. Positive reappraisal was the most frequently used emotion-focused coping strategy than the escape-avoidance. In a cross sectional study by Isa et al., (2019), the study identified problem solving and positive reappraisal as predominant coping strategies used by emergency nurses to cope with job-related stress.

2.7 RESILIENCE IN THE EMERGENCY UNIT

The study that was conducted by Manyam, Davis and Mitchell, (2020), states that the EU is the place where acute care is being provided. Most of the time it is a stressful workplace, most of the nurses end up not coping with unusual and critical cases or situations. Furthermore, the study indicated that resilience may be used, to reduce future workplace stress, as well as promoting resilience programme for emergency nurses. Resilience in the emergency unit identified as coping mechanism (Manyam, et al., 2020)

2.8 EMOTIONAL EXHAUSTION

Therefore, Job demand, as well as changes in receiving rewards, social harassment, and changes in work agreement can also lead to emotional exhaustion and nurses turns to leave the job and poor quality patients care (Lee & Cha, 2018). Furthermore, Lee & Cha, (2018) states that the intervention in this type of situations is important to provide the good quality health to the patients in the EU. A long shift, in a poor working environment that is too cold or too hot also can cause emotional exhaustion (Lee & Cha, 2018). Emotional exhaustion was identified as a challenge.

2.9 CONCLUSION

This chapter outlined some of the challenges the nurses are facing during and after resuscitation of patients, as well as coping mechanism**.** This chapter focused on literature review where most factors were highlighted, the nurses' role in the resuscitation of the patient, nurses role in the resuscitation of patient, nurses knowledge, skills and attitudes regarding the resuscitation, challenges and factors experienced by nurses in the EU. Mechanisms to cope with the resuscitation, challenges in an emergency unit, resilience in the emergency unit as well as emotional exhaustion**.** This chapter has also revealed that insufficient research has been done on the challenges and coping mechanism for nurses involved in the resuscitation of patients. Chapter 3 discusses the research methodology used in this study in detail.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology refers to the overall research approach, research method, research design, data collection, study population, study site, sampling, and data analysis (Brink et al., 2018). This chapter discusses the research methodology that was used in the study which entails the research approach, the research design, study site, population, sampling method and sample size, data collection, data analysis, pilot study, biases, and measures to ensure trustworthiness and ethical issues.

3.2. RESEARCH APPROACH AND DESIGN

This study used a qualitative research methodology approach to obtain in-depth information on the challenges and coping mechanisms of nurses during resuscitation of patients in the EU at selected hospitals in the Mopani District, Limpopo Province. A qualitative research approach enabled the researcher to explore and describe the depth, richness, and complexity of the lived experiences of nurses during the resuscitation of patients in the EU (Polit & Beck, 2016).

A qualitative exploratory, the descriptive and contextual research design was used to determine the challenges and coping mechanisms of nurses during the resuscitation of patients in the EU at selected public hospitals in the Mopani district.

3.2.1 Exploratory research approach

According to Swedberg, (2020), exploratory research is directed to improve different perceptions, determine different thoughts, and increase information about the occurrence. In this study, the researcher has explored the challenges and coping mechanisms of nurses involved in the resuscitation of patients in an EU at selected public hospitals in the Mopani District, Limpopo Province. The researcher provided

the participants with adequate time to express their experiences while spotting any emotional states.

3.2.2 Descriptive research design

Descriptive research design focuses on providing a truthful explanation or image of the position or features of a condition or phenomenon (Brink et al., 2018). The emphasis of descriptive research is not on determining roughly by a firm search of cause and outcome relationships, but rather on defining the variables that occurred in a particular position and, sometimes, on defining the relationships that exist among those variables (Doyle, McCabe, Keogh, Brady & McCann, 2020). In this study, the researcher described the participants' experiences, as a coping mechanism for resuscitation of patients, and a report was created on the participants' information. This research design is used when more evidence is necessary or used when there's a necessity to categorise problems (Brink et al., 2018).

3.2.3 Contextual Research Design

Duda, Warburton and Black, (2020) defined contextual research as a study in which the researcher gets out of his/her workstation into the physical world, in the places where the participants conduct their everyday duties or where the involvements take place. In this study, the participants are nurses from selected public hospitals of the Mopani District, Limpopo Province and interviews were conducted within the hospital premises in specially arranged private rooms.

3.3 STUDY SITE

The study site was in the Mopani District in greater Tzaneen town in Limpopo Province. Limpopo province is divided into five districts namely Capricorn, Mopani, Vhembe, Waterberg, and Sekhukhune Districts. The study site was in 2 hospitals in Mopani District, namely: Van Velden and the Letaba hospital, where these hospitals provide 24 hours emergency services. Van Velden is a district hospital with a bed occupancy of 69 while the Letaba hospital is a regional hospital with 250-bed occupancy. The complicated patients are referred from the district hospital to the

regional hospital for specialised management. The majority of nurses working in these EU were trauma trained and they possessed communication skills, decision-making skills, interpersonal skills, patient assessment, nursing diagnosis, triage and resuscitation skills, and teamwork is promoted to achieve quality patient care.

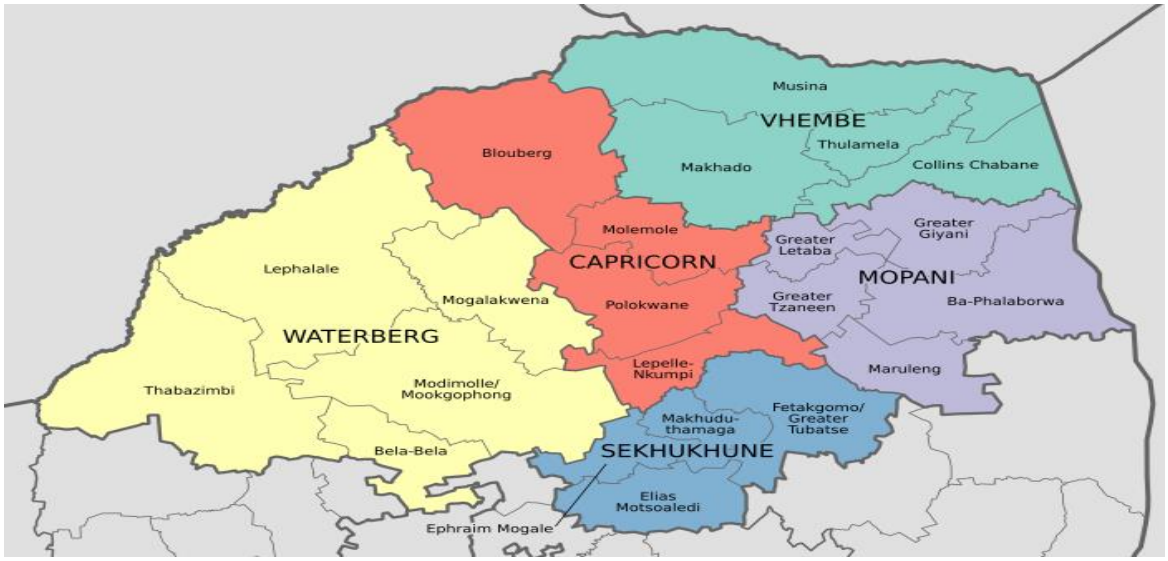

Figure 3.1: The illustration figure of Mopani Districts

3.4 POPULATION

Population refers to an entire group of persons or objects that is of interest to research (Leavy, 2017). The population was all nurses currently working in the EU of the selected hospitals. The accessible population in this study was professional nurses working in the selected hospitals. The target population was professional nurses who were working in the EU of the selected hospitals. Letaba Hospital has 35 emergency unit nurses and the Van Velden hospital has 28 nurses. The population of this study was 63 nurses.

3.5 SAMPLING METHOD AND SAMPLE

Sampling refers to the research process of selecting a sample from a population to obtain information (Brink *et al*., 2018). The non-probability purposive sampling method was used to select the participants who are believed to have challenges during resuscitation of patients in the EU (Cresswell, 2018). The study sampled the

professional nurses working in the EU of selected hospitals as they were the first level of contact with the patients during the resuscitation of patients. The sampling was performed until data saturation, which is when no new information emerges.

3.6 INCLUSION AND EXCLUSION CRITERIA

3.6.1 Inclusion criteria

Inclusion criteria are also referred to as eligibility criteria and are defined as the criteria that specify the preferred population characteristics (Polit & Beck, 2016). The inclusion criteria for this study will be:

- Professional nurses working in the EU of the selected hospitals were given consent to participate in the study.
- Only professional nurses with one year of experience and more of working in the emergency units of the selected hospitals were included.

3.6.2 Exclusion criteria

Exclusion criteria are when the researcher decides to focus on a particular population (Polit & Beck, 2016). The exclusion criteria were thus:

- Nurses working in the emergency unit, but on leave during the time of data collection was also excluded.

3.7 DATA COLLECTION

Data collection is a systematic method of collecting relevant information from the participants (Gray, Grove, & Sutherland, 2016). Furthermore, the data collection refers to the gathering of information that is appropriate to research purposes, specific objectives, questions, or hypotheses of the study. According to Brink *et al.,* (2018) it is the gathering of information that describes some information from which conclusions can be drawn. The data collection in the qualitative research is more flexible and resolutions of what to be collected by the researcher. According to Polit and Beck (2016), the primary data collection method in qualitative research is

observation and interview. Therefore, the researcher used semi-structured interviews during the data collection.

3.7.1 Preparation for data collection

The University of Limpopo Turfloop Research Ethical Committee (TREC) provided the ethical clearance certificate TREC/392/2020: PG to conduct the study. Furthermore, permission has also been provided from the Limpopo Provincial Department of Health and Mopani Districts Office (Appendix C). The chief executive officer of the special hospital was permitted to collect data at the selected public hospitals in the Mopani district of Limpopo Province South Africa.

The Deputy Nurse Manager was contacted to plan and discuss the contributions of the participants in the data collection sessions. The hospital management granted the researcher permission to contact the wards and the professional nurses in the specifically selected hospitals. The operational manager helped plan and organise the available empty private cubicle for the conducting of the interviews. The researcher requested the professional nurses, to introduce themselves as the participants of the study. The study was introduced, and consent forms were signed by the professional nurses, who managed to meet the selection process. The audio recorder was used during the interview, to record and informed consent was obtained from the participants.

3.7.2 Data collection method

The researcher used different methods of data collection during semi-structured interviews. The collection method, which was used during data collection, and data collection tools, are deliberated below in facts:

- *Semi-structured interview*

An interview is one of the communication skills which are done orally and is also one of the methods that was used during the interview. When collecting data, the researcher managed to find the replies from the participants (Brink *et al*., 2018). A semi-structured interview method was used to collect data during the research study

using an interview guide. According to Polit and Beck (2016), the interview guide directed the researcher without uttering the interview, meanwhile, the interview questions were between two to six. The semi-structured interview involved several open-ended questions established on the topic part that the researcher needs to cover (Appendix B).

The study was done in a private room to avoid disturbance. The environment was quiet, comfortable, ventilated and no discomfort was observed. The participants were free they managed to express their feelings. The interview was recorded using a voice recorder and field notes were also taken to record non-verbal cues. A central question was “How do you resuscitate patients in the emergency unit?. The central question was followed by probing questions based on the responses focusing on challenges and possible coping strategies from participants to produce more in-depth information (see Appendix K). The interview was done in English because the participants are professional nurses and can understand English. The interview lasted for about 40 to 52 minutes. The data collection methods used were an interview guide, field notes and a voice recorder were used as tools for the collection of data.

- *Voice recorder*

One-on-one interviews were done, and voice recorders were used during the interview to support the following analysis. Therefore, it was followed by writing down the recordings verbatim (Creswell, 2014). Furthermore, the voice recorder was alternately used to assist the researcher to concentrate on the chats and the topics during the interview sittings. Consent was given from the participants before the voice recorder was used. A voice recorder was used, it allowed full recording than taking notes. Rutakumwa, Mugisha, Bernays, Kabunga, Tumwekwase, Mbonye and Seeley, (2020) recommended that the use of a voice recorder normally offered the researcher full trustworthiness information, as the information will be prepared manner so that a specific tape is related to the exact person.

- *Field notes*

Quick and Hall (2015) they define field notes as a record of details in the field. Furthermore, according to Polit and Beck (2016), field notes are defined as notes which are taken or written down by researchers to record the unstructured observations that were made in the field. The interpretation of those field notes was done after data collection.

Nevertheless, Busetto, Wick, and Gumbinger, (2020), they defined field notes as a written description that the researcher attends to, observes, understands, knowledge and lastly deliberates during an interview. During the interview, the researcher made use of field notes which helped to note the nonverbal indications that were observed from the participants during interviews, and the researcher managed to interpret some of the actions that were presented by the participants.

3.8 PILOT STUDY

A pilot study is a small study that allows the instrument to be used in a small number of participants; those participants are not going to be part of the main study to prevent bias in the study (Brink *et al*., 2018). The purpose of the pilot study was to verify the tools to be used in the main study and to check for any errors in the instrument of data collection. The pilot study was conducted at Dr CN Phatudi Hospital to identify errors in the interview guide that might come across before the main study. The necessary arrangement was done to correct the instrument to collect data, Dr CN Phatudi was not part of the main study. The semi-structured one-on-one interview sessions were conducted which included the selected professional nurses, who are targeted or who met the sampling criteria. The researcher conducted a pilot study before the collection of data for the main study. A pilot study was conducted to investigate the feasibility of the main study and to identify the possible errors of data collection instruments that need revision (Brink *et al*., 2018).

3.9 DATA ANALYSIS

The data collect through the semi-structured interview using the interview guide, voice recorder and taking field notes was transcribed verbatim. The data was

analysed using Tesch's open coding method where the researcher developed themes and sub-themes, with the consensus with the independent coder (Polit & Beck, 2016). The researcher and the independent coder analysed the data individually, then come together and agreed on identified themes and sub-themes. The researcher prepared a summary of the recognised themes and sub-themes before sending the transcribed data to an independent coder. The independent coder was given the transcripts to go through them to analyse the collected data. Once the analysis by an independent coder was done, the researcher and the independent coder had a session to discuss the themes and they agreed on identified common themes and subthemes.

Tesch's open coding method of qualitative data analysis was used in the study using these eight steps (Creswell 2014).

Table 3.1: Tesch's open coding method

The researcher chose one interview. From that interview, the researcher read the data to comprehend the meaning of the information. The researcher read the initial set of transcripts and jotted down general notes.
After going through the transcripts, the researcher grouped similar topics in groups and categorised them.
The researcher then went back to the data and abbreviated the topic as codes and wrote the codes next to the appropriate segment of the text.
The researcher then observed the organisation of data to check if the categories or codes emerged.
Then the researcher found the most descriptive wording for the topic and then converted them into categories. The aim was to reduce the total list of categories by grouping topics that relate to each other. Lines were drawn between the categories indicating the interrelationship of the categories.
The final decision was made on the abbreviations of each category and the codes were arranged alphabetically.
The data material belonging to each category was assembled in one place and kept track of track of the material (Creswell, 2014).

3.10 MEASURES TO ENSURE TRUSTWORTHINESS

There are four criteria for trustworthiness which were authorised by Lincoln and Cuba and were used in this study.

3.10.1 Credibility

Credibility is the confidence of the truth of the data and its interpretation (Polit & Beck, 2016). In this study, credibility was ensured by prolonged engagement,the participants were given time to think and also questions were clarified, the highest engagement was 40-52 minutes. Follow-up interviews were made to some participants to get more clarity on some aspects which were not clear during transcription and analysis. The use of audio recording to record the data, and the taking of field notes during a semi-structured interview. Participants were given enough time during the interview session to ensure that sufficient data was collected.

3.10.2 Dependability

Dependability refers to the provision of evidence such that if it were to be repeated with the same participants (Brink *et al.,* 2018). In this study, dependability was ensured by the use of any audit trail since the researcher kept the voice recordings and field notes after data collection, the data was kept in a locked safe where unauthorised people will not assess the data only the supervisor.

3.10.3 Transferability

Transferability refers to the ability to apply the findings in other contexts or other situations (Polit & Beck, 2016). In this study, transferability was ensured by presenting a detailed description of the research methodology, population sampling technique, and study setting.

3.10.4 Conformability

This refers to the potential for the congruence of data in terms of accuracy relevance or meaning and establishes whether the data represent the information provided by

the participants (Brink *et al*., 2018). In this study, conformability was ensured by the use of an experienced independent coder to code the data. The researcher has kept an audit trail to confirm the processes undertaken. Voice recordings and field notes were also kept available to confirm participants' responses.

3.11 ETHICAL CONSIDERATIONS

3.11.1 Ethical clearance and permission

Ethical clearance was sought from the Turfloop Research Ethics Committee (TREC). Permission was sought from the Limpopo Provincial Department of Health, Mopani District, and the Chief Executive officers of various institutions.

3.11.2. Informed consent

The participants were given accurate and complete information about the goal of the study to be conducted. This has included the type and benefits of the study and the reasons why the study should be conducted. The information was made available in the language that was understood by the participants. Participants were informed of their rights to withdraw without any consequences.

3.11.3 Principle of justice

Justice refers to every participant has got the right to fair selection and treatment (Brink et al., 2018). In this study, the researcher strictly adheres to the inclusion and exclusion criteria to select participants. Similar questions were posed to all participants to ensure that they are treated equally.

3.11.4 Confidentiality

Confidentiality refers to the need not to disclose participants' information whether in the form of spoken, written, or electronic that could have been identified with the participants either during the collection of data or thereafter (Moule, Aveyard & Goodman, 2017). The interview was held in a private room suitable for the participant where no one can hear the conversation. All collected data from the

participants were not disclosed to any other person not directly involved in the study, data in the form of a tape recorder and field notes were kept under lock and key.

