EXPLORING LIVED EXPERIENCES OF GAUTENG BASED MILITARY PRE-HOSPITAL EMERGENCY CARE PROVIDERS DURING EXTERNAL DEPLOYMENT

By

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A dissertation submitted in fulfilment of the requirements for the degree of Master of Health Sciences: Emergency Medical Care in the Department of Emergency Medical Care, Durban University of Technology

18 July 2017

As the candidate’s supervisor I have not approved this thesis/dissertation for submission.

Signed: [Redacted] Name: [Redacted] Date: 06 April 2018
PREFACE

The study discussed in this dissertation was carried out at four South African Military Health Service bases in Gauteng from March 2015 to May 2017, under the supervision of Doctor Nombeko Mshunqane, Professor Hermann du Plessis and Mr Simpiwe Sobuwa.

This study represents the original work of the author and has not otherwise been submitted in any form for any degree or diploma to any other tertiary institution. Where use has been made of the work of others it is duly acknowledged in the text.
DECLARATION- PLAGARISM

I, Tshikani Lewis Khoza declare that:

1. The research reported in this dissertation, except where otherwise indicated, is my original research.

2. This dissertation has not been submitted for any degree or examination at any other university.

3. This dissertation does not contain other persons’ data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.

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   a. Their words have been re-written but the general information attributed to them has been referenced.
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5. This dissertation does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the dissertation and in the References sections.

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ABSTRACT

Introduction
The South African Military Health Service (SAMHS) provides multi-disciplinary health care, including emergency medical care (EMC), to the South African National Defence Force (SANDF). Post 1994, the SAMHS pre-hospital emergency care providers (PECPs), in support of SANDF, have been deployed in various external operations and have gained a wealth of combat EMC experience. The challenges experienced during deployment are reported using formal military reports which often do not address the in-depth experiences of individual PECPs during service delivery.

Aim of the study
This study aimed to explore and describe the lived experiences of Gauteng based military PECPs when providing EMC during external deployment.

Objectives
The study’s objective was to describe the experiences of PECPs working at SAMHS in Gauteng during external deployment.

Methodology
The study was conducted using a qualitative, exploratory and descriptive research design guided by a phenomenological approach. Eighteen (18) participants, who had been deployed, were recruited from a study population consisting of 276 military PECPs based at four SAMHS units in Gauteng using a purposive random sampling method. Semi-structured, in-depth individual interviews were conducted and subsequently analysed using thematic analysis.

Results
Five themes emerged from the study, namely, the organisational culture of the SAMHS; political situation during external deployment; resources; human resources and safety. The sub-themes that emerged included the challenges reported in formal military reports, tactical decisions that may affect healthcare, harsh environments, political will of the host country, civilian hostility, gaps in what the mandate authorises, prolonged casualty evacuation times, limited resources, unique casualty transportation,
mental stress, lack of trauma care experience, task overload, training expectations and inadequate guarantee of safety.

Conclusion
The findings of this study indicated that the Gauteng based military PECPs interact well and receive a high degree of group support from their co-workers. This decreases the morbidity and mortality of their patients during external deployment. However, they also reported feelings of anger and frustration because of unresolved challenges arising from previous deployments, inappropriate casualty transportation and inadequate leadership. They further reported that the limited transportation and the political situation in the host country during deployment contributed to both stress and feeling unsafe. The findings also indicated a low rate of service delivery by military PECPs which negatively affects the maintenance of human resources and which may, thereafter, adversely affect the success rates of external missions conducted by the SAMHS and the SANDF.
DEDICATION

I would like to dedicate this research:

1. To my late grandfather, an unsung hero who established the first school in Xhosana Village, Limpopo. Your guidance and inspiration has led me to a path of lifelong learning and a passion for teaching.

2. To my late grandmother, you taught me perseverance and humility, I am blessed to have had you in my life.

3. To my mother, you guided and supported my decisions, and encouraged me to carry on, no matter the hardships.

4. To my wife, Zanele, and my son, Ndzalama, for their love, patience, and motivation.

5. To every Military Emergency Care Provider who not only serves the brave men and women of South Africa but also the people of Southern Africa and the SADC during times of need – I salute you.