3.11.5 Anonymity

The researcher notified the participants that their identities will not appear anywhere throughout the study. This were ensured by not using the participants' real names instead research numbers or alphabets will be used.

3.11.6 The Principle of beneficence

The researcher made sure that all participants were assured and treated in a way that prevents possible harm either physical, emotional, spiritual, or psychological (Gray *et al.,* 2016). The researcher explained the advantages of the study and how the findings benefited the nursing profession.

3.11.7 Respect for participants

The researcher allowed the participants to decide whether or not to participate in the study. The researcher explained to the participants that they have the right to withdraw from the study anytime or to ask for clarification about the purpose of the study.

3.12 BIAS

Bias is actions that produce errors, distortion or interpretation and affect the quality of study results (Polit & Beck 2016). During the interview process, the researcher's subjectivity was avoided by putting aside preconceived ideas, expectations, and experiences about the phenomenon under the study through bracketing to minimise bias. Sampling bias and sample imbalances were avoided by adhering to the chosen sampling method to obtain participants.

Errors in data collection were avoided through triangulation in data collection tools where multiple tools were used, including interviews, voice recording, and field notes that can capture all the key concepts. Data collection bias was also avoided by ensuring that the questions will be asked as they appear in the interview guide and

the responses will be recorded as given by the participants. During analysis the researcher avoided bias by not manipulating the results, all raw data will be provided on request. The researcher clarified the questions to the participants when they are answering questions and avoided leading questions.

Another way of minimising bias is through bracketing. Bracketing is the method of classifying and field in predetermined beliefs and ideas about the phenomenon under study (Polit & Beck, 2016). These authors further explain that it is challenging to accomplish grouping completely, but the researcher attempts to group out the world and any assumptions in a determination to provoke the information in pure form. In this study, the researcher did hold back any ideas and beliefs about the phenomenon during data collection to avoid biases. Even if the researcher had some information about the study, which has not been stated by the participants it was not encompassed in the study.

3.13 CONCLUSION

This chapter discussed the research approach and research design, population and sampling method, and data collection and analysis. Measures to ensure trustworthiness and ethical considerations were also discussed. Chapter 4 will discuss the presentation of results, interpretation, and literature control in detail.

CHAPTER 4

PRESENTATION, DISCUSSION OF RESULTS AND LITERATURE CONTROL

4.1 INTRODUCTION

The previous chapter discussed the research methodology used in the study. This chapter deals with the presentation, discussion of findings and literature control where the existing research literature is used to support the findings from the study. The study sought to determine nurses' challenges and coping mechanisms during the resuscitation of patients in the EU. The interviews that was conducted were transcribed verbatim, coded, and analysed where themes and sub-themes were developed and supported by direct quotes from participants.

4.2 PARTICIPANTS' DEMOGRAPHICS

Table 4.1: Demographic information of participants

Participants	**Gender**	**Age**	**Years working as professional nur**	**Period of resuscitation in the EU**
Participant 1	Female	52years	20 years	11 years
Participant 2	Female	30years	08 years	08 years
Participant 3	Male	40years	07 years	04 years
Participant 4	Female	55 years	10 years	10 years
Participant 5	Male	30 years	05 years	04 years
Participant 6	Female	43 years	12 years	07 years
Participant 7	Male	60 years	30 years	15 years
Participant 8	Male	25 years	04 years	04 years
Participant 9	Female	25 years	05 years	05 years
Participant 10	Female	40 years	03 years	03 years
Participant 11	Female	26 years	05 years	05 years
Participant 12	Female	50 years	14 years	07 years
Participant 13	Male	40 years	11years	10 years
Participant 14	Female	43 years	10 years	03 years
Participant 15	Male	59 years	30 years	23 years

Participant 16	Female	33 years	05 years	04 years
Participant 17	Female	30 years	05 years	03 years
Participant 18	Female	44 years	15 years	11 years

4.3 PROCESS OF DATA COLLECTION AND ANALYSIS

Data were collected using face-to-face semi-structured interviews from eighteen (18) professional nurses who are working in the EU of the selected hospitals.

4.4 RESEARCH FINDINGS

This section presents the findings from participants on the challenges and coping mechanisms. Each theme was presented and discussed in detail and supported by verbatim quotes from individual interview transcripts in the context they were expressed to support the conclusion indicated by the researcher and also give meaning. A typical statement is presented in italics. The data analysed were grouped under four (4) themes with their sub-themes. Table 4.1 below presents the themes and sub-themes that have emerged during data analysis using Tesch's open coding method. The themes and sub-themes are reflecting nurses' challenges and coping mechanisms during the resuscitation of patients in the EU.

Table 4:2 Themes and sub-themes

Main themes	Sub-themes
1. Nurses' challenges during resuscitation in the emergency unit	1.1 Human resource challenges during resuscitation in the emergency unit 1.2 Nurses' institutional challenges during resuscitation in the emergency unit 1.3 Nurses' Intra-/interpersonal challenges during resuscitation in the emergency unit 2.3 Nurses' patient-related challenges during resuscitation in the emergency unit
2. Effects of challenges on nurses	2.1 Intra-/interpersonal effects of challenges

during resuscitation in the emergency unit	during resuscitation in the emergency unit 2.2 Occupational effects of challenges during resuscitation in the emergency unit
3. Nurses' coping mechanisms with resuscitation in the emergency unit	3.1 Intrapersonal coping mechanisms within the nurses 3.2 Interpersonal coping mechanisms amongst nurse
4. Suggested coping mechanisms with resuscitation in the emergency unit	4.1 Human resource coping mechanisms suggestions 4.2 Procurement and facilities coping mechanisms suggestions 4.3 Support services coping mechanisms suggestions 4.4 Nursing services coping mechanisms suggestions

4.4.1 Theme 1: Nurses' challenges during resuscitation in the emergency unit

Participating nurses in this study described several challenges they faced during resuscitation in the EU which includes a shortage of human resources, institutional challenges, nurses' intra/interpersonal challenges and patient-related challenges as noted during resuscitation of patients.

4.4.1.1 Sub-theme: Human resource challenges during resuscitation in the emergency unit.

Study findings discovered that there is inconsistent availability of competent doctors and nurses allocated in the EU and this shortage of manpower impact negatively on the quality of resuscitation of patients. According to some participants, some doctors are inexperienced, only started their community service and are not competent when it comes to resuscitation in the EU. Doctors play a major role in the resuscitation of patients in the EU and the absence of doctors during resuscitation was described as a human resource challenge. Sometimes doctors are nowhere to be found during

the peak hours of patient resuscitation in the EU. Continuous rotation of nursing staff was observed as another factor contributing to the unreliable availability of competent nurses in the EU for effective resuscitation of patients. These findings denote that the inconsistent availability of competent nurses and doctors in the EU affects the quality of care rendered to patients.

The findings are supported by participant 1*"So usually at casualty there is no doctor, especially during the weekend you will find that there is one sister and the junior nurses, the doctor comes when we call her as a doctor on call, we call her/him if there is a patient."*

Another participant 2 added that "*And also inexperienced doctors cos usually in our hospital we work with community service doctors…ok inexperienced doctors, you find that the doctor is busy on the phone; some of the doctors when you advise them they don't even listen to you they just prefer to call doctors from referral hospital and consultants*. *It's also a problem, especially in our hospital whereby you find that there is a rotation of nurses every year is a big challenge."*

Participant 5 "*It is not well staffed because someday we are left being only three, one professional Nurse, one assistant Nurse, one enrolled Nurse and you have the doctor you have to resuscitate*."

The findings are congruent with that of a study indicated that a lack of experience and skills among the employees, denoting that medical workers and pre-hospital emergency management lack the necessary competencies for patient resuscitation (Nijhawan, Kam, Martin, Forrester, Thenabadu, & Aziz, 2021). Furthermore, the study also noted that inadequate skills and ability to control the crisis among pre-hospital EMS professionals and EU personnel have demonstrated excessive challenges in providing effective treatment to trauma patients. According to Sostero, Milasi, Hurley, Fernandez-Macías, and Bisello (2020), in the EU division, staff shortages remained an issue due to a lack of employee recruitment processes and turnover of staff. Patient resuscitation is an important part of EU practice and competent nurses are imperative in ensuring successful resuscitation.

Ribeiro, Martins, da Silva, Teston, da-Silva, and Martins, (2019) consequently concluded that personnel shortages and restrictions in funding staff are directly related work overload in the EU, thus staff training is necessary for all implementation plans. Roy's adaptation model postulates that adaptation occurs when people respond positively to environmental changes and that individuals need to be able to consciously adapt to such environmental changes, processes, and outcomes, creating both human and environmental integration.

4.4.1.2 Sub-theme: Nurses' institutional challenges during resuscitation in the EU

The study findings highlighted the institutional challenges manifested by inadequate medical equipment and pharmaceutical supplies for quality nursing care. There is improper and unsuitable infrastructure and a lack of support services from the multidisciplinary support services with regard to transport, EMS, cleaning, and security services. The institution on the other hand lacks managerial and organisational support for nurses working in the EU. The findings imply that there are institutional challenges experienced by nurses during the management of patients in the EU that needs to be attended to in order to improve the care given to patients.

The following quotes are in support of the finding's participant 1: *"So the other challenge, we supposed to have enough equipment, we don't have enough medical equipment and supplies in the hospital, you will find that you have a stethoscope but no pulse oximeters, how can we resuscitate patient without a pulse oximeter"*

Participant 14 *"The most challenging thing that most of our equipment is that they are old equipment. We don't have new equipment, some of them are not working well, so those are the challenges that we are having, but anyway in that small theatre is where we are trying to can resuscitate."*

Participant 16 said" *And then there's a shortage of treatment. Like in the pharmacy when we call there they say we don't have this and then we and then don't have this for a replacement for that treatment. Mere hydrocortisone happens that sometimes we don't have. "*

Participant 18 *"We are having like serious challenges of medication you know like; a doctor would try to order something to maybe to try to resuscitation the patient and then you find gore (that) you don't have it in the ward, you have to call the pharmacy, pharmacy they will tell you gore(that) it's out of stock even from depot".*

According to the World Health Organization (2019), 50 to 80 percent of medical equipment in poor nations is inoperable, posing a barrier to the health system's capacity to provide health services to patients. Moyimane *et al*., (2017) mentioned that a serious shortage of medical equipment at the hospital occurred in the form of the unattainability of equipment, low quality, and poor maintenance of the few that were available, and this affect the quality of care to be rendered to patients. The National Core Standards of Health Establishments in South Africa require that medical equipment be maintained in accordance with manufacturer specifications to keep the equipment reliable, safe, and available for use when needed for diagnostics, treatment, and patient monitoring (Modisakeng, Matlala, Godman, and Meyer, 2020). Furthermore, poor maintenance and repair, as well as a lack of financial resources, are to blame for the shortages.

The findings of the study also noted that the EU infrastructure was found to be not in good condition where the space is too small; the resuscitation room itself was not well-ventilated and spacious for resuscitation. The patients are attended to being so congested even now during the Covid pandemic. There is a lack of adequate space and poor maintenance and this makes it difficult to perform several tasks at the same time in the EU.

Participant 10 *"The resuscitation room is too small, mmm not well ventilated, no air-conditioner when it's hot. Some curtains they do not close properly, which we also requested for replacement. Yes but it's still the same as it has been two years back. Yeah so, the privacy of the patient is very much compromised".*

Participant 11 added *"The infrastructure totally is not meant for the casualty. There is no privacy, is being opened. People are just getting inside, they all are roaming just getting inside, there is no privacy.*

Another Participant 17 added that *"The space is not enough, it's not enough. For now, we are having a pandemic COVID".*

The lack of physical working space hampered the prompt and scientific transfer of patients, as well as the continuity of therapy in some cases and the hospital emergency department, do not have adequate accommodation for such a large number of patients (Jamshidi, Jazani, Alibabaei, Alamdari, & Kalyani, 2019). In addition to a lack of equipment, a lack of physical room for patient admissions is a major factor in the delay of pre-hospital emergency personnel. In several circumstances, a lack of physical space has hindered the infrastructure's ability to manage patients (Jamshidi *et al.,* 2019).

According to Birch and Muniesa, (2020), development and ensuring privacy and confidentiality, as well as the availability of medications and other supplies. Furthermore, other issues included a shortage of furniture, information and communication materials, instruments, and medications, the usage of space and equipment and an increased patient load that resulted in congestion. The findings are also supported by Atakro *et al.,* (2016) in their study who indicated that overcrowding in the EU poses a notable challenge to quality emergency care delivery. This is mainly due to the number of patients waiting to be treated with further treatment delays in attending and or assessing patients already kept in the small space and overcrowded EU. Thus, Roy's adaptation model emphasises the importance of adaptation to a changing environment as another coping mechanism to bring about an outcome.

The study findings again identified that the multi-disciplinary support services such as radiology, laboratory, and pharmacy that are all needed in the success of resuscitation in the EU are not adequately available and there is no support from such services. Participants highlighted that inadequate support from several disciplines made resuscitation challenging.

Another participant 8 *"When we send the patient to the pharmacy to collect the medication and then that patient find there's no pharmacist, the patients will come*

back to us shouting even if you try to explain the procedure. The patient doesn't want to hear that they are fighting with us".

Participant 12 said *"You want to send the patient to X-ray there are no X-ray personnel or the X-ray's note printing. Laboratory especially at night when you call they don't answer the phone and you find it's closed and you need urgently results".*

Participant 16 *"The other challenges with resuscitation you find that the referral hospital, they need the blood result and our lab takes long to give the results and the x-ray they are not there 24 hours so if in case of emergency we have to call them to come and do the X-ray".*

According to Farias, Silva, Brandão, Guedes, Pontes, and Lopes, (2021) for effective resuscitation in the EU, service delivery must incorporate psychosocial support, medical treatment, and multidisciplinary referral, including within the health care system. Multi-sectorial case management for survivors, including health, welfare, counselling, and legal services under one roof, with the objective of reducing unnecessary referrals.

Another finding that poses a major challenge that was mentioned by participants was the inadequate support services such as transport, EMS, cleaning, and security services in the EU which impact negatively on the effective resuscitation of patients to achieve quality.

Participant 4*"So, the problem of EMS is when they have a patient who needs resuscitation they do not let us know in advance to prepare our equipment so when they arrive then we can be able to resuscitate even call the doctor, the radiographer to be available. So, we end up losing the patient, so these are my challenges."*

Participant 8 "Sometimes when we call the porter we are working without a porter and then as casualty sometimes we are having eh patient comes bleeding and then we want a cleaner doesn't have a cleaner and then as a professional nurse I must take a mop and do the clean because I can't work in eee dirty places".

Participant 10 "In the absence of security, it becomes a challenge that every time we have to first call the security, whom stationed at the main gates. So, that is still a big issue because some psychiatric patients are very aggressive. And the process of calling the security from the main gate, sometimes you will find that patients, staff and people are already assaulted. I was also assaulted three days back actually in the absence of the security".

Transport delays and a shortage of equipped ambulances with trained emergency services (EMS) personnel were additional challenges that led to infant mortality. In South African district hospitals' inadequate newborn resuscitation contributes to infant morbidity and mortality (Sivanandan & Sankar, 2020). Lack of staff, improperly trained staff, restricted resuscitation equipment, and a lack of well-equipped transport facilities are all factors that contribute to suboptimal newborn resuscitation (Sivanandan & Sankar, 2020). Clinical competency has frequently been examined and considered important in a variety of clinical settings and while doing various emergency clinical activities (Almalkawi, Jester & Terry, 2018). According to Roy's adaptation model, another coping mechanism is the interdependence mode which focuses on the close relationship of an individual with other people, individually or collectively, and their purpose, structure, and development.

Another finding of the study is poor resuscitation in the EU due to inadequate management and organisational support. Nurses indicated that they are not supported by management and this further frustrates them during patient care in the EU.

Participant 3 " *And one more thing, more, discouraging things it's that even the management does not even uhm the Appraise you for what you are doing*. *They simply insisted on helping you to cope they press you more, more and more down*"

Another participant 4 said " *So, I have realised that our management is not well, it is poor. Yeah! It is poor because you can state a problem now because all those things I have been stating that are problems in casualty, but nothing has been done."*

Participant 11 added that "*We have tried to talk to the unit manager; our young Unit manager has mentioned that there is no staff and there is nothing that can be done."*

The findings of this study agree with that of a study conducted by Afaya, Bam, Azongo, Afaya, Yakong and Kpodo, (2021) revealed that there are various challenges affecting nurses working in the EU and among them is the inadequate managerial support and other managerial processes which impact negatively on the provision of quality patient care. The study recommended that to ensure quality emergency nursing care, the hospital management should validate and attend to problems raised by those nurses. A study conducted in China also supported the same study findings where a shortage of EU nursing staff was reported as a major concern to the provision of quality patient care (Lam, Kwong, Hung, Pang & Chien, 2019).

Another study conducted in Canada confirmed that quality emergency care can only be delivered effectively if nurses are adequately supported and given the required attention by management as the nurses work with overwhelming patients. Furthermore, the lack of support from management contributes negatively to their capability to offer quality care for their clients. Thus nurses wanted management to validate their work-related worries and find proper solutions to improve quality emergency care in the unit (Enns & Sawatzky ,2016) Therefore, the development of a caring working setting is needed for nurses to practice complete and holistic nursing care which yields job satisfaction and retention(Enns & Sawatzky, 2016).

4.4.1.3 Sub-theme: Nurses' intrapersonal and interpersonal challenges during resuscitation in the emergency unit

The finding of the study revealed that during resuscitation of patients in the EU, nurses experience challenges within themselves as human beings like a feeling of guilt and fear, especially, in case resuscitation is unsuccessful and the patient ends up losing their life. The findings further revealed that such challenges are also evident among the other colleagues where which affect nurses in their day-to-day duty of caring for patients in the EU. This implies that during resuscitation, nurses

are personally affected by the traumatic situation and this also impacts their relationships with co-workers which in turn impacts negatively on their work.

This is evidenced by participant 1 *"I am not sure whether I lose the patients before the doctor, what am I going to write (mmh) what must I write , because if the doctor is there at least we covered".*

Participant 7 said "*Ok, sometimes, when I resuscitate a person, especially the patient who is having a viral infection like Covid 19 tested positive. When I resuscitate and fail I ask myself, am I going to be alive because I don't know whether that Covid infected me".*

Participant 10 "So, with the ones which are new or which we are not familiar with it gets difficult because we don't know how that person is going to react because some even utter anger statements like we were not together in MEDUNSA, you won't be fine the whole day.

The intra-personal obstacles are the fundamental features of the individual that prohibit the nurse from fulfilling their position as a health advocate (Kaur, Kallakuri, Kohrt, Heim, Gronholm, Thornicroft, & Maulik, 2021). These obstacles also include actual or imagined worries of punishment for engaging and participating in their health advocacy role; personality qualities such as timidity, lack of assertiveness, and a lack of confidence; and professional inexperience and lack of confidence (Kaur at el., 2021). Findings by Szyikowski (2020), found that nurses' perceived or genuine anxieties of being labelled as knowing too much might prevent them from doing the right thing in an atmosphere where members are penalised or discouraged from standing up for their opinions. As stated in the RMA, the intrapersonal interactions of the group). According to Roy's model, a feeling of shared duty, solidarity of collective ideals and a common mission drive role and group identity.

4.4.1.4 Sub-theme: Nurses' patient-related challenges during resuscitation in the emergency unit

The participants verbalised that during resuscitation in the EU, there are also challenges that are caused by patients themselves like coming to the hospital too

late when they have complications and as such this creates challenges for nurses. The family of patients also causes challenges during the resuscitation of patients in the EU which makes it difficult for nurses to cope. This concludes that sometimes when nurses are performing their resuscitation duties both the patient and the family can interfere and contribute to the challenges nurses complain about in the EU.

These findings were supported by participant 1 *"Sometimes patients do not come to the hospital that same day may be of the injury, he comes after a day when it is too late when we tried to resuscitate that patient we failed because the patient came to the hospital very late".*

Participant 17 *also added that " In most cases, I can't say I want to hide something uhh it's not in most cases that we have a failed resuscitation but a patient sometimes starts in another hospital and when they fail the patient comes to our hospital*".

Participant 7 indicated that *"So, seeing, when resuscitation has failed and then it's difficult for you, you have to face the family* ".

Participant 14 also verbalised that *"The other experience during resuscitation is relatives or friends of patients. Sometimes they threaten us, swearing by the side, some of them are drunk, or you find that there are two patients who were fighting each other and the other one injured the other they bring them together, but they still want to continue with the fight and that is a threat to our lives*."

Resuscitation Council recognises the responsibility of the doctor to assess and balance the risks, benefits, and costs that the resuscitative interventions will have on the patient and their family, including the financial costs to the health care system and society as a whole (Campwala, Schmidt, Chang, & Nager, 2020). Furthermore, some doctors specified that the presence of chronic medical problems within the patient has no impact on their decision-making however, the majority of them indicated that they consider the general medical situation (Campwala et al., 2020).

The current data on family Centered care supports the inclusion of family members during resuscitation (Dainty, Atkins, Breckwoldt, Maconochie, Schexnayder, Skrifvars, Tijssen, Wyllie, Furuta, Aickin & Acworth, 2021). In the case of an

emergency, autonomy should be respected while not hindering scientific improvement, additionally, transparency should be promoted, and financing should be enhanced. According to the theoretical assumptions of Roy's Adaptation Model, the family is classified as a common influential stimulus that affects a person's adaptation (Pedersen, Smallegange, Coetzee, Hartog, Turner, Jordans, & Brown, 2019). The presence of the stimulus, in a patient in need of resuscitation is represented by family support, and the positive responses generated by competent nurses providing relevant care.

4.4.2 Theme 2: Effects of challenges on nurses during resuscitation in the emergency unit

The study findings exposed that nurses experience the after-effects of the challenges they went through during resuscitation of patients in the EU. Participants experience intrapersonal and interpersonal effects of challenges following resuscitating of patients and there are also occupational effects that are experienced during resuscitation in the EU. Findings suggest that resuscitation personnel feel insufficiently prepared for death notification delivery and communicating with distressed families and bystanders.

4.4.2.1 Sub-theme: Intra-/interpersonal effects of challenges during resuscitation in the emergency unit

The finding of the study revealed that when nurses perform the resuscitation procedure in the unit, there is a challenge that if the resuscitation fails, they experience physical, emotional, and psychological effects. This is manifested by feelings of demotivation and burnout amongst the nurses. The other challenges identified include poor interpersonal relations with other staff due to stress and burnout. This finding entails that during patient care nurses in the EU experience both physical and emotional challenges that need to be attended to ensure quality emergency nursing care.

Participant 3 *“Burnout will end up resulting in a physical illness no longer emotional but physical illness and burnout. Developing high blood pressure and developing all the stress causes stress. I can say stress can lead to depression. ”*

Participant 5 *“At the end of the day because you will find that you are, sometimes you even have problems with the relationship with the Doctor because things that you are looking for are not there, the things that his looking for they are not there and you must bring them. You end up disturbed emotionally”.*

Participant 10 added *“But the problem is sometimes that what I did maybe it was not good because I would worry if I failed to intubate, I will worry and stress that the reason why the patient demised, so it was very affecting”.*

Another participant 15 said *“ then akere (you know) during trauma like, we don’t know whether panic is, I believe panic maybe can affect psychology you find this doctor you know he/she do this and this, Mara (but) during trauma they forget almost everything so maybe you find that they forgot the critical part”.*

The EU personnel are regularly exposed to uncertainty, distress, emotional stress, guilt, burnout, and vicarious trauma after resuscitation (Ribeiro et al., 2019). These findings were supported by findings in the exploratory studies which also valued lost time or brief stand-down from active work and chances for peer debriefing after difficult and challenging resuscitation decision-making resulting in patient death (Anderson, Slark and Gott, 2019). Roy’s adaptation model asserted that the Four Adaptive Modes of RMA are related to one's connections and interactions with others, as well as the giving and receiving of love, respect, and worth.

According to Harris, (2021), anxiety occurs when a person recognises a prescribed regimen (focal stimuli) as a threat to self-concept and emotional responses such as redefining the situation, avoidance, denial, or depression of situation are used, all of which are based on the Roy's Adaptation Model. EU personnel were more negatively affected by failed events and events involving fellow patients with whom they had formed a good relationship during admission, according to the majority of EU personnel. Self-care, informal peer support, and organised debriefing were seen

as beneficial ways of maintaining their well-being, following stressful situations and being able to give care and emotional support to the other patients (Smith, Walker & Burkle 2019). According to Harris (2021), anxiety occurs when a person recognises a prescribed regimen (focal stimuli) as a threat to self-concept and emotional responses such as redefining the situation, avoidance, denial, or depression of situation are used, all of which are based on Roy's Adaptation Model.

4.4.2.2 Sub-theme: Occupational effects of challenges during resuscitation in the Emergency unit

The findings of the study revealed that there is a lack of optimal functioning for nurses due to challenges in the EU like physical exhaustion leading to medico-legal and ethical risks. The occupational challenges are so extreme to appoint were other nurses wish to avoid the work situation, are affected emotionally and so stressed and this has a negative impact on the quality of patient care. The findings indicate that during the care of patients in the EU, the nurses experience occupational challenges that predispose them to risk their work to lawsuits due to exhaustion and occupational-related stress. These findings are supported by the following quotes:

Participant 1 **"***We become tired because you know you must use both hands to resuscitate the patients we become tired and stressed up. I will have a terrible headache, and generalised body pains, I don't know how to do but am supposed to come to work because of the situation.*

Participant 5 added that " *So, insomnia we end up developing insomnia. So, that is the big problem that we encounter, and you know if those things persist. "Eeh! I will speak for myself I end up being demotivated to even come to work. My morale will be very low".*

Participant 6 *"Truly speaking the emotional one it is its painful it's painful and then you feel like you can just cry because the pressure in inside it's too much for you".*

The findings of this study are congruent with that of a study conducted by Adriaenssens, De Gucht and Maes, (2015) which stated that the changes in work request, control and social support are predictors of work fulfilment, work

engagement and causing emotional overtiredness. The study further recommends occupational interventions to improve the occupational health of nurses working in an emergency unit and to pay attention to reducing occupational demands to ensure job control and social support. Thus, nurse managers ought to be aware of the causes and consequences of occupational stress in emergency room nurses in order to enable preventive interventions (Adriaenssens et al., 2015). Burnout experience in the EU is suggestively related to general health leading to poor physical and mental health signs, such as headaches, depression, and insomnia that impact negatively on job performance (Hamilton, Tran & Jamieson, 2016; Khamisa, Peltzer, Ilic & Oldenburg, 2016).

According to the findings of a study conducted by Eriksson, Gellerstedt, Hillerås and Craftman (2018), the study concluded that the shortage of manpower to deal with the high patient load leads to increased personal stress affecting one emotional state and affecting the overall wellbeing. The increased workload in the EU was found to have a relationship with the work-related stress of the nurse in the EU and thus it is recommended that hospital management should alter the workload with the expertise of nurses to reduce work stress that can impact on quality patient care (Ulumuddin, Septiana, Nurdiana & Budiharjo, 2021). Work-related stressors have been linked with the bigger hazard of depression and suicide, intra-personal conflict as well as decreased job performance and poor staff morale (Mata, Ramos, Bansal, Khan, Guille, & Di Angelantonio, *2015).*

Situational stress experienced by nurses it is associated with the feeling of anxiety resulting in a frightening situation that cannot be controlled when attending to patients causing conflicts. Thus, causing mistakes in their work units and loss of self-confidence in handling patients which may make one escape the work situation and avoid work (Merkusi & Aini, 2020). Roy‘s adaptation model indicates that emotional-focused coping strategies are necessary and effective in managing consistent stressors which impact one’s performance and the general well-being of individuals to avoid a negative impact on patient care.

Flood, Cradock-Henry, Blackett, and Edwards, (2018) claimed that Roy described adaptation as "the process and result of a thinking and feeling individual using

conscious knowledge and choice to construct human and environmental integrations." Furthermore, adaptation is viewed as a dynamic and complex process of coping with health hazards, as well as the results of that process. In psychosocial and biomedical models, adaptation is a match between the demands of a situation and the capacities of an individual. Several lines of thought imply that adaptation may be understood as both a process reflecting an individual's efforts to manage relationships with others and the environment and an outcome presenting a condition of physical, emotional, behavioural, and cognitive functioning (Flood *et al*., 2018).

4.4.3. Theme 3 Nurses' coping mechanisms with resuscitation in the emergency unit

The study found that nurses have various coping mechanisms to enable them to continue caring for patients in the EU. The coping ways of nurses were described in a variety of ways and the following sub-themes, intrapersonal and interpersonal coping were identified. Intrapersonal coping mechanisms included improvisation, self-talk, and self-motivation. Interpersonal coping mechanisms used by participants also included seeking support from others and engaging in conducive communication skills. These subthemes are discussed below.

4.4.3.1 Sub-theme 1: Intrapersonal coping mechanisms within the nurses

The study found that the nurses use intrapersonal coping mechanisms which included situations where nurses have to improvise always in order to cope with challenges during the care of patients in the EU. The findings furthermore revealed that at times nurses have to self-motivate themselves to can go on with their day-to-day activities. Participants had to improvise in a way to cope with the situation that comes with resuscitation in the EU. This implies that nurses use a variety of coping mechanisms like intrapersonal strategies so that they can effectively cope with the challenges they go through while attending to patients in the EU. The findings are supported by the following quotes:

One participant 5 said: *“So we just improvise. We just improvise by moving things making sure that the environment that we are working around is clear and we have space for proper resuscitation but it’s just improvisations we can’t say is really good”*

Participant 12 *“You just have to compromise yeah so the patient will be attended to”*

Furthermore, participants 15 *“We old once already we are adapted to that type of situation; we have accepted that”.*

Another participant 10 *“just to distract me from whatever situation and make sure, try to read some books and trying to revise some of the things in relation to that condition that when the next patient comes I will try to do this”.*

Giles, Hammad, Breaden, Drummond, Bradley, Gerace and Muir-Cochrane (2019), alluded that the frustration and guilt experienced by many EU nurses when they failed to succeed with their resuscitations and provision of high-quality emergency care were largely related to influences outside their control and this large impact on their performance in the unit. During such frustrations, the care of the patient is also affected. When nurses fail to overcome and manage systemic issues in their workplace, this results in poor patient outcomes, and unhappiness among EU nurse clinicians and ultimately contributes to high nursing and medical staff turnover (Adriaenssen et al., 2015).

Roy's Adaptation Model was used as a framework to help researchers in analysing depression symptoms in nurses, with the statement "A mentally-healthy nurse workforce is critical to providing effective healthcare" Callis (2020). According to Roy‘s adaptation model, people's resilience refers to their capacity to adapt and pull themselves together, as well as their ability to withstand crises or tragedies. Furthermore, the model indicates that professional protective factors include professional experience, professional satisfaction, being informed, sharing knowledge and skills, being adaptive, positive attitudes toward work, being supported by colleagues, teams, and consultants, sharing problems with colleagues, recognising stressors, and finding solutions (Hannawa, Kolyada, Potemkina & Donaldson, 2021). The findings are in line with the focal stimuli in Roy‘s adaptation

model which are those internal or external stimuli challenging the person most immediately that need adaptation within an individual to be able to cope with the stimuli.

4.4.3.2 Sub-theme 2: Interpersonal coping mechanisms amongst the nurses

The sub-theme of interpersonal coping mechanisms also emerged as a coping mechanism used by nurses in the EU. The interpersonal coping mechanisms involve the use of conducive communication skills and seeking support from others to ensure that the nurses are able to cope with challenging experiences during the care of patients in the EU. Several participants coped by seeking support from colleagues, managers, and families. Some discuss it with colleagues, and doctors and even talk about it with family members. The findings show that nurses use others including co-workers, and family to try and cope with some challenges that they experience in the emergency unit can support them in coping with the challenges.

Participant 3 said, *"I give them a brief knowledge or a brief with regard to the resuscitation that if the patient present like this, we do this and we do this and that help me to cope when I share with co-workers".*

Participant 11 *"If we are resuscitating the patient, in receiving the patient in the resuscitation room, they are stressed and the family, we talk to talk to them politely, we can then cope when talking to them".*

Another participant 10 indicated that *"I discuss with whoever I will be working with, for example, there are some doctors that we usually discuss with about general presentation of the patient and also the management".*

This was confirmed again by participant 15 *"Sometimes we even talk amongst ourselves as nurses and doctors immediately after".*

Colleagues who found that there was often uncertainty around team members' roles, and conflict sometimes occurred between professional groups regarding the best way to manage EOL care and who is appropriately skilled to provide that care (Wolf,

Delao, Perhats, Clark, Moon, CNS-CC, F.A.E.N. Baker and Zavotsky, 2015).Cultivating social support from family, friends/colleagues, and supervisors can aid in stress management and improve a nurse's quality of life (Kowitlawkul, Yap, Makabe, Chan, Takagai, Tam & Nurumal, 2019). It is also critical for nurse leaders to preserve their staff's support by assisting them in lowering job stress. As nurses interact within their work environment, their adaptive responses may be compromised as interpreted within the framework of Roy's theory. Routine updates to personnel about plans and essential preparations are part of communication. Thus, Roy defines the essential necessity of the group identification mode identity integrity (Callis, 2020).

4.4.4. Theme 4: Suggested coping mechanisms with resuscitation in the emergency unit

The findings of the study identified that the nurses recommended several coping mechanisms and strategies to enable them to deal with the challenges that are experienced by the EU nurses during their day-to-day care of patients. The participants suggested the recommendations for coping based on human resources, Procurement and health facilities coping mechanisms recommendations, support services coping mechanisms recommendations and nursing services recommendations as sub-themes to be discussed in detail below.

4.4.4.1 Sub-theme 1: Human resource coping mechanisms suggestions

The study suggested that coping mechanisms that can be effective in improving the challenges experienced by emergency care nurses may be improved through attendance of human resource concerns which is the provision of coping mechanisms for nurses working in the EU. The coping mechanisms regarding human resources can improve service delivery, including the provision of experienced trained doctors and nurses to the EU to aid with expert services needed during patient care. The findings imply that the nursing staff working in the EU develop coping strategies that they deem fit to help them cope with the daily challenges of handling emergency patients and their relatives. The findings are supported by the following quotes:

Participant 2 "Okay cause of inexperience doctors I feel like casualty it's a specialty ward just like maternity like they need to allocate experienced senior doctors and those nurses who are experienced in dealing with emergencies."

Participant 11 "*The medical officer mentoring the intern for the medical cases must be around when the intern medical officer is busy assessing the patient so as to educate the intern."*

Another participant 13 "*we need to have nurses who have experience and are adequately trained to work in the emergency unit. So, we need to do better as the face of the hospital people knowing that when we going to casualty we are in safe hands*."

The findings agree with that of a study conducted by Portero de la Cruz, Cebrino, Herruzo and Vaquero-Abellán (2020) which concludes that problem-focused coping is viewed as the most commonly used strategy when the nurse presents with somatic symptoms and social dysfunction is the most frequently experienced signs and symptoms. The presence of anxiety, social dysfunction, and avoidance coping are the main predisposing factors of burnout which if not attended to lead to poor job performance. According to Abraham, Thom, Greenslade, Wallis, Johnston, Carlström, Mills & Crilly (2018), the use of adaptive coping styles yields a positive result in physical and psychological well-being, controlling of stress, and general performance among healthcare professionals. The overall good performance amongst nurses in the EU thus leads to an improvement in the quality of care, better patient safety, and a decrease in health service expenses (Abraham *et al.*, 2018).