6. To the members of the South African Military Health Service – people think we have an easy job because our work is not carried out in front of them. I say only we know the feeling, only we know the pain and only we know why we serve without any expectation.
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The Lord, our Father, words are not enough to express the gratitude for all you do in my life; I am humbled. I would like to sincerely acknowledge the following people for their contributions towards the success of my study:

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5. To Mr Raveen Naidoo, I am very grateful for the opportunity to conduct this research and for your support.

To the South African Military Health Service and the South African National Defence Force, thank you for your support. I am forever grateful. I would also like to give special mention to the following South African National Defence Force officers for their contribution to the success of this study:
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LIST OF ABBREVIATIONS

AEA : Ambulance Emergency Assistant
AU : African Union
BAA : Basic Ambulance Assistant
CAQDAS : Computer Aided Qualitative Data Analysis Software
CAR : Central African Republic
DRC : Democratic Republic of Congo
EMC : Emergency Medical Care
EMS : Emergency Medical Services
HPCSA : Health Professions Council of South Africa
MHTF : Military Health Training Formation
MTG : Medical Task Group
MTT : Medical Task Team
OECO : Operations Emergency Care Orderly
PBEC : Professional Board of Emergency Care
PECP : Pre-hospital Emergency Care Provider
SAI : South African Infantry
SAMHS : South African Military Health Services
SANDF : South African National Defence Force
UN : United Nations
GLOSSARY OF TERMS

**Ambulance Emergency Assistant**: An emergency care provider registered as an Ambulance Emergency Assistant (AEA) with the Professional Board of Emergency Care (PBEC) of the Health Professions Council of South Africa (HPCSA). AEAs undergo a three to four month training programme after completing the four-week Basic Ambulance Assistant course and several months on the road experience. AEAs are capable of providing nebulisation, peripheral intravenous access, basic airway management, administration of glucose, aspirin and manual defibrillation in cardiac arrest (Health Professions Council of South Africa 2011).

**Basic Ambulance Assistant**: PECPs provide the most basic level of pre-hospital emergency care. They are registered as Basic Ambulance Assistant (BAA) under the PBEC of HPCSA. Their training comprises a four to six-week training course that includes cardio pulmonary resuscitation, first aid, use of ambulance equipment patient packaging and trauma management (MacFarlane, Van Loggerenberg and Kloeck 2004).

**Battalion**: Consists of three companies and approximately 270 troops (Mahungela 2016).

**Company**: Consists of three platoons and approximately 90 troops (Mahungela 2016).

**Emergency Care Technician**: PECPs are registered under the PBEC of HPCSA as Emergency Care Technicians (ECT). This is a mid-level qualification with the training conducted over a period of two years and includes a limited advanced life support (ALS) scope of practice (Cape Peninsula University of Technology 2017).

**External deployment**: Refers to SANDF personnel performing official military operations outside of the borders of South Africa (Naidoo 2009).

**Laer (Lower)**: Tactical replenishment of forward fighting elements by a replenishment convoy under the cover of darkness and all round protection (Lewis 2017).
**Militia**: A civilian or veteran military force that participates in insurgency and guerrilla warfare as opposed to the regular army (South Africa. Department of Defence 2014).

**Operational emergency care orderly**: PECPs are registered under the PBEC of HPCSA as Operational Emergency Care Orderlies (OECO). Their role is to provide battlefield advanced resuscitation, stabilisation, primary health care for minor ailments and the evacuation of casualties. They receive their training at the School for Military Health Training (SMHT) of the South African Military Health Service (SAMHS) over a period of 9 months (McNally, Ligthelm and Martin 2012).

**Paramedic**: PECPs are registered under the PBEC of HPCSA as paramedics. Some paramedics have received nine to 12 months training and qualified as Critical Care Assistants (CCA) while others have undergone three years formal tertiary education to qualify with either a National Diploma Ambulance and Emergency Technology (ND: AET) or a National Diploma Emergency Medical Care (ND: EMC). They are capable of providing Paediatric Advanced Life Support (PALS), Advanced Cardiovascular Life Support (ACLS) and Advanced Trauma Life Support (ATLS). Their scope of practice currently allows for the use of various emergency drugs such as benzodiazepines, intravenous analgesia and emergency cardiac medications (Health Professions Council of South Africa 2006).

**Platoon**: Consists of approximately 30 troops (Mahungela 2016).

**Peacekeeping**: Actions that are taken in the interests of the preservation of peace where conflict has been suppressed in order to facilitate and assist in the implementation of resolutions (Unies and Unies 2008).