The findings of a study conducted by Labrague, McEnroe-Petitte, Leocadio, Van Bogaert and Cummings (2018) recommend that increasing social support and encouraging job control were perceived as significant in reducing work stress and its related consequences amongst nurses working in stressful environments. Thus, promoting supportive structures for day-to-day professional practice for nurses, organisational support services and stress management training is vital in assisting EU nurses to cope with challenges in their workplace (Labrague et al., 2018). The need for social support of the nursing and other health team professionals and

management is recommended in health care settings as they are the main predictors of occupational well-being in nurses subjective to hospital management in the improvement of the working conditions of nurses working in the emergency unit (Adriaenssens, Hamelink & Van Bogaert, 2017).

4.4.4.2 Sub-theme 2: *Procurement and health facilities coping mechanisms suggestions*

The findings from participants included suggestions on the improvements of nurses' concerns through the attendance and improvement of the procurement processes for equipment and supplies, management improved infrastructure as their inadequacy impacts the provision of quality EU services. These aspects need to be improved to enable nurses working in the EU to be motivated hence instilling a sense to perform at their maximum best. This means that the emergency unit nurses view improvement in the procurement processes, infrastructure, and administrative processes as the only means that can improve the working conditions and improve the quality of care given to patients in the EU. The findings are backed up by the following direct quotes from the participants:
Participant 1 "*I think if the government or our employees or our managers can order enough stock or motivate to our hospital to have the stock that is not having it*."

Another participant 5 "*The second one is the equipment issue all necessary equipment and supplies must be procured in advance must always be readily available when needed."*
And participant 14 "*With the equipment we have a huge serious challenge. The hospital needs to buy enough equipment and not just enough; we must even change the equipment because they are old*. *Ventilators or defibrillators are old they cannot even use them. They must buy new ones* ".

Adequate equipment and supplies are important in the EU and this includes medical equipment and nurses' personal protective equipment (PPE) that protects healthcare workers from infection. Thus supply chain of pharmaceutical supplies and healthcare equipment requires a quick response as they are critical components (Patel,

D'Alessandro, Ireland, Burel, Wencil & Rasmussen, 2017). A study conducted by Zamani (2019) supports the findings of the study and confirms that accessible supplies and equipment are significant predictors of staff satisfaction and improved performance in emergency care settings and the need to be prioritised during procurement processes.

Nurses further suggested that coping mechanisms in the EU may be enhanced through the provision of adequate and routine maintenance of infrastructure which includes adequate wards, cubicles with enough spaces and all other related structural aspects in the facility. The findings are backed up by the following direct quotes from the participants:

Participant 3 "*mm with the little amount of budget they can extend the emergency unit even if they didn't extend a big thing it can be better. The unit is very small for such many patients."*
Another participant 5 "*Yes, the infrastructure must be improved in order for us to be able to cater for all the patients that need to be seen*."
Participant 15 "*It is a very small opening theatre Eish actually now we need new theatre structure but what we are having there it's only one bedded, we even have windows there is not well ventilated at all*."

The findings are in line with that of who indicated that Many EU nurses are employed in an over capacity as the increased burden of disease and ageing population put increasing demands on the existing infrastructure which is not adequately structured and maintained to deal with such demands (McCusker, Vadeboncoeur, Levesque, Ciampi & Belzile, 2014; Adriaenssens et al., 2015). A study conducted indicates that there is a need to focus on the EU physical environment basically the infrastructure as a means to improve the workspace to minimise some overcrowding and space problems in the emergency unit (Gerace, Giles, Breaden, Hammad & Drummond,2021).

According to Roy's adaptation model, people are unique beings with bio-psycho-social characteristics and constantly interact with the internal and external

environment. Stimuli can be classified as focal, contextual, and residual. Residual stimuli are the environmental factors that have an undetermined effect on human behaviour. Human beings have to make adaptive responses to changing stimuli by using both innate and acquired mechanisms to maintain health (Roy, 2009).

4.4.4.3 Sub-theme 3: Support services coping mechanisms suggestions

The study findings also noted the recommendation on coping mechanisms as the provision of other support services within the multidisciplinary team context that includes transportation of patients by emergency services, x-ray department, laboratory services including pharmacy department for the provision of comprehensive patient care. Adequate multi-disciplinary support services, effective managerial support, in-service training and professional psychological support were viewed as essential aspects in the provision of quality patient care in the EU. The following quotes serve as evidence to support these findings:

Participant 4 "*And remember we spoke about the issue of the radiograph. Hmm! So, or the lab people to come and help us as well when we need them urgently*".

Participant 8 "*mm like eh pharmacist must stay in hospital so that they are available at all times. And then management can support me and then maybe they can increase salary".*

Participant 13 "*Collective support from each multi-disciplinary team force like pharmacist should be able to know that this it's what is needed at the casualty*. *We need training support like this basic life support".*

According to the importance of a devoted physical space in the EU, role clarification, and the availability of a multi-disciplinary team approach is vital to improving patient care challenges (Giles, Hammad, Breaden, Drummond, Bradley, Gerace & Muir-Cochrane, 2019). Furthermore, the uncertainty by EU nurses with requirements and the demand for the extension of knowledge and skills, with the need for educationally unprepared skills to provide quality EU care is an essential element for the provision of quality care (Giles et al., 2019).

The nurse also indicated that there must be specific training in how to provide quality care to the patients in the EU including improved communication skills, and recognition of end-of-life, where processes for determining a patient's wishes for care are addressed.

Participant 8 "*We desperately need training like this basic life support and resuscitation*. "

Nurses also recognise that there is a lack of training in dealing with family grief and distress, how to effectively deal with family anger and that these are stumbling blocks for them to give effective patient care in the EU (Ho, 2016). There is a need for continuing education initiatives to improve the skills of nurses working in the emergency unit for them to render quality care to patients (Wolf et al., 2015). Mughal and Evans, (2020) in their study recommend that additional training for nurses working in the emergency unit is important to improve nurses' knowledge and skills required during patient care.

4.4.4.4 Sub-theme 4: Nursing services coping mechanisms suggestions

The participants in the study suggested that coping mechanisms to enhance effective EU services may be improved through the use of debriefing services as a means for psychological support which is provided to all nursing and medical staff that are allocated in the EU as the environment is by nature usually strenuous with lots of challenges. The study finding implies that debriefing, psychological support, team building and in-service training are essential for nurses working in the EU to improve their work performance.

Participant 2 "*I think we must have a regular debriefing session. Where we voice out everything, all our concerns and then just discuss everything, just to distress*".

Participant 10 also added" *We do have psychologists here; I think they should be debriefing us and attend to our psychological needs as staff*. *I think we got a lack of psychologists who are supposed to support us".*

Participant 13 "*And the next step would be after the incident of a failed resuscitation, there should be something that should be done to help the team".*

The findings are congruent with that of a study undertaken by Power, Baker and Jackson (2020) also indicated that ensuring an optimum work environment includes aspects of appropriate employment of staff, and accessibility of staff to support education. The overall organised routine debriefing of all incidents that put pressure on practice needs to be taken seriously if the quality of care is to be achieved. Regarding the adaptation process, Roy's Adaptation Theory understands the person as an adaptive and holistic system and argues that internal and external stimuli affect people and influence the triggered responses (Roy, 2009).

Another finding of the study suggests the use of team-building workshops as a motivational factor to encourage and promote teamwork within the EU staff as this mechanism is deemed effective in enhancing job responsibility and satisfaction. The following quote supports the findings of this study.

Participant 3 "*team building to get motivated but unfortunately, it just failed because of the shortage of staff who is going to the back to team building and who is remaining with the unit, and they organise motivational speaker just to address us".*

Another participant added *5 "To be able to cope with the resuscitation. Also, the importance of teamwork and some workshops to help us cope. We must have teamwork so people must be properly orientated*".

Participant 18 "*so let's try to motivate each other to help each other, to create the spirit of Ubuntu (kindness)".*

The EU physical environment lacks staff team building, training, and motivation; therefore there is a need to focus on these staff concerns, and consideration of the emotional experiences of frontline nurses caring for patients at the end of life (Gerace et al., 2021). A study conducted by Fallon and Rice (2015) also supports the notion of agreeing with employee development programmes that enhance job satisfaction. Further, such programmes may be more relevant to reducing turnover intentions, while support and appreciation may be key motivators of nurses' ongoing commitment to the organisation.

4.5 CONCLUSION

The chapter highlighted the themes and sub-themes identified in the data analysis which included nurses' perceptions of resuscitation in the emergency unit, nurses' challenges during resuscitation in the emergency unit, effects of challenges during resuscitation in the emergency unit, nurses' coping mechanisms with resuscitation in the emergency unit and lastly recommended coping mechanisms with resuscitation in the emergency unit. The next chapter will deal with the summary, limitations, recommendations, and conclusions of the study.

CHAPTER 5

SUMMARY, LIMITATIONS, RECOMMENDATIONS, AND CONCLUSIONS

5.1 INTRODUCTION

The previous chapter discussed the results of the study regarding the challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in the Mopani district, Limpopo Province. This chapter summarises the findings of the study. It also shows the degree to which the study's objectives have been met, and makes recommendations drawn from the study's findings as discussed in Chapter 4. Strategies were developed, based on the findings of nurses regarding the challenges and coping mechanisms with the reference to the literature review.

5.2 OBJECTIVES OF THE STUDY

The objectives of the study were:

5.2.1. To explore and describe the challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani district, Limpopo province.

The challenges and coping mechanisms experienced by nurses during the resuscitation of patients were explored and described using a qualitative research method, and the objectives of the study were also achieved. An explorative and descriptive method was used to explain the challenges and coping mechanisms experienced by nurses. The total population was eighteen participants from selected hospitals. The non-probability purposive sampling method was used to select the participants. One on one individual interview using a semi-structed interview guide was used as a method of data collection. Data was analysed using Tech’s coding method, with the support of an independent coder who does the best in qualitative studies.

5.2.2 To suggest strategies based on the study findings that would enhance the effective coping mechanism of nurses involved in the resuscitation of patients in an

emergency unit at selected public hospitals in the Mopani district, Limpopo province. After exploration and description of challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals strategies were suggested according to identified themes:

5.3 STRATEGIES SUGGESTED BASED ON IDENTIFIED THEMES

The strategies were suggested based on identified themes. The following strategies were suggested to improve the coping strategies of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals:

5.3.1 Theme 1: Nurses' challenges during resuscitation in the emergency unit

The provision of adequate, experienced nurses and doctors in the EU (emergency unit) in the hospit to overcome shortages in the emergency unit and also the competent nurses should be available nurses is available to upgrade the nurses. The hospital should not include the emergency unit in the

5.4 RECOMMENDATIONS OF THE STUDY

The following recommendations will be based on nursing practice, education, and research. And aim **challenges during resuscitation in the emergency unit**

The following recommendation was proposed:

5.4.1.1 Recommendations for nursing service and administration

The study recommends the adequate provision of staff based on the staff establishment of the ho procurement processes for equipment and supplies to minimise shortages impacting patient care.
The in-service training for emergency resuscitation should be continuously provided with prefere continuing professional development to equip nurses with the latest information and be abreast with education on orientation and induction programmes for nurses on emergency resuscitation.

5.4.1.2 Recommendations for nursing education

There is a need for the development of a curriculum of short courses on emergency, and disaster m warrant that theory and practice be appropriately integrated through adequate and enough exposure

curriculum must reinforce the compulsory attendance of basic life support (BLS) to all undergraduate

5.4.1.3 Recommendations to research

The study recommends that more studies be conducted on the nursing care of patients in the eme EU. Further research should be conducted on the development of more models of care when dealing

5.4.2 Recommendations for Theme 2: The effects of challenges on nurses during resuscitatio

The recommendations include the following aspects:

5.4.2.1 Recommendations for nursing service and administration

Most importantly, nursing management needs to consider the psychological attendance of all nu challenges. The study further recommends the attendance of motivational sessions and improves the

5.4.3 Recommendations for Theme 3: Nurses' coping mechanisms with resuscitation in the e

The study recommended the following:

5.4.3.1 Recommendations for nursing service and administration

The study recommends an improvement of coping mechanisms and the development of strategies to through workshop attendance. Stress management workshops should be arranged for nurses at risk

5.4.3.2 Recommendations for nursing education

There need to be compulsory inclusion of interpersonal and communication skills module in all nursi

5.4.4 Recommendations for Theme 4: Suggested coping with different coping mechanisms to

The recommendations focus on the following aspects:

5.4.4.1 Recommendations for nursing service and administration

The need to have guidelines that regulate how resuscitation procedures should be provided to ensur

hospitals. There must be on-going and continuous workshops to make staff aware of impending stres

5.4.4.2 Recommendations to research

Further research needs to be conducted about the barriers to effective implementation of resuscitatio in the EU.

5.5 LIMITATIONS OF THE STUDY

The study was limited to three hospitals which are situated in the Mopani District of Limpopo Provin of the study are limited to challenges and coping strategies amongst nurses working in the EU only a restrictions because of the pandemic, which resulted in the researcher having to conduct the study nurses involved in the resuscitation of patients in an emergency unit in different provinces and coun placed out the challenges and coping mechanisms of nurses involved in the resuscitation of patients

5.6 SUMMARY

Chapter 5 outlined the summary of the study. As well as the recommendations, strategies, limitati challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emerg Hence, the recommendations of the study are in place.

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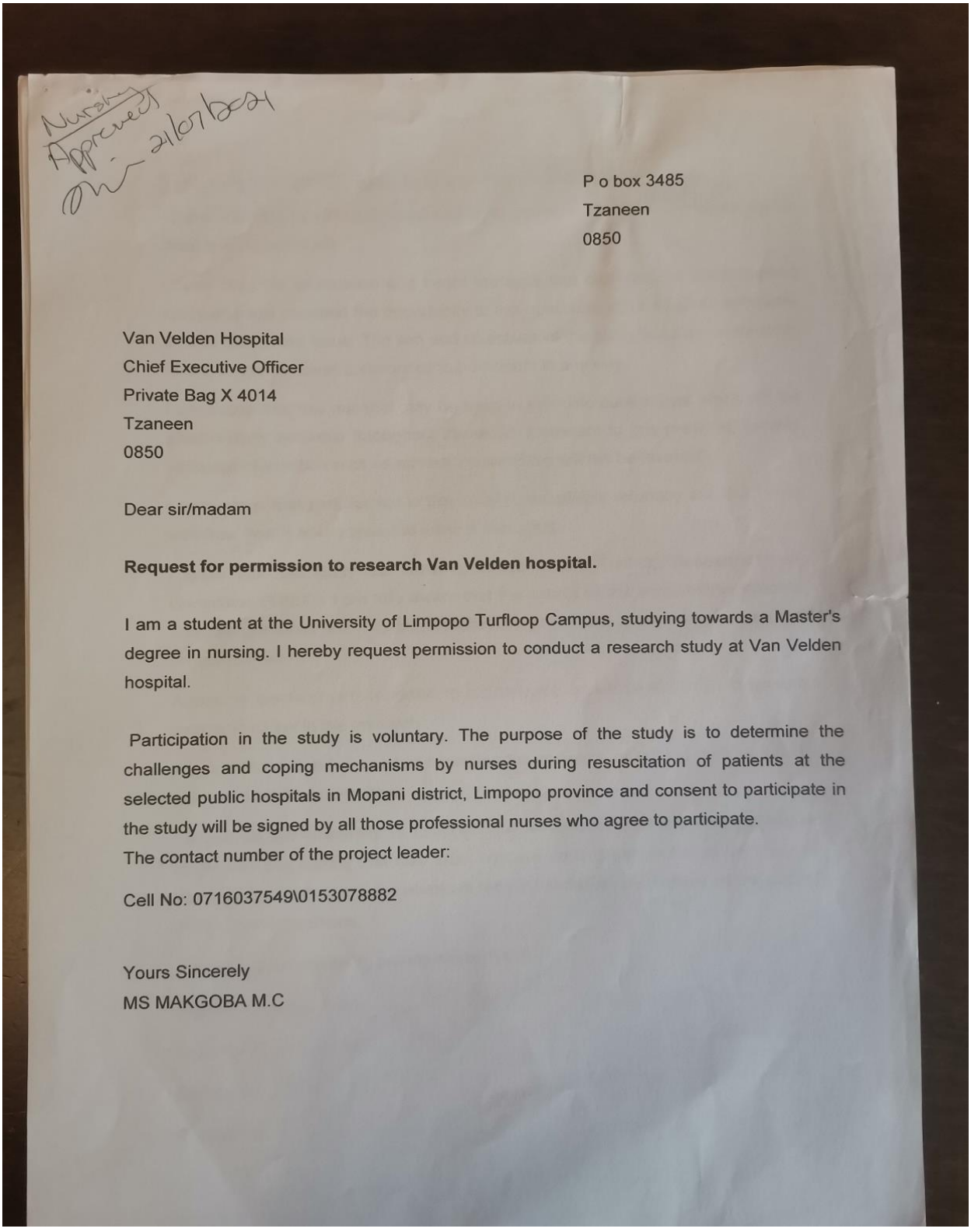
Appendix A: request for permission Van Velden Hospital



Nursing
Approved
21/07/2021

P o box 3485
Tzaneen
0850

Van Velden Hospital
Chief Executive Officer
Private Bag X 4014
Tzaneen
0850

Dear sir/madam

Request for permission to research Van Velden hospital.

I am a student at the University of Limpopo Turfloop Campus, studying towards a Master's degree in nursing. I hereby request permission to conduct a research study at Van Velden hospital.

Participation in the study is voluntary. The purpose of the study is to determine the challenges and coping mechanisms by nurses during resuscitation of patients at the selected public hospitals in Mopani district, Limpopo province and consent to participate in the study will be signed by all those professional nurses who agree to participate.
The contact number of the project leader:

Cell No: 0716037549\0153078882

Yours Sincerely
MS MAKGOBA M.C

Appendix B: Ethical clearance

University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email:makoetja.ramusi@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE

ETHICS CLEARANCE CERTIFICATE

MEETING: 10 December 2020

PROJECT NUMBER: TREC/392/2020: PG

PROJECT:

Title:	Challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani District, Limpopo Province
Researcher:	MC Makgoba
Supervisor:	Mrs TE Mutshatshi
Co-Supervisor/s:	Mr MO Mbombi
School:	Health Care Sciences
Degree:	Master of Nursing

PROF P MASOKO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE
The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: **REC-0310111-031**

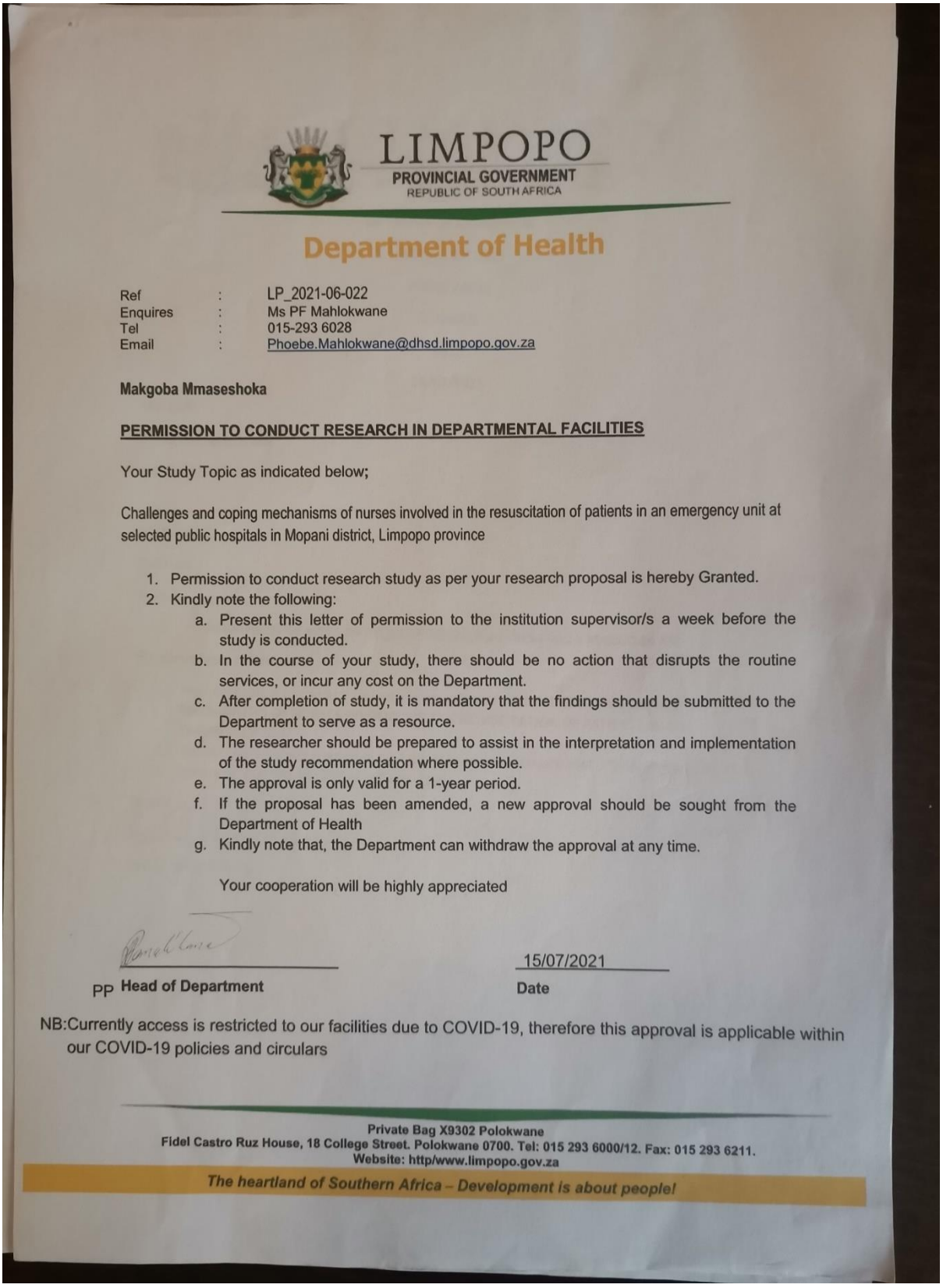
Note:

i) **This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned date. Application for annual renewal (or annual review) need to be received by TREC one month before lapse of this period.**

ii) **Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee, together with the Application for Amendment form.**

iii) **PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.**

Appendix C: permission letter Department of Health



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

Department of Health

Ref : LP_2021-06-022
Enquires : Ms PF Mahlokwane
Tel : 015-293 6028
Email : Phoebe.Mahlokwane@dhsd.limpopo.gov.za

Makgoba Mmaseshoka

PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

Challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani district, Limpopo province

1. Permission to conduct research study as per your research proposal is hereby Granted.
2. Kindly note the following:
   a. Present this letter of permission to the institution supervisor/s a week before the study is conducted.
   b. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
   c. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
   d. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   e. The approval is only valid for a 1-year period.
   f. If the proposal has been amended, a new approval should be sought from the Department of Health
   g. Kindly note that, the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated

PP **Head of Department** 15/07/2021 **Date**

NB:Currently access is restricted to our facilities due to COVID-19, therefore this approval is applicable within our COVID-19 policies and circulars

Private Bag X9302 Polokwane
Fidel Castro Ruz House, 18 College Street. Polokwane 0700. Tel: 015 293 6000/12. Fax: 015 293 6211.
Website: http/www.limpopo.gov.za

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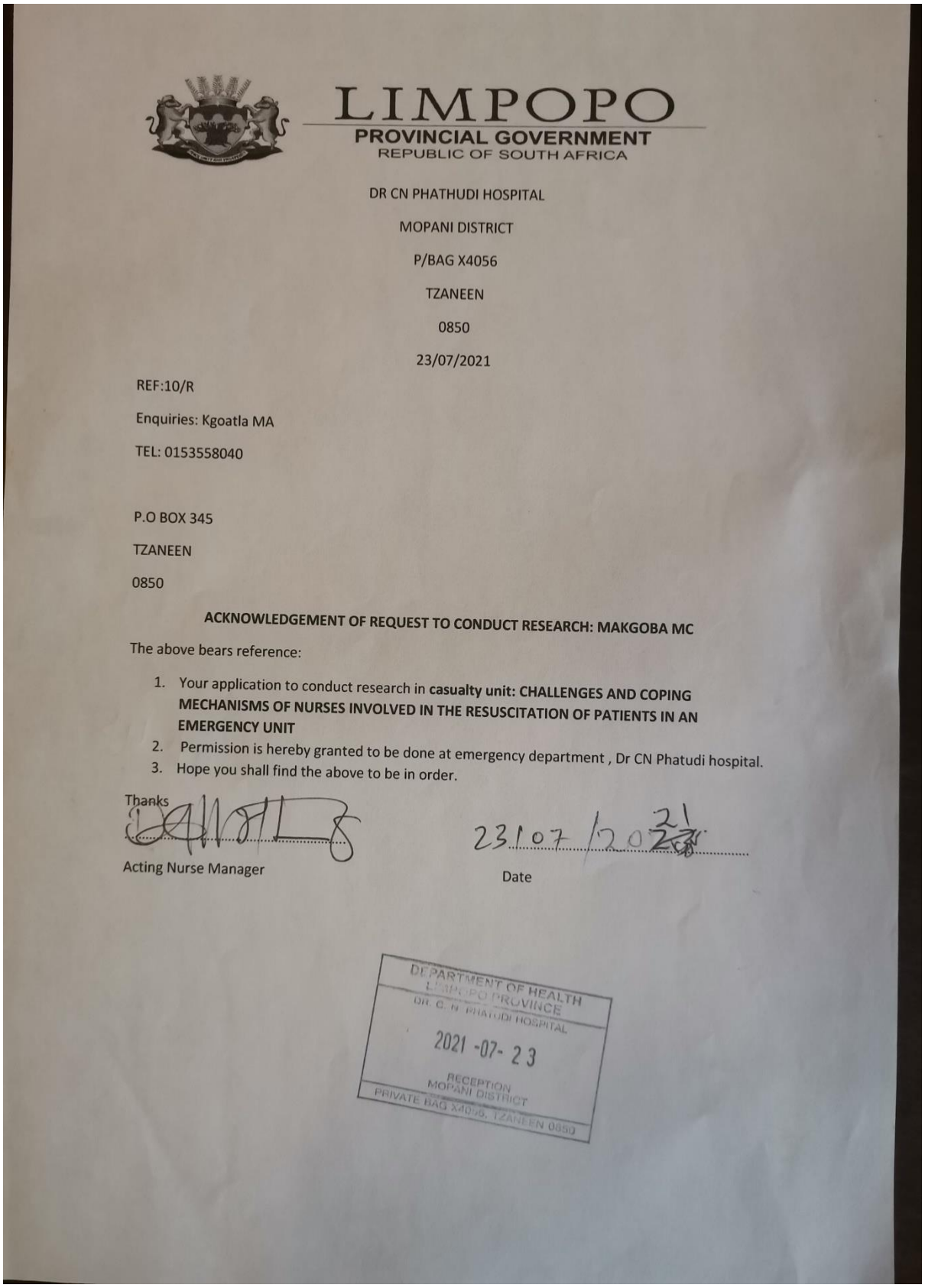
Appendix D: permission letter Dr Cn Phatudi Hospital



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DR CN PHATHUDI HOSPITAL

MOPANI DISTRICT

P/BAG X4056

TZANEEN

0850

23/07/2021

REF:10/R

Enquiries: Kgoatla MA

TEL: 0153558040

P.O BOX 345

TZANEEN

0850

ACKNOWLEDGEMENT OF REQUEST TO CONDUCT RESEARCH: MAKGOBA MC

The above bears reference:

1. Your application to conduct research in **casualty unit: CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT**
2. Permission is hereby granted to be done at emergency department , Dr CN Phatudi hospital.
3. Hope you shall find the above to be in order.

Thanks

Acting Nurse Manager

23/07/2021
Date

DEPARTMENT OF HEALTH
LIMPOPO PROVINCE
DR. C. N. PHATUDI HOSPITAL
2021 -07- 23
RECEPTION
MOPANI DISTRICT
PRIVATE BAG X4056, TZANEEN 0850

Appendix E: consent form

CONSENT FORM

PROJECT TITLE: **Challenges and coping mechanisms of nurses during resuscitation of patients in the emergency unit at the selected public hospitals in Mopani district, Limpopo Province**.

DEPARTMENT OF NURSING SCIENCE ENGLISH CONSENT FORM

Statement concerning participation in an academic research project/ study

Name of project/study: Challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani district, Limpopo province

I have read the information and heard the aims and objectives of the proposed study and was provided the opportunity to ask questions and was given adequate time to rethink the issue. The aim and objectives of the study are sufficiently clear to me. I have not been pressurized to participate in any way.

I am aware that this material may be used in scientific publications which will be electronically available throughout the world. I consent to this provided that my personal information such as names and surname will not be revealed.

I understand that participation in this study is completely voluntary and that I may withdraw from it at any time and without reasoning.

I know that this study has been approved by the Turfloop Research Ethics Committee (TREC). I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree to this provided my privacy will be guaranteed.

Access to the records that pertain to my participation will be restricted to persons

directly involved in the research. Any questions that I may have regarding the research or related matters, will be answered by the researchers.

I indemnify the University of Limpopo and all persons involved with the above study from any liability that may arise from my participation in the above study or that may be related to it, for whatever reasons including negligence on the part of the mentioned persons.

I hereby give consent to participate in this study.

Signature of participants……

Signature of researcher……

Signed at……on the…… of…….20

Contact no: ……..

Appendix F: independent coder

Dr Annatjie van der Wath (M Cur, PhD) annavdw@mweb.co.za

CODING CERTIFICATE

Qualitative Data Analysis

This serves to confirm that Annatjie van der Wath has co-coded the following qualitative data: 18 interviews for the study:

CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT AT SELECTED PUBLIC HOSPITALS IN MOPANI DISTRICT, LIMPOPO PROVINCE

I declare that the candidate, Makgoba, Mmaseshoka Charmaine, and I have reached consensus on the major themes and categories as reflected in the findings during a consensus discussion.

Annatjie van der Wath (M Cur, Ph D) annavdw@mweb.co.za

Appendix G: request permission Letaba hospital

P o box 3485
Tzaneen
0850
26 July 2021

The manager
Private Bag X1430
Letaba
0870

Dear sir |madam

Request for permission to conduct research at Letaba hospital

I am a student at the University of Limpopo Turfloop Campus, studying towards a Master's degree in nursing. I hereby request permission to conduct a research study at Letaba hospital.

The purpose of the study is to determine the challenges and coping mechanisms by nurses during the resuscitation of patients at the selected public hospitals in Mopani district Limpopo province. Participation in the study is voluntary and consent to participate in the study will be signed by all those professional nurses who agree to participate.

The study is a requirement for the degree I am doing.

Contact number of the project leader:

Cell No: 0716037549\0153078882. (makgobacharmaine15@gmail.com)

Yours Sincerely

MS MAKGOBA M.C

Appendix H: Permission letter Letaba hospital

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
HEALTH
LETABA REGIONAL HOSPITAL

Ref : 54/3/5

Enq : Malatji EM

Tel : 015 303 8226

Email : Eleck.malatji@dhsd.limpopo.gov.za

To : Acting Chief Executive Officer (Ms. Ragolane VJ)

From : HRM Deputy Director: Corporate Services (Nkolele TT)

ATT: Ms Makgoba MC
P.O.BOX 3485
TZANEEN
0850

RE: OFFER TO CONDUCT RESEARCH ON CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT AT SELECTED PUBLIC HOSPITALS, LIMPOPO PROVINCE.

The above matter refers

It is a great pleasure to inform you that the acting Chief Executive Officer has approved your application for Research. It has been approved for a period of 1 year.

Starting Time: 07h30
Lunch Time: 13h00 to 14h00
Knock off Time: 16h30

You will be expected to work from Monday to Friday.

NB.Please note that you will not get remuneration/ Compensation during your job training.

Hoping that you will enjoy your stay in the hospital.

.....
Acting Chief Executive Officer
Ms Ragolane VJ

July 2021
Date

Private Bag X 1430, LETABA, 0870
Cnr. Tarentaal and Lydenburg Road, Tel: (015) 303 8200, Fax no: 015 303 8421

The heartland of Southern Africa – development is about people!

Appendix I: Editing certificate

Makgoba Mmaseshoka
Charmaine
University of Limpopo
Sovenga
0727

420 Unit C Mankweng 0727
081 5666 755
rightmovemultimedia@gmail.com
Researcheditors882@gmail.com
karabokonyani@gmail.com

18 August 2022

TO WHOM IT MAY CONCERN

This editing certificate verifies that this dissertation was professionally edited for Makgoba Mmaseshoka Charmaine (202018942).

Thus, it is meant to acknowledge that I, Mrs K.L Malatji and Dr E.J Malatji professional Editors under a registered company RightMove Multimedia, have meticulously edited the manuscript from the University of Limpopo. Title: "**CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT AT SELECT HOSPITALS IN MOPANI DISTRICT, LIMPOPO PROVINCE**".

Sincerely,
Mrs K. L Malatji

Appendix J: Interview Guide

Central Question

How do you resuscitate patients in the emergency unit?

Probing questions

What challenges do you experience whilst resuscitating patients in the EU?

What are your strategies following the said challenges?

Can you tell me how you cope with the failed resuscitation of a patient?

What do you think can be done to improve challenges and coping mechanisms during resuscitation of patients in an emergency unit?

Appendix K: Example of transcript

Researcher: A

Participant: B

A: Good day.
B: Good day.
A: How are you?
B: I'm fine and you.
A: I'm fine. My name is Makgoba Charmaine. I'm from University of Limpopo; I'm doing masters in nursing science as my topic is challenges and coping mechanism of nurses in resuscitation of patient. Eeeh! Which language are you comfortable in speaking?

B: English.

A: Okay, thank you very much as you have agreed to participate in my study thank you very much for signing the consent and also allow me to record your voice. Now we are now going to start with our interviews. Uhm! Tell me how long were you working in your emergency unit?

B: Hmm! I have been working in casualty from 2014 up until now.

A: Alright. Okay thank you. Uhm! Tell me exactly what are you doing here in emergency unit?

B: Okay, we see a lot of patients and but then we have emergency patience that we resuscitate in the unit. So, when they are a patient who is critically ill or injured.

A: Okay.
B: trauma patients.
A: Hmm!
B: We bring them in the, in our small theatre where we are going to do the resuscitation.

A: okay.

B: Eeh! We bring all the equipment. Eeh! We have a team of Eeh! Employee's that we work together as the resuscitation team.

A: Hmm!

B: Yeah! In the resuscitation we must have a doctor, professional Nurses who are going to write the report, who is doing to assist the Doctor then we need an emergency trolley and the emergency equipment.

A: Alright. I get you. So, tell me what are your duties as a professional Nurse during resuscitation of a patient?

B: Okay, as a professional Nurse, Eeh! My Duties is to assist the Doctor, Eeh! Firstly, Eeh! They must be one professional Nurse who is going to write a report.

A: Alright.

B: A Detailed report during resuscitation and then other one let's say myself I will be with the Doctor there.

A: Hmm!

B: Will be Giving the patient oxygen bring all the needed emergency equipment as required by the doctor and then, eeh! Assisting with insertion of intravenous are in lines for giving fluidity so, yeah!