**Peace Operations**: Operations that are deployed with the aim of managing, resolving and preventing conflict (Unies and Unies 2008).

**South African Military Health Service**: The fourth arm of service of the SANDF, the SAMHS provides multi-disciplinary military health care to the members of the SANDF and their dependents and current and previous heads of state and their dependents and renders assistance to the National Department of Health (Naidoo 2009).
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CHAPTER ONE

CONTEXTUALISING THE STUDY

1.1 Introduction and background

Emergency Medical Services (EMS) is designed to provide pre-hospital Emergency Medical Care (EMC) and the transportation of the critically ill and injured patients to a hospital (Spaite et al. 1995). Although civilian EMS in South Africa are growing rapidly, there is a shortage of Advanced Life Support paramedics because of the migration to other countries to seek employment (Govender et al. 2012). Pre-hospital Emergency Care Providers (PECP) are expected to carry out their duties in an ethical way as stipulated by the Professional Board of Emergency Care (PBEC) under the Health Professions Council of South Africa (HPCSA) (Health Professions Council of South Africa 2006).

The South African Military Health Service (SAMHS) is the fourth arm of service of the South African National Defence Force (SANDF) after the South African Army (SA Army), South African Air Force (SAAF) and South African Navy (SAN). Its role is to provide multi-disciplinary health care, including EMC to the SANDF (Naidoo 2009). In the 2013/2014 financial year, SAMHS PECPs were deployed to provide military force health support to the SANDF troops deployed during the United Nations Peace Support Operation (UN PSO) in the Democratic Republic of Congo (DRC), UN PSO in Burundi and African Union/United Nations (AU/UN) Hybrid mission in Sudan. They were also deployed in support of the Southern African Development Community (SADC) Maritime Security Strategy in terms of which the SANDF was deployed in the Mozambique Channel to counter the rise of piracy and maritime crimes. In addition, they were deployed to the Central African Republic (CAR), South Sudan, Republic of Tanzania, DRC and Equatorial Guinea for capacity building and general military assistance operations. The PECPs also assisted Mozambique in disaster relief during the Mozambique floods (South Africa. Department of Defence 2014).

Military PECPs provide EMC to forward elements of armies and navies worldwide. Hence, PECPs play a vital role in trauma care and the survival of wounded soldiers during external deployment (Ben-Abraham et al. 1999).
According to Buhaug and Urdal (2013), urban growth in the world is seen as increasing economic growth, however, in sub-Saharan Africa, rapid urban growth occurs as a result of rapidly growing populations and has a negative impact on the economy. The rapid population growth in these sub-Saharan countries may result in local government service delivery constraints including constraints in relation to employment, water, sanitation, housing, law and order. This often results in violence and instability. Similarly, when the economy and the job market are not able to keep pace with the urban population growth, violence and instability may result (Buhaug and Urdal 2013). Overpopulation also results in increased competition for the available resources and land with the resulting intergroup competition sparking violent conflict under unfavourable economic and political conditions. It is argued that poor countries are more susceptible to violent resource conflicts because of their limited capacity to adapt to changing environments. In addition, they often lack the institutional arrangements necessary for peaceful conflict resolution (Buhaug and Urdal 2013).

The majority of the world's population now lives in cities (Buhaug and Urdal 2013). According to the UN, by the year 2050, two out of every three persons will be living in an urban area while approximately 3 billion people will be absorbed into the cities (Buhaug and Urdal 2013). This will occur primarily in sub-Saharan Africa and Asia. The urban population growth within the context of economic stagnation, little job creation and poor governance often leads to an increased risk of violence and political turmoil, thereby resulting in the ongoing civil conflict which is a relatively common occurrence in Africa (Buhaug and Urdal 2013). Consequently, we see peacekeeping patrols and operations occurring more frequently in third world urban settings as compared to first world settings. The fact that enemy contact and enemy engagement often take place in an urban setting necessitates different mechanisms to deal with injury to those used in rural conventional warfare. This exposes military emergency care providers to different safety considerations and increased patient volumes as a result of the increased effects of collateral damage due to the high volumes of civilians involved. In addition, it also results in military personnel being exposed to unconventional injuries because of civil unrest practices such as rock throwing.

Despite the fact that the daily lived experiences of PECPs have a direct impact on the quality of EMC (Mosadeghrad 2014), there is, nevertheless, a paucity of literature on
the daily lived experiences of PECPs working at SAMHS in Gauteng province during external deployment (Rojas, Seghieri and Nuti 2014).