A: Alright I understand. So, what are the benefits of doing resuscitation?

B: Eeh! The benefit that, Eeh! We learn mostly.

A: Yes.

B: We learn every day during the resuscitation, we learn new things and then we also help the patient resuscitation saves life.

A: Okay I understand. So, you talked about a resuscitation, when they is resuscitation, they are some of things that you are doing like helping the Doctor, Eeh! Bring this and that so, tell me what are the equipment that are you using when

you resuscitate a patient?

B: Okay, firstly we must have an emergency trolley which is equipped with a different type of drugs, respiratory drugs, cardiac and all sort of fluids that are needed.

A: Okay.
B: And then you must have a defibrillator in the emergency room.
A: Eeh!
B: You Must also have a data scope.
A: Okay.
B: To monitor the vital signs of the patient.
A: Alright.
B: Eeh! Another thing. I think those are the ones we need most.
A: Alright.
B: Because our emergency room trolly are equipped with a lot of things that we need.

A: Alright. Okay I understand. So, Uhm! What do you do exactly when the patient come, let's say you want to start resuscitation, what do you do there?

B: As a professional Nurse you make sure that the patient is placed safely on the bed, on the resuscitation bed.

A: Hmm!

B: Or, Eeh It must be flat and then check for safety around the patient.

A: Okay.
B: And there are no hazards.
A: Okay.
B: And then we will start with the resuscitation.
A: Okay.
B: Resuscitation we follow the CAP method we check for circulation, we check the air wave then they bring everything and everything follows.

A: Alright.

B: Yeah!

A; No, I understand. Uhm! Eeh! Based on the duties that you have mentioned you said when you are having a patient for resus, you are having a team where they is someone who is writing, someone is helping the Doctor. So, tell me what are the challenges that you have observed or the problems that you have encountered when you resuscitate a patient?

B: Okay the first challenge that we have the biggest one is lack of equipment.

A: Lack of equipment okay.

B: Yeah! And then the second one is a is that we are sometimes we are not well prepared to do the resuscitation, we well be running around looking for that and that.

A: Hmm!

B: Yeah! Looking for thing that we need during emergency while we should be having them in our unit or in our emergency trolley.

A: Okay.

B: Hmm! Besides that I think we have teamwork is okay.

A: Okay then when you resus the challenges or the problem that you have encountered it is a lack of equipment, Uhm! Eeeh! Not well prepared and running up and downs.

B: Hmm!

A: So, what more can you add on your challenges?

B: We can add, Eeh! Equipment that are necessary then we must ensure as a unit, we must ensure that all the things that we need during resuscitation are readily available always all the time.

A: Okay.

B: Yes.

A: So, tell me how the lack of equipment affects you as the professional Nurse especially when you do resuscitation.

B: It affects us really bad because we fail to do the things that we are supposed to do because we lack equipment that are functioning properly.

A: Okay.

B: Yes. Maybe we could have saved a life but, we denied by the fact that we do not have a certain equipment.

A: Alright.

B: Yeah! Or a certain item.

A: Aright, then the issue of not being prepared you end up running around how are you affected like knowing that we need to resuscitate and at the end you end up moving up and down, how are you affected by this situation?

B: It is emotionally draining.

A: Hmm!

B: At the end of the day because you will find that you are, sometimes you even have problems with the Doctor because things that you are looking for are not there, the things that his looking for they are not there and you must bring them.

A: Hmm!
B: And it is an emergency you understand?
A: Yes.
B: So, we end up maybe having a sort of, how can I put it? Hmm! We end up not working well as a team because things are not prepared and then we end up

blaming each other, blaming others.

A: Hmm!

B: Yes. It is draining emotionally.

A: I understand. So, when you say emotionally draining I want to understand what will be happening there emotionally so especially after when things are not there, Eeh! Going well? Emotionally how? In which way?

B: Because after this resuscitation is unsuccessful maybe.

A: Okay.

B: You go home and sit down and think about it, think maybe I could have done this but, then we did not have this and that.

A: Hmm!
B: So, it takes an emotional tall on us.
A: Hmm!
B: Hmm!
A: So, what are the consequences of this blaming, Uhm! Thinking about, eeh! What you were supposed to do. What are the consequences that might happen there or that happens to you?

B: Eeh! I will speak for myself I end up being demotivated.

A: Hmm!
B: To even come to work.
A: Okay.
B: My moral will be very low.
A: Hmm!
B: Because we work under very difficult times.
A: Hmm!
B: Pressure.

A: Yeah! So, I had you talk about when you resuscitate a patient they is a team I just want to check how is the relationship between you and the Doctors?

B: Like I said our relationship is fine we work well with the doctors but during resuscitation let's say his looking for something and then he or she is looking for something and then it's not there.

A: Yes.

B: They end up shouting as if it is our problem that whatever that they are looking for is not there. Sometimes it is not our problem because the thing is not there and they are nothing we can do.

A: Yeah! ……[[

B: But they end up blaming us, shouting us they really get angry and irritated so, Eish! But all in all we work well as a team.

A: Hmm!

B: Unless there is something missing during resuscitation then they will see that.

A: Hmm!

B: Yeah!

A: So as you talk about when you resuscitate patient they is a team, they is someone who does some duties there.

B: Yes.

A: So, how are you are you coping, how are you working with the team?

B: If we are enough on duty we work really well during resuscitation because we will have someone assigned to do the recording and someone assigned to vital signs recording everything and then they will be one who is assisting the Doctor, is there with the Doctor and then another one who will be our runner Nurse who will be

fetching whatever that will want maybe from the other rooms.

A: Okay.
B: Yes.
A: So, as you were saying if your enough you are working very well. So, based on your emergency unit how is it with related to the Nurse, related to the teamwork that you need?

B: It is not well staffed.
A: It is not well staffed?
B: It is not well staffed because someday we are left to being only three, one professional Nurse, one assistant Nurse, one enrolled Nurse and you have the doctor you have to resuscitate.

A: Okay then the team is not complete.
B: Okay so, based on the information that you have given me you are not enough.
A: Yes.
B: And, Eeh! How are you affected by doing resuscitation with a less staff because based on the number of years that you have worked in casualty you know that you need to have this staff, because, Eeh! You need to achieve this and that or benefit this and that after resuscitation because you are less how are you coping? How are you working?

A: You know we just come to work because we have to work and we love what we do but honestly we are tired, exhausted burn out is there but still we have to provide the services that are needed.

A: Hmm!

B: So, honestly speaking we work under pressure, we are under pressure because we are, and we still have to provide the services that are needed. Resuscitate the patient and do all of that but they is a very big shortages of staff.

A: Okay. I understand, Eeh! Your problem so, based on the challenges or the problem that you have mentioned and experience that you are having as a

professional Nurse working in casualty plus minus 8 years, Uhm! How do you, what do you think or Uhm! How are you, what is it what is it that is happening after a failed resuscitation?

B: We be disappointed very disappointed because we could have saved a life and we don't even get briefing Sometimes, We are traumatized by the experience that we have and is worse when the resuscitation was unsuccessful.

A: Yeah! So, how are you coping with this situation of let's say you resuscitate a patient, there's an experienced professional nurse hoping that will win the case at the end the patient it happened that dies. Then how are you coping with the situation?

B: As I've said that we don't get a proper briefing, but we just brief amongst ourselves, maybe we talk about it after and discuss it. Other than that, it's just we just have to motivate ourselves that we didn't save this one but we saved another one. It happens even though is not really something that is good.

A: Alright! I understand. So, when we start you mentioned something like in your emergency unit, you normally see a lot of patients. How is it? How is the statistics there? How is it, like how are you working with this lot of patients because you mentioned something like one of the problems you don't have staff?

B: Yeah! I do not know if I could say we are used to this but we see a lot of patients and is very difficult for us, but we still manage to see all the patients that are needed to be seen. Like for instance we have a miner elements patient then we have emergencies, there's time where there is a lot of trauma patients from accidents and then now, we have the pandemic, covid ones. So, we just try to manage within ourselves. See all the patients that need to be seen until we knock-off.

A: Okay alright. Okay. So, Eish! I understand. You mentioned something like you seeing a lot of trauma cases. Where do you do resuscitation in your emergency unit, where do you put them, Where the structure how is it?

B: that's a very difficult one, we have an emergency room which has four beds and

then we have a small theatre that we use to do our small procedures. Then which has one bed and then a cue room which has one bed also works as an isolation. So, mostly we use the emergency room and the small theatre. In the small theatre room, we have most of our equipment there and then we usually bring the critically injured patients here the p ones and p twos. They are kept in the small theatre maybe if it is one, if it is two then it becomes a problem that the patient has to go to the emergency room then you find out that there's another patient that who is not from the accident or maybe who are not trauma patients but are here to be seen. So, we use that, we have four beds in in the emergency room and then small theatre which we use to resuscitate.

A: Okay. So, I can hear that if you have two p one patient or critical ill patient you have to take the other one from here to other side. So, how are you coping with this situation?

B: Is very difficult because we also have to divide ourselves. We must take the patient to the other side and the other one to other side also the staff they must be divided. There should be the people who are working on the other side and others on the other side. So, is very difficult for us, even sharing equipment.

A: Okay. So, what are the consequences of mixing those patients in your resuscitation room, as you have, you mentioned something like pandemic, trauma, so now what is happening, what are the consequences there?

B: Is a serious problem, especially now with the pandemic because we have to isolate some patients, we have to, we must have social distancing, and in our unit is not idea, is really not an idea the structure there it does not really work. We try to say to the patient others see that side will see the emergency first but is very difficult because you find out even those ones who are not trauma patients maybe it's a covid like that is having severe respiratory stress must be kept on oxygen she need a bed, is very difficult to separate the patients to segregate them but we try. If they are those who are or have a minor element or minor injuries are to be seeing last maybe to be seen in OPB somewhere there and then maybe, we remain with the

critical ones.

A: So, how do you, I can hear you that you moving patients from that side to that side, how do you control this patients?

B: Hmm! Eeh! I think maybe it comes with the experience that were being working in casualty for so many years. I know that this patient can be seen that side and that patient can be seen this side. According to how we categorise them how ill are they or how injured are they.

A: Hmm! Alright

B: Yes! They will be seen like that. And then we don't use first come first serve in the casualty, we use the emergency. There's an emergency, the others they will be seen later than the others will see emergency first.

A: Alright. So, as you explained that you have a problem of infrastructure, when you resuscitate a patient, you need teamwork. What are the consequences there when you resus in your resus room, because you mentioned something like there is no space, So how are you working in a small space resuscitating patient, what is happening, how are you affected by this infrastructure in casualty especially when you resuscitate a patient?

B: Is very difficult for us to resuscitate patient because there is no space as I've said. So, and then we have to be a team working there as a team.

A: Okay.

B: So we just improvise. We just improvise by moving things making sure that the environment that we are working around is clear and we have space for proper resuscitation but it's just improvisations we can't say is really good.

A: Okay.
B. Yeah!
A: Here is a patient, you need to resuscitate a patient is in a critical condition and

then as you are saying need to improvise, you need to move some of the things for you to have space. So, what are the consequences that you have encountered related to the person, related to the resuscitation person, because as a practitioner you need to move and move around. What will be happening there?

B: There will be a delay in the resuscitating the patient. Sometimes we end up having a patient who change condition because we were busy still moving things.

A: Hmm!
B: Yeah! Trying to make a space for the patient.
A: Okay.
B: Yeah!
A: Alright. So, I get you. So, tell me! What do you think can be done based on the problems that you are having?

B: The first one is the infrastructure problem. I don't know how It can be dealt with. But we really need space.

A. Space?

B: Yes, the infrastructure must be improved in order for us to be able to cater for all the patient that need to be seen. The second one is the equipment issue all necessary equipment must be always available readily available when needed. So, most of the equipment that are not, let's say they don't have budget for, they should compromise and make means to find them.

A: Okay.

B: Then another one is staffing issue; casualty must be priority they must make sure during the allocation of staff. They must make sure that casualty is well staffed with a team or that can be separated in to two complete resuscitation team.

A: Okay.
B: Yes.
A: Then the issue of burnout, tiredness, frustrated, disappointed after failed

resuscitation, demotivated, sometimes you feel low morale. What do you think can be done in order to improve those coping mechanisms?

B: I think we must have a regular debriefing session.

A: Okay.

B: Yeah! Where we voice out everything, all our concerns and then just discuss everything, just to distress.

A: Okay. What more can you add?

B: Yeah! And more support from Management.

A: What can you tell me like anything that you can add based on the challenges, based on how you cope, what can you tell me related on resuscitation of patient? Anything you want to add.

B: I just think we just need to be well prepared for resuscitations.

A: Okay.

B: To ensure that our unit is ready for resuscitation every day when we come on duty we must make sure that we check all of our equipment ensure that are well functioning properly and check the emergency trolly for availability of drugs and fluids that are needed for resuscitation.

A: Alright.
B: And then ensure that we well-staffed in the unit.
A: Okay.
B: Yeah! To be able to cope with the resuscitation. Also, the importance of team work. We must have team work so people must be properly orientated.

A: Okay,

B: So that they can be helpful during resuscitation.

A: Alright no. I understand you. Do you have any question, any addition or clarity or anything you want to ask before we can close our interview?

B: No!

A: You are fine?

B: Yes, I am fine.

A: If you don’t have any question then I just want to thank you very much for your precious time. Thank you very much, enjoy your day.

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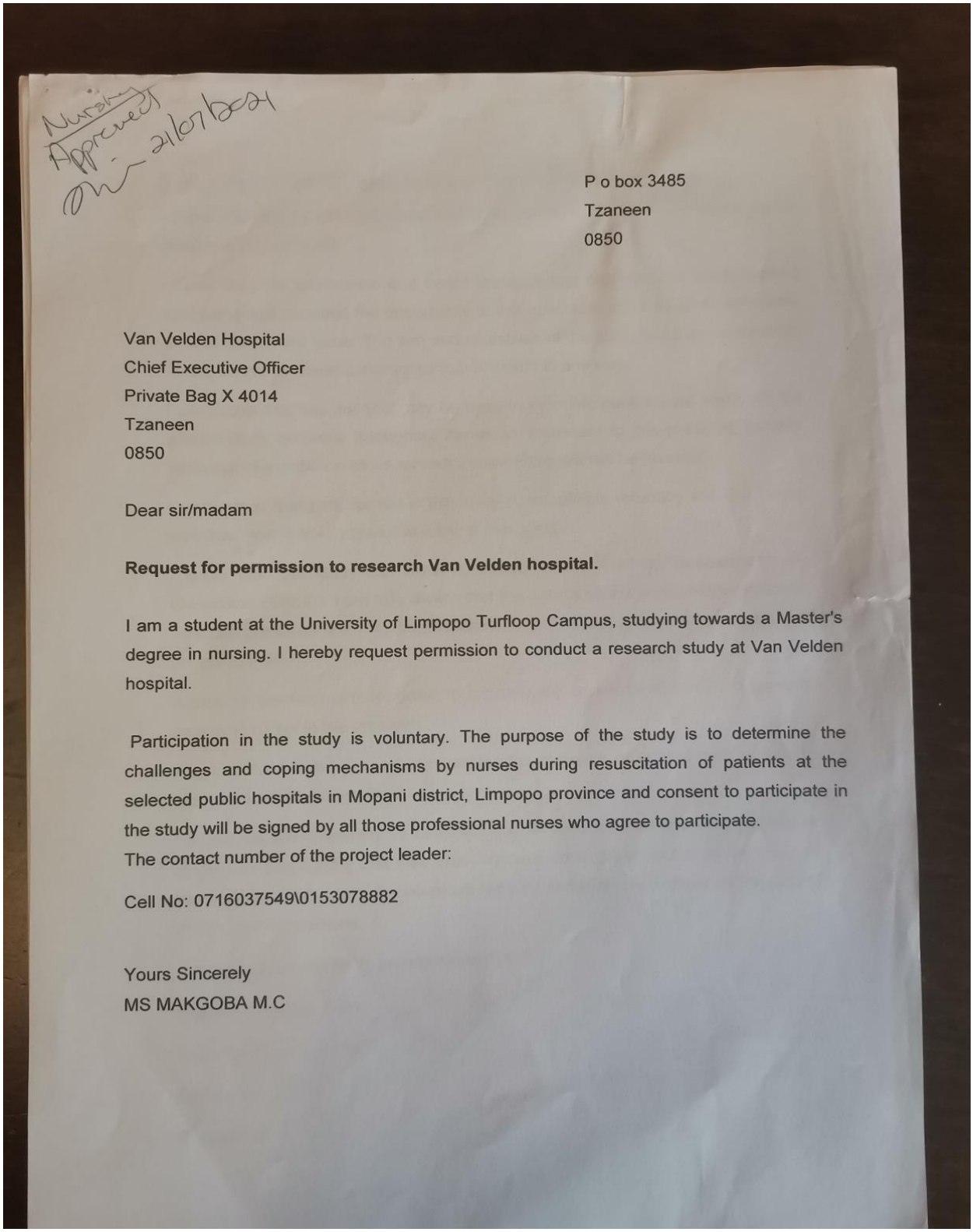
Appendix A: request for permission Van Velden Hospital



Nursing
Approved
21/07/2021

P o box 3485
Tzaneen
0850

Van Velden Hospital
Chief Executive Officer
Private Bag X 4014
Tzaneen
0850

Dear sir/madam

Request for permission to research Van Velden hospital.

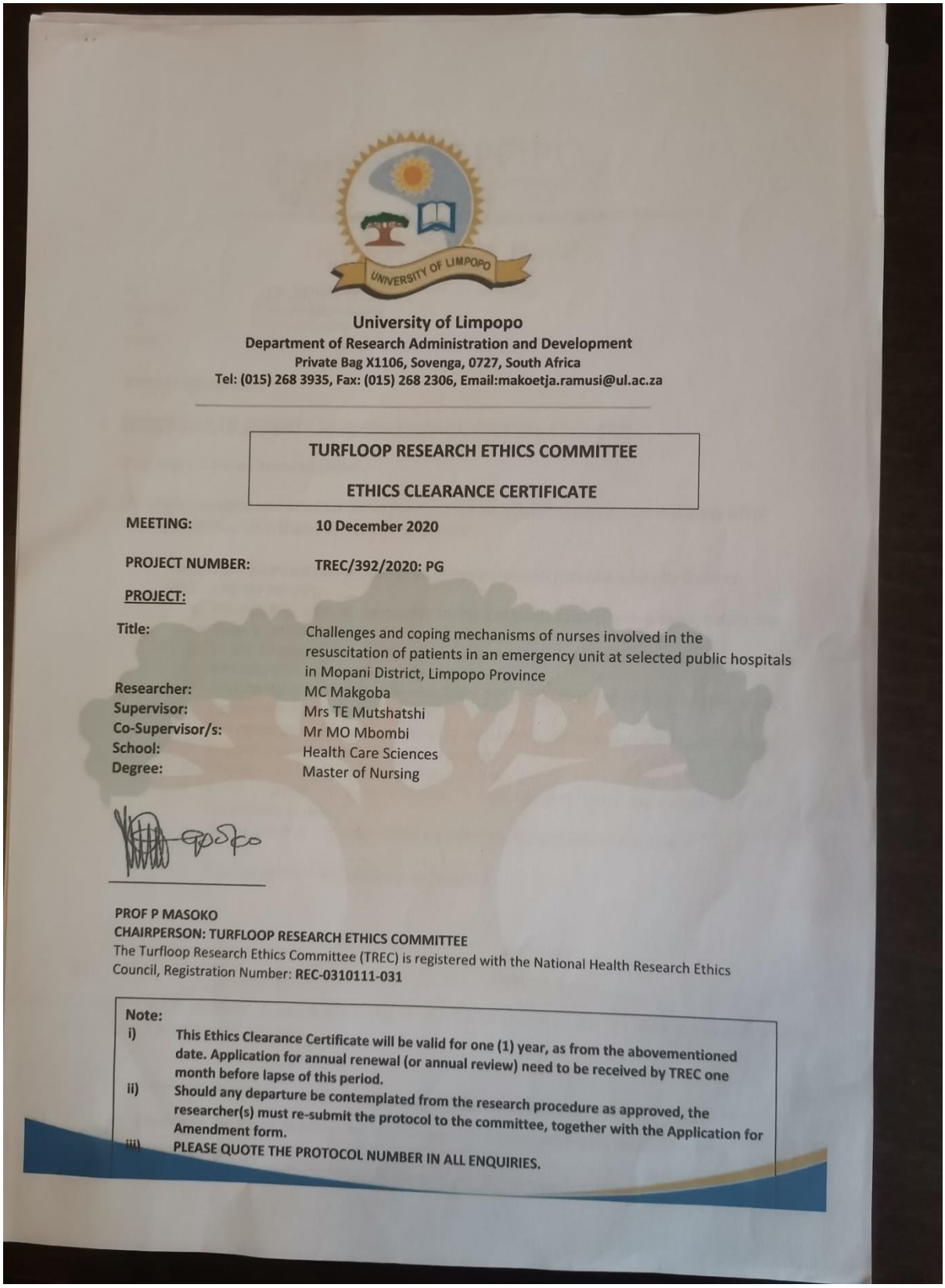
I am a student at the University of Limpopo Turfloop Campus, studying towards a Master's degree in nursing. I hereby request permission to conduct a research study at Van Velden hospital.

Participation in the study is voluntary. The purpose of the study is to determine the challenges and coping mechanisms by nurses during resuscitation of patients at the selected public hospitals in Mopani district, Limpopo province and consent to participate in the study will be signed by all those professional nurses who agree to participate.
The contact number of the project leader:

Cell No: 0716037549\0153078882

Yours Sincerely
MS MAKGOBA M.C

Appendix B: Ethical clearance



University of Limpopo
Department of Research Administration and Development
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 3935, Fax: (015) 268 2306, Email:makoetja.ramusi@ul.ac.za

TURFLOOP RESEARCH ETHICS COMMITTEE

ETHICS CLEARANCE CERTIFICATE

MEETING: **10 December 2020**

PROJECT NUMBER: **TREC/392/2020: PG**

PROJECT:

Title: Challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani District, Limpopo Province

Researcher: MC Makgoba
Supervisor: Mrs TE Mutshatshi
Co-Supervisor/s: Mr MO Mbombi
School: Health Care Sciences
Degree: Master of Nursing

PROF P MASOKO
CHAIRPERSON: TURFLOOP RESEARCH ETHICS COMMITTEE
The Turfloop Research Ethics Committee (TREC) is registered with the National Health Research Ethics Council, Registration Number: **REC-0310111-031**

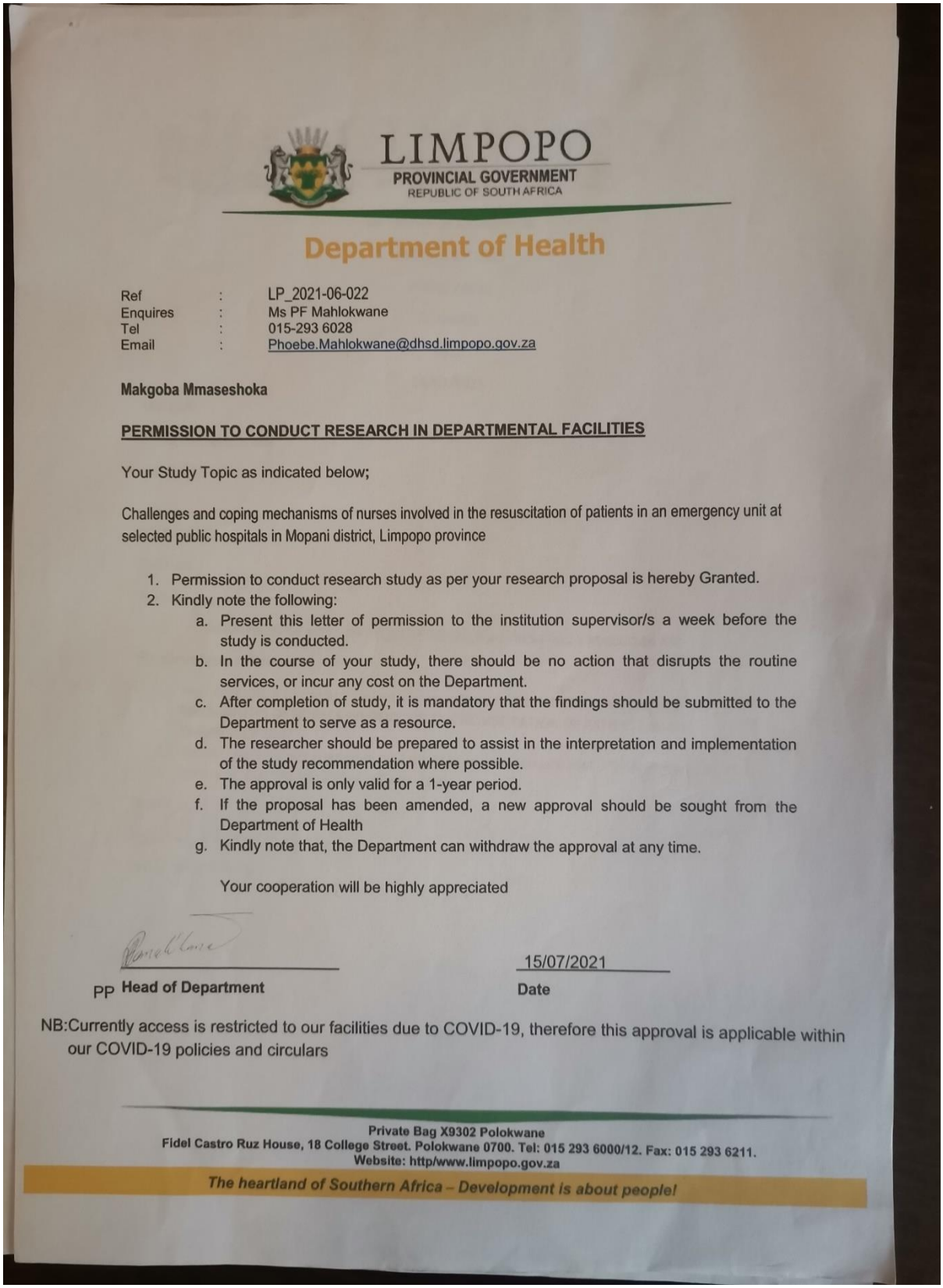
Note:

i) **This Ethics Clearance Certificate will be valid for one (1) year, as from the abovementioned date. Application for annual renewal (or annual review) need to be received by TREC one month before lapse of this period.**

ii) **Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee, together with the Application for Amendment form.**

iii) **PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.**

Appendix C: permission letter Department of Health



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

Department of Health

Ref : LP_2021-06-022
Enquires : Ms PF Mahlokwane
Tel : 015-293 6028
Email : Phoebe.Mahlokwane@dhsd.limpopo.gov.za

Makgoba Mmaseshoka

PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

Challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani district, Limpopo province

1. Permission to conduct research study as per your research proposal is hereby Granted.
2. Kindly note the following:
   a. Present this letter of permission to the institution supervisor/s a week before the study is conducted.
   b. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
   c. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
   d. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
   e. The approval is only valid for a 1-year period.
   f. If the proposal has been amended, a new approval should be sought from the Department of Health
   g. Kindly note that, the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated

PP **Head of Department** 15/07/2021 **Date**

NB:Currently access is restricted to our facilities due to COVID-19, therefore this approval is applicable within our COVID-19 policies and circulars

Private Bag X9302 Polokwane
Fidel Castro Ruz House, 18 College Street. Polokwane 0700. Tel: 015 293 6000/12. Fax: 015 293 6211.
Website: http/www.limpopo.gov.za

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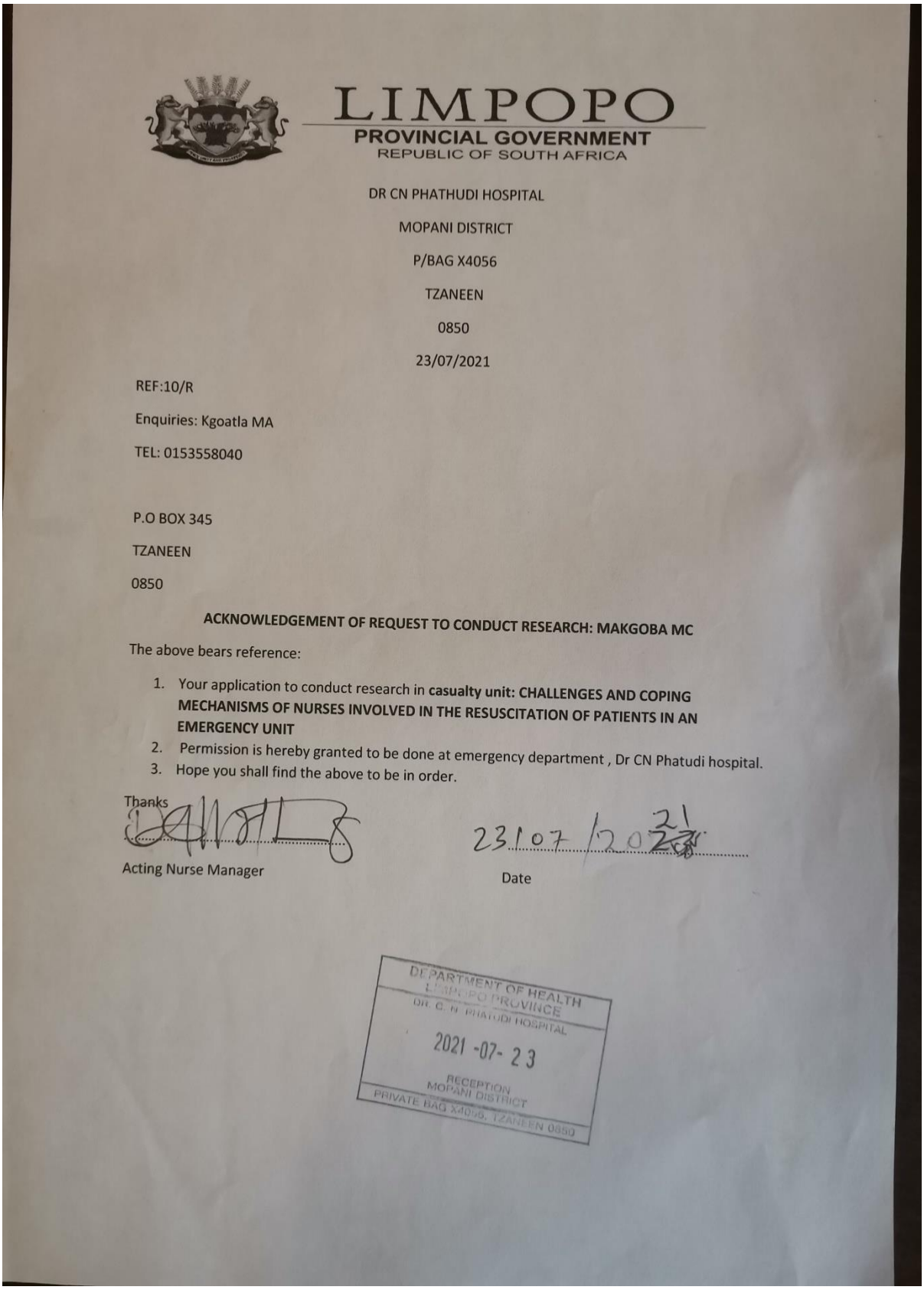
Appendix D: permission letter Dr Cn Phatudi Hospital



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DR CN PHATHUDI HOSPITAL

MOPANI DISTRICT

P/BAG X4056

TZANEEN

0850

23/07/2021

REF:10/R

Enquiries: Kgoatla MA

TEL: 0153558040

P.O BOX 345

TZANEEN

0850

ACKNOWLEDGEMENT OF REQUEST TO CONDUCT RESEARCH: MAKGOBA MC

The above bears reference:

1. Your application to conduct research in **casualty unit: CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT**
2. Permission is hereby granted to be done at emergency department , Dr CN Phatudi hospital.
3. Hope you shall find the above to be in order.

Thanks

Acting Nurse Manager

23/07/2021

Date

DEPARTMENT OF HEALTH
LIMPOPO PROVINCE
DR. C. N. PHATUDI HOSPITAL
2021 -07- 23
RECEPTION
MOPANI DISTRICT
PRIVATE BAG X4056, TZANEEN 0850

Appendix E: consent form

CONSENT FORM

PROJECT TITLE: **Challenges and coping mechanisms of nurses during resuscitation of patients in the emergency unit at the selected public hospitals in Mopani district, Limpopo Province**.

DEPARTMENT OF NURSING SCIENCE ENGLISH CONSENT FORM

Statement concerning participation in an academic research project/ study

Name of project/study: Challenges and coping mechanisms of nurses involved in the resuscitation of patients in an emergency unit at selected public hospitals in Mopani district, Limpopo province

I have read the information and heard the aims and objectives of the proposed study and was provided the opportunity to ask questions and was given adequate time to rethink the issue. The aim and objectives of the study are sufficiently clear to me. I have not been pressurized to participate in any way.

I am aware that this material may be used in scientific publications which will be electronically available throughout the world. I consent to this provided that my personal information such as names and surname will not be revealed.

I understand that participation in this study is completely voluntary and that I may withdraw from it at any time and without reasoning.

I know that this study has been approved by the Turfloop Research Ethics Committee (TREC). I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree to this provided my privacy will be guaranteed.

Access to the records that pertain to my participation will be restricted to persons

directly involved in the research. Any questions that I may have regarding the research or related matters, will be answered by the researchers.

I indemnify the University of Limpopo and all persons involved with the above study from any liability that may arise from my participation in the above study or that may be related to it, for whatever reasons including negligence on the part of the mentioned persons.

I hereby give consent to participate in this study.

Signature of participants……

Signature of researcher…….

Signed at……on the…… of…….20

Contact no: ……..

Appendix F: independent coder

Dr Annatjie van der Wath (M Cur, PhD) annavdw@mweb.co.za

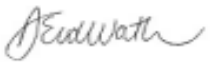
CODING CERTIFICATE

Qualitative Data Analysis

This serves to confirm that Annatjie van der Wath has co-coded the following qualitative data: 18 interviews for the study:

CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT AT SELECTED PUBLIC HOSPITALS IN MOPANI DISTRICT, LIMPOPO PROVINCE

I declare that the candidate, Makgoba, Mmaseshoka Charmaine, and I have reached consensus on the major themes and categories as reflected in the findings during a consensus discussion.



Annatjie van der Wath (M Cur, Ph D) annavdw@mweb.co.za

Appendix G: request permission Letaba hospital

P o box 3485
Tzaneen
0850
26 July 2021

The manager
Private Bag X1430
Letaba
0870

Dear sir |madam

Request for permission to conduct research at Letaba hospital

I am a student at the University of Limpopo Turfloop Campus, studying towards a Master's degree in nursing. I hereby request permission to conduct a research study at Letaba hospital.

The purpose of the study is to determine the challenges and coping mechanisms by nurses during the resuscitation of patients at the selected public hospitals in Mopani district Limpopo province. Participation in the study is voluntary and consent to participate in the study will be signed by all those professional nurses who agree to participate.

The study is a requirement for the degree I am doing.