1.2 Problem statement
The EMC provided to the wounded during deployment is essential to positive patient outcomes and to ensure the realisation of military objectives (Johnson 2015). Post 1994, the SAMHS PECPs, in support of the SANDF, have been deployed in various external operations and, consequently, have gained a wealth of combat EMC experience.

According to Mark et al. (2009), the challenges experienced during deployment are reported in formal military reports. However, these formal military reports often do not address the in-depth experiences of individual PECPs during service delivery. Accordingly, as there have been no such previous studies conducted, the aim of this study was to uncover unique information about the experiences of military PECPs in the South African context. It was anticipated that exploring the lived experiences of PECPs may help in understanding the challenges encountered when providing care during external deployment.

It was also hoped that an in-depth, detailed understanding of PECPs experiences when providing EMC during external deployment would provide explicit knowledge that could be used to mitigate PECP concerns and challenges in providing EMC during external deployment and to provide the SANDF policy makers and management with explicit knowledge that could be used to improve EMS delivery, operational readiness and the retention of PECPs in the SAMHS (Dierckx de Casterlé et al. 2011; Mark et al. 2009; Jennings et al. 2006).

1.3 Aim of this study
This study aimed to explore and describe the lived experiences of Gauteng based military PECPs during external deployment.

1.4 Research Question
What are the lived experiences of PECPs working in the SAMHS in Gauteng during external deployment?
1.5 **Objectives**
The study’s main objective was to describe the experiences of PECPs working in the SAMHS in Gauteng during external deployment.

1.6 **Significance of this study**
It is important that both the SAMHS and the SANDF are aware of and informed about what PECPs endure to provide EMC to the ill and injured during external deployment. It was anticipated that the study may assist the SANDF, SAMHS and other military healthcare providers to acknowledge, appreciate and be more aware of pre-hospital EMC, thus enabling them to provide PECPs with the support required to enable them to perform their duties more effectively. The study may assist in policy making and the efforts made to mitigate the concerns and challenges of externally deployed PECPs. Finally, the study may also contribute to the existing body of knowledge and add value to the Military Health Support Doctrine, including training of military PECPs in the Southern African Development Community (SADC), and help to improve the provision of EMC in future military operations.

1.7 **Dissertation structure**
This section presents an overview of the dissertation structure.

**Chapter 1:** Introduces and contextualises the study. In addition, the chapter contains an overview of military pre-hospital emergency care in South Africa. The chapter also presents the aim and objective of the study.

**Chapter 2:** Reviews existing literature on the experiences of military pre-hospital emergency care providers during external deployment.

**Chapter 3:** Describes the study design and how the requisite data was gathered.

**Chapter 4:** Provides a thematic, structural and textural description of the data analysis procedure.

**Chapter 5:** Contains a discussion of the results as guided by the research question described in chapter one. The chapter is arranged in line with the theoretical framework used as well as themes that emerged from the analysis of the interviews.
Chapter 6: Presents the conclusion, limitations and recommendations arising from the data analyses carried out.

1.8 Summary
This chapter introduced the study and provided an overview of the study’s aim, objective, significance as well as an outline of the dissertation structure. The next chapter contains a review of the existing literature on military PECPs during external deployment in order to provide an understanding of the context of the study.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
This chapter discusses the review conducted of relevant literature. Most of the literature used was based on old references because of limited new research.

The military is a unique community with specific needs and, hence, if the healthcare provided is to be effective it is essential that it is tailored to meet these unique needs. The American College of Emergency Care Physicians (ACEP) has found that, for optimal EMC to occur, military EMS providers should comply with national health care service standards and not be limited to military boundaries. Accordingly, all SAMHS PECPs are required to be registered with the HPCSA so as to be eligible for deployment (Lockey 2003). Section 17 of the HPCSA Act of 1974 mandates the registration of all persons practising a health profession registrable under the HPCSA Act in South Africa and stipulates that any person who contravenes the act is guilty of a criminal offence (Health Professions Council of South Africa 1974).

However, despite the fact that it is required by law for military EMS providers to comply with the guidelines and protocols as defined by the Professional Board for Emergency Care of HPCSA when providing care to patients within South Africa, there are no professionally regulated and tailor-made, clinical practice guidelines for military EMS providers when they are deployed outside of South Africa. There is neither a professional health care regulatory body to which military PECPs deployed externally are accountable. In addition, the national service standards applicable within the military PECPs country of origin may not be relevant to the emergency care needs when they are deployed in foreign countries during external deployment as these service standards are tailored to meet the health care systems needs of their countries of origin.

2.2 The Military PECP of the South African Military Health Service
Militaries wage war in order to win. However, according to Shilcutt (2003), winning in battle also involves saving the lives of the severely injured and treating those with minor injuries so they may continue fighting. The core aim of the SAMHS is the provision of multi-disciplinary health care, which includes EMC, to the members of the
SANDF and their dependents during peacetime, wartime, military operations, disaster relief and humanitarian operations (Naidoo 2009; McNally et al. 2012).

The provision of healthcare services to support mission personnel in an operational area is an important component of peacekeeping operations. The main objective of medical support is to ensure the physical and mental wellbeing of the deployed personnel, the maintenance of human resources and the preservation of life, as well as to decrease the morbidity and mortality of the soldiers deployed in mission areas (Johnson 2015). However, this is not possible if the health care provision is not optimal (Annals of Emergency Medicine 2010).

According to Johnson (2015), peacekeepers operate more effectively when they are both healthy and aware of the fact that high quality healthcare is readily available in the event of either injury or illness. The South African Military PECPs are becoming increasingly mobile in remote geographical areas, in an effort to meet the SANDF mandate, but while facing significant financial constraints (South Africa. Department of Defence 2014). Together with their peacekeeping colleagues, the PECPs operate in hostile environments with poorly defined boundaries, ongoing armed conflict and inadequate guarantees of their safety (Johnson 2015).

McNally et al. (2012) highlight that PECPs are deployed to provide EMC, the evacuation of casualties and primary healthcare for the treatment of minor ailments. They are deployed in every operation where there is a risk of casualties and where the available medical facilities are more than 10 minutes away as delays in life saving emergency medical intervention have been found to have a negative impact on patient outcomes (McNally et al. 2012). McNally et al. (2012) also indicated that PECPs are deployed in teams of two OECOs and a driver per platoon.

The geographical locations, mobility, financial constraints, burden of disease and trauma, hostile environments and continued armed conflict require a unique approach to the provision of EMC. In addition, these factors also present the military PECPs with unique challenges when they are in external deployment. During external deployment, the SAMHS PECPs not only care for the SANDF peacekeepers but they also assist the local population as the healthcare systems in most of the countries where they are deployed would have collapsed (Buhaug and Urdal 2013). This may affect the
provision of EMC as it may result in task overload and overburden their already limited resources. Optimising EMC may, therefore, help to improve the quality of the pre-hospital healthcare provided to peacekeepers (Lockey 2003).

2.3 External deployment

2.3.1 Peace support operations

Peace support operations may be defined as the deterrence, restraint, suppression and termination of conflict between or within states through peaceful, third party intercession which is structured and directed internationally using multidisciplinary, multinational forces consisting of military organisations, police forces, civilian organisations such as humanitarian relief organisations, non-government organisations (NGO) and combatant/guerrilla factions to uphold peace (Kime 1996). Peace support operation objectives involve peace enforcement, peacemaking and peacekeeping. They are executed in order to strengthen a country’s diplomatic effort to maintain peace in regions, provinces or areas where there is conflict (Sigri and Basar 2015).

During peacekeeping operations, missions are executed by diverse military staff members who come from different countries. Every mission includes several tasks that should be executed. These tasks are usually executed in environments which are unstable, dangerous and challenging. Operational resources such as healthcare equipment are often scarce while it is often problematic to synchronise the peacekeepers of different nationalities in respect of a common goal as they all have varying organisational procedures and regulations. According to Bialke (2001), it is the responsibility of the deploying countries to skill up, train and equip their soldiers although they are fed, sheltered and controlled by the UN. The mandate of a peace support operation is to end conflict, enforce a ceasefire, broker and maintain peace agreements and rebuild war-torn areas using both military and civilian resources and personnel (Sigri and Basar 2015).

The use of military force, including peacekeeping operations, may be seen as an extension of politics as it provides a means to achieving a political solution to problems. Thus, peacekeeping operations are conducted to accomplish political objectives as determined on the diplomatic level. The aim of peacekeeping operations is to support such diplomatic efforts to restore and maintain peace in conflict areas. These
operations are conducted under the guidelines and boundaries set out by the UN, AU, rebel or combatant forces and the other parties involved. Peace support operations are categorised as peace building, peace enforcement, peace-making, peacekeeping or, collectively, as peace support (Kime 1996).