Contact number of the project leader:

Cell No: 0716037549\0153078882. (makgobacharmaine15@gmail.com)

Yours Sincerely

MS MAKGOBA M.C

Appendix H: Permission letter Letaba hospital

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
HEALTH
LETABA REGIONAL HOSPITAL

Ref : 54/3/5
Enq : Malatji EM
Tel : 015 303 8226
Email : Eleck.malatji@dhsd.limpopo.gov.za
To : Acting Chief Executive Officer (Ms. Ragolane VJ)
From : HRM Deputy Director: Corporate Services (Nkolele TT)

ATT: Ms Makgoba MC
P.O.BOX 3485
TZANEEN
0850

RE: OFFER TO CONDUCT RESEARCH ON CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT AT SELECTED PUBLIC HOSPITALS, LIMPOPO PROVINCE.

The above matter refers

It is a great pleasure to inform you that the acting Chief Executive Officer has approved your application for Research. It has been approved for a period of 1 year.

Starting Time: 07h30
Lunch Time: 13h00 to 14h00
Knock off Time: 16h30

You will be expected to work from Monday to Friday.

NB.Please note that you will not get remuneration/ Compensation during your job training.

Hoping that you will enjoy your stay in the hospital.

.....
Acting Chief Executive Officer
Ms Ragolane VJ

.....July 2021
Date

Private Bag X 1430, LETABA, 0870
Cnr. Tarentaal and Lydenburg Road, Tel: (015) 303 8200, Fax no: 015 303 8421

The heartland of Southern Africa – development is about people!

Appendix I: Editing certificate

Makgoba Mmaseshoka
Charmaine
University of Limpopo
Sovenga
0727

420 Unit C Mankweng 0727
081 5666 755
rightmovemultimedia@gmail.com
Researcheditors882@gmail.com
karabokonyani@gmail.com

18 August 2022

TO WHOM IT MAY CONCERN

This editing certificate verifies that this dissertation was professionally edited for Makgoba Mmaseshoka Charmaine (202018942).

Thus, it is meant to acknowledge that I, Mrs K.L Malatji and Dr E.J Malatji professional Editors under a registered company RightMove Multimedia, have meticulously edited the manuscript from the University of Limpopo. Title: "**CHALLENGES AND COPING MECHANISMS OF NURSES INVOLVED IN THE RESUSCITATION OF PATIENTS IN AN EMERGENCY UNIT AT SELECT HOSPITALS IN MOPANI DISTRICT, LIMPOPO PROVINCE**".

Sincerely,
Mrs K. L Malatji

Appendix J: Interview Guide

Central Question

How do you resuscitate patients in the emergency unit?

Probing questions

What challenges do you experience whilst resuscitating patients in the EU?

What are your strategies following the said challenges?

Can you tell me how you cope with the failed resuscitation of a patient?

What do you think can be done to improve challenges and coping mechanisms during resuscitation of patients in an emergency unit?

Appendix K: Example of transcript

Researcher: A

Participant: B

A: Good day.
B: Good day.
A: How are you?
B: I'm fine and you.
A: I'm fine. My name is Makgoba Charmaine. I'm from University of Limpopo; I'm doing masters in nursing science as my topic is challenges and coping mechanism of nurses in resuscitation of patient. Eeeh! Which language are you comfortable in speaking?

B: English.

A: Okay, thank you very much as you have agreed to participate in my study thank you very much for signing the consent and also allow me to record your voice. Now we are now going to start with our interviews. Uhm! Tell me how long were you working in your emergency unit?

B: Hmm! I have been working in casualty from 2014 up until now.

A: Alright. Okay thank you. Uhm! Tell me exactly what are you doing here in emergency unit?

B: Okay, we see a lot of patients and but then we have emergency patience that we resuscitate in the unit. So, when they are a patient who is critically ill or injured.

A: Okay.
B: trauma patients.
A: Hmm!
B: We bring them in the, in our small theatre where we are going to do the resuscitation.

A: okay.

B: Eeh! We bring all the equipment. Eeh! We have a team of Eeh! Employee's that we work together as the resuscitation team.

A: Hmm!

B: Yeah! In the resuscitation we must have a doctor, professional Nurses who are going to write the report, who is doing to assist the Doctor then we need an emergency trolley and the emergency equipment.

A: Alright. I get you. So, tell me what are your duties as a professional Nurse during resuscitation of a patient?

B: Okay, as a professional Nurse, Eeh! My Duties is to assist the Doctor, Eeh! Firstly, Eeh! They must be one professional Nurse who is going to write a report.

A: Alright.

B: A Detailed report during resuscitation and then other one let's say myself I will be with the Doctor there.

A: Hmm!

B: Will be Giving the patient oxygen bring all the needed emergency equipment as required by the doctor and then, eeh! Assisting with insertion of intravenous are in lines for giving fluidity so, yeah!

A: Alright I understand. So, what are the benefits of doing resuscitation?

B: Eeh! The benefit that, Eeh! We learn mostly.

A: Yes.

B: We learn every day during the resuscitation, we learn new things and then we also help the patient resuscitation saves life.

A: Okay I understand. So, you talked about a resuscitation, when they is resuscitation, they are some of things that you are doing like helping the Doctor, Eeh! Bring this and that so, tell me what are the equipment that are you using when

you resuscitate a patient?

B: Okay, firstly we must have an emergency trolley which is equipped with a different type of drugs, respiratory drugs, cardiac and all sort of fluids that are needed.

A: Okay.
B: And then you must have a defibrillator in the emergency room.
A: Eeh!
B: You Must also have a data scope.
A: Okay.
B: To monitor the vital signs of the patient.
A: Alright.
B: Eeh! Another thing. I think those are the ones we need most.
A: Alright.
B: Because our emergency room trolly are equipped with a lot of things that we need.

A: Alright. Okay I understand. So, Uhm! What do you do exactly when the patient come, let's say you want to start resuscitation, what do you do there?

B: As a professional Nurse you make sure that the patient is placed safely on the bed, on the resuscitation bed.

A: Hmm!

B: Or, Eeh It must be flat and then check for safety around the patient.

A: Okay.
B: And there are no hazards.
A: Okay.
B: And then we will start with the resuscitation.
A: Okay.
B: Resuscitation we follow the CAP method we check for circulation, we check the air wave then they bring everything and everything follows.

A: Alright.

B: Yeah!

A; No, I understand. Uhm! Eeh! Based on the duties that you have mentioned you said when you are having a patient for resus, you are having a team where they is someone who is writing, someone is helping the Doctor. So, tell me what are the challenges that you have observed or the problems that you have encountered when you resuscitate a patient?

B: Okay the first challenge that we have the biggest one is lack of equipment.

A: Lack of equipment okay.

B: Yeah! And then the second one is a is that we are sometimes we are not well prepared to do the resuscitation, we well be running around looking for that and that.

A: Hmm!

B: Yeah! Looking for thing that we need during emergency while we should be having them in our unit or in our emergency trolley.

A: Okay.

B: Hmm! Besides that I think we have teamwork is okay.

A: Okay then when you resus the challenges or the problem that you have encountered it is a lack of equipment, Uhm! Eeeh! Not well prepared and running up and downs.

B: Hmm!

A: So, what more can you add on your challenges?

B: We can add, Eeh! Equipment that are necessary then we must ensure as a unit, we must ensure that all the things that we need during resuscitation are readily available always all the time.

A: Okay.

B: Yes.

A: So, tell me how the lack of equipment affects you as the professional Nurse especially when you do resuscitation.

B: It affects us really bad because we fail to do the things that we are supposed to do because we lack equipment that are functioning properly.

A: Okay.

B: Yes. Maybe we could have saved a life but, we denied by the fact that we do not have a certain equipment.

A: Alright.

B: Yeah! Or a certain item.

A: Aright, then the issue of not being prepared you end up running around how are you affected like knowing that we need to resuscitate and at the end you end up moving up and down, how are you affected by this situation?

B: It is emotionally draining.

A: Hmm!

B: At the end of the day because you will find that you are, sometimes you even have problems with the Doctor because things that you are looking for are not there, the things that his looking for they are not there and you must bring them.

A: Hmm!
B: And it is an emergency you understand?
A: Yes.
B: So, we end up maybe having a sort of, how can I put it? Hmm! We end up not working well as a team because things are not prepared and then we end up

blaming each other, blaming others.

A: Hmm!

B: Yes. It is draining emotionally.

A: I understand. So, when you say emotionally draining I want to understand what will be happening there emotionally so especially after when things are not there, Eeh! Going well? Emotionally how? In which way?

B: Because after this resuscitation is unsuccessful maybe.

A: Okay.

B: You go home and sit down and think about it, think maybe I could have done this but, then we did not have this and that.

A: Hmm!
B: So, it takes an emotional tall on us.
A: Hmm!
B: Hmm!
A: So, what are the consequences of this blaming, Uhm! Thinking about, eeh! What you were supposed to do. What are the consequences that might happen there or that happens to you?

B: Eeh! I will speak for myself I end up being demotivated.

A: Hmm!
B: To even come to work.
A: Okay.
B: My moral will be very low.
A: Hmm!
B: Because we work under very difficult times.
A: Hmm!
B: Pressure.

A: Yeah! So, I had you talk about when you resuscitate a patient they is a team I just want to check how is the relationship between you and the Doctors?

B: Like I said our relationship is fine we work well with the doctors but during resuscitation let's say his looking for something and then he or she is looking for something and then it's not there.

A: Yes.

B: They end up shouting as if it is our problem that whatever that they are looking for is not there. Sometimes it is not our problem because the thing is not there and they are nothing we can do.

A: Yeah! ……[[

B: But they end up blaming us, shouting us they really get angry and irritated so, Eish! But all in all we work well as a team.

A: Hmm!

B: Unless there is something missing during resuscitation then they will see that.

A: Hmm!

B: Yeah!

A: So as you talk about when you resuscitate patient they is a team, they is someone who does some duties there.

B: Yes.

A: So, how are you are you coping, how are you working with the team?

B: If we are enough on duty we work really well during resuscitation because we will have someone assigned to do the recording and someone assigned to vital signs recording everything and then they will be one who is assisting the Doctor, is there with the Doctor and then another one who will be our runner Nurse who will be

fetching whatever that will want maybe from the other rooms.

A: Okay.
B: Yes.
A: So, as you were saying if your enough you are working very well. So, based on your emergency unit how is it with related to the Nurse, related to the teamwork that you need?

B: It is not well staffed.
A: It is not well staffed?
B: It is not well staffed because someday we are left to being only three, one professional Nurse, one assistant Nurse, one enrolled Nurse and you have the doctor you have to resuscitate.

A: Okay then the team is not complete.
B: Okay so, based on the information that you have given me you are not enough.
A: Yes.
B: And, Eeh! How are you affected by doing resuscitation with a less staff because based on the number of years that you have worked in casualty you know that you need to have this staff, because, Eeh! You need to achieve this and that or benefit this and that after resuscitation because you are less how are you coping? How are you working?

A: You know we just come to work because we have to work and we love what we do but honestly we are tired, exhausted burn out is there but still we have to provide the services that are needed.

A: Hmm!

B: So, honestly speaking we work under pressure, we are under pressure because we are, and we still have to provide the services that are needed. Resuscitate the patient and do all of that but they is a very big shortages of staff.

A: Okay. I understand, Eeh! Your problem so, based on the challenges or the problem that you have mentioned and experience that you are having as a

professional Nurse working in casualty plus minus 8 years, Uhm! How do you, what do you think or Uhm! How are you, what is it what is it that is happening after a failed resuscitation?

B: We be disappointed very disappointed because we could have saved a life and we don't even get briefing Sometimes, We are traumatized by the experience that we have and is worse when the resuscitation was unsuccessful.

A: Yeah! So, how are you coping with this situation of let's say you resuscitate a patient, there's an experienced professional nurse hoping that will win the case at the end the patient it happened that dies. Then how are you coping with the situation?

B: As I've said that we don't get a proper briefing, but we just brief amongst ourselves, maybe we talk about it after and discuss it. Other than that, it's just we just have to motivate ourselves that we didn't save this one but we saved another one. It happens even though is not really something that is good.

A: Alright! I understand. So, when we start you mentioned something like in your emergency unit, you normally see a lot of patients. How is it? How is the statistics there? How is it, like how are you working with this lot of patients because you mentioned something like one of the problems you don't have staff?

B: Yeah! I do not know if I could say we are used to this but we see a lot of patients and is very difficult for us, but we still manage to see all the patients that are needed to be seen. Like for instance we have a miner elements patient then we have emergencies, there's time where there is a lot of trauma patients from accidents and then now, we have the pandemic, covid ones. So, we just try to manage within ourselves. See all the patients that need to be seen until we knock-off.

A: Okay alright. Okay. So, Eish! I understand. You mentioned something like you seeing a lot of trauma cases. Where do you do resuscitation in your emergency unit, where do you put them, Where the structure how is it?

B: that's a very difficult one, we have an emergency room which has four beds and

then we have a small theatre that we use to do our small procedures. Then which has one bed and then a cue room which has one bed also works as an isolation. So, mostly we use the emergency room and the small theatre. In the small theatre room, we have most of our equipment there and then we usually bring the critically injured patients here the p ones and p twos. They are kept in the small theatre maybe if it is one, if it is two then it becomes a problem that the patient has to go to the emergency room then you find out that there's another patient that who is not from the accident or maybe who are not trauma patients but are here to be seen. So, we use that, we have four beds in in the emergency room and then small theatre which we use to resuscitate.

A: Okay. So, I can hear that if you have two p one patient or critical ill patient you have to take the other one from here to other side. So, how are you coping with this situation?

B: Is very difficult because we also have to divide ourselves. We must take the patient to the other side and the other one to other side also the staff they must be divided. There should be the people who are working on the other side and others on the other side. So, is very difficult for us, even sharing equipment.

A: Okay. So, what are the consequences of mixing those patients in your resuscitation room, as you have, you mentioned something like pandemic, trauma, so now what is happening, what are the consequences there?

B: Is a serious problem, especially now with the pandemic because we have to isolate some patients, we have to, we must have social distancing, and in our unit is not idea, is really not an idea the structure there it does not really work. We try to say to the patient others see that side will see the emergency first but is very difficult because you find out even those ones who are not trauma patients maybe it's a covid like that is having severe respiratory stress must be kept on oxygen she need a bed, is very difficult to separate the patients to segregate them but we try. If they are those who are or have a minor element or minor injuries are to be seeing last maybe to be seen in OPB somewhere there and then maybe, we remain with the

critical ones.

A: So, how do you, I can hear you that you moving patients from that side to that side, how do you control this patients?

B: Hmm! Eeh! I think maybe it comes with the experience that were being working in casualty for so many years. I know that this patient can be seen that side and that patient can be seen this side. According to how we categorise them how ill are they or how injured are they.

A: Hmm! Alright

B: Yes! They will be seen like that. And then we don't use first come first serve in the casualty, we use the emergency. There's an emergency, the others they will be seen later than the others will see emergency first.

A: Alright. So, as you explained that you have a problem of infrastructure, when you resuscitate a patient, you need teamwork. What are the consequences there when you resus in your resus room, because you mentioned something like there is no space, So how are you working in a small space resuscitating patient, what is happening, how are you affected by this infrastructure in casualty especially when you resuscitate a patient?

B: Is very difficult for us to resuscitate patient because there is no space as I've said. So, and then we have to be a team working there as a team.

A: Okay.

B: So we just improvise. We just improvise by moving things making sure that the environment that we are working around is clear and we have space for proper resuscitation but it's just improvisations we can't say is really good.

A: Okay.
B. Yeah!
A: Here is a patient, you need to resuscitate a patient is in a critical condition and

then as you are saying need to improvise, you need to move some of the things for you to have space. So, what are the consequences that you have encountered related to the person, related to the resuscitation person, because as a practitioner you need to move and move around. What will be happening there?

B: There will be a delay in the resuscitating the patient. Sometimes we end up having a patient who change condition because we were busy still moving things.

A: Hmm!
B: Yeah! Trying to make a space for the patient.
A: Okay.
B: Yeah!
A: Alright. So, I get you. So, tell me! What do you think can be done based on the problems that you are having?

B: The first one is the infrastructure problem. I don't know how It can be dealt with. But we really need space.

A. Space?

B: Yes, the infrastructure must be improved in order for us to be able to cater for all the patient that need to be seen. The second one is the equipment issue all necessary equipment must be always available readily available when needed. So, most of the equipment that are not, let's say they don't have budget for, they should compromise and make means to find them.

A: Okay.

B: Then another one is staffing issue; casualty must be priority they must make sure during the allocation of staff. They must make sure that casualty is well staffed with a team or that can be separated in to two complete resuscitation team.

A: Okay.
B: Yes.
A: Then the issue of burnout, tiredness, frustrated, disappointed after failed

resuscitation, demotivated, sometimes you feel low morale. What do you think can be done in order to improve those coping mechanisms?

B: I think we must have a regular debriefing session.

A: Okay.

B: Yeah! Where we voice out everything, all our concerns and then just discuss everything, just to distress.

A: Okay. What more can you add?

B: Yeah! And more support from Management.

A: What can you tell me like anything that you can add based on the challenges, based on how you cope, what can you tell me related on resuscitation of patient? Anything you want to add.

B: I just think we just need to be well prepared for resuscitations.

A: Okay.

B: To ensure that our unit is ready for resuscitation every day when we come on duty we must make sure that we check all of our equipment ensure that are well functioning properly and check the emergency trolly for availability of drugs and fluids that are needed for resuscitation.

A: Alright.
B: And then ensure that we well-staffed in the unit.
A: Okay.
B: Yeah! To be able to cope with the resuscitation. Also, the importance of team work. We must have team work so people must be properly orientated.

A: Okay,

B: So that they can be helpful during resuscitation.

A: Alright no. I understand you. Do you have any question, any addition or clarity or anything you want to ask before we can close our interview?

B: No!

A: You are fine?

B: Yes, I am fine.

A: If you don’t have any question then I just want to thank you very much for your precious time. Thank you very much, enjoy your day.