The UN has issued the UN charter which provides the means to manage conflicts. It is a political document that allows crises to be addressed adequately as long as the UN member states demonstrate the collective political will to participate in peace support operations. Operations range from classical peacekeeping operations under Chapter VI of the UN charter to the dynamic peace enforcement operations under Chapter VI and Chapter VII (Bialke 2001). Chapter VI of the UN Charter, entitled “Pacific Settlement of Disputes”, directs that the UN Security Council, after considering any dispute resolution measures that were put in place by the parties to the conflict, may counsel providing resolution to the conflict. According to Article 33 of the UN charter, a peacekeeping mission is “a peaceful means that is chosen and consented to by the parties to pursue a peaceful settlement of a conflict” (Bialke 2001).

Chapter VI ½’s reference to peacekeeping missions is more restrained than that in Chapter VII and refers to a hybrid action on the part of the UN, more dynamic than in Chapter VI but less forceful than in Chapter VII. UN peacekeepers are usually armed but use weapons for the purposes of self-defence only. They are deployed to monitor the ceasefires and treaties that the parties in conflict have agreed upon, discourage hostility on the part of the parties to a conflict and provide an international presence. They are not deployed to resolve conflict but to provide a favourable environment in which the parties to a conflict may negotiate and find a peaceful means to end the conflict. Thus, they act as neutral military observers who are under the command and control of the UN. In addition, the peacekeeping force works under the defensive Rules of Engagement (ROE) (Bialke 2001). These defensive ROEs are formulated and customised in accordance with the specific mandate in terms of which the force is deployed and the situation on the ground. It must be noted that the defensive stance of the peacekeepers limits the capabilities of and alternatives available to peacekeepers to react to security threats (United Nations 2003).

Consent from the host country is required for the UN to deploy peacekeepers in order to promote and preserve the sovereign equality of UN member states. Such consent
prevents the peacekeepers from intervening in affairs that are within the domestic authority of any state. Accordingly, there is no infringement of the state’s sovereignty when the host country consents to the deployment of a UN peacekeeping force. Furthermore, when a host country withdraws its consent, then the peacekeeping force is also obliged to withdraw. The host nation’s consent is finalised by a Status of Forces Agreement (SOFA). In the agreement, the host agrees to offer UN peacekeepers full freedom of movement in the operational area and also jurisdictional exemption from criminal issues (Bialke 2001).

The use of force in a Chapter VI peacekeeping operation is limited to self-defence. In addition, the UN Charter also emphasises that the use of force must be proportional to the situation. As a result, peacekeepers are equipped only with weapons for self-defence although this may mean that they will usually be outgunned by the parties they are required to observe. Furthermore, the peacekeeping force has no mandate for offensive operations (Bialke 2001).

The UN Charter entitles Chapter VII as “Action with respect to threats to the peace, breaches of the peace and acts of aggression”. Thus, the focus of Chapter VII of the UN Charter is on peace enforcement. It aims to create peace and then maintain such peace. It may involve the use of force in opposition to a member state. The operation maybe conducted by air, land, sea or any means possible to uphold or reinstate security and peace (Bialke 2001). The decision to deploy a peace support force is made by a country under pressure or as a result of international organisations’ growing concerns over the country under pressure. The UN then launches the intervention and stipulates the actions that may be carried out by the forces deployed and their limitations. Although operations may warrant the use of force, the overall success of these operations depends on diplomacy and political momentum (Dandeker and Gow 1997).

Interstate and ethnic conflicts often result in humanitarian crises, including collapsed healthcare systems with the media exposing human rights violations, thus prompting international organisations to take action. In many instances the only diplomatic action possible involves launching a multi-disciplinary peace support operation that incorporates the provision of healthcare (Dandeker and Gow 1997). According to the International Committee of the Red Cross (ICRC) (1977), every wounded or sick non-
hostile military or civilian person shall be protected and respected, no matter the party
to which they belong. Furthermore, they shall receive medical care to the fullest extent
possible with the least possible delay and not be discriminated against nor
distinguished in any way other than medically. Medical personnel receive protection
under both the Geneva Convention and the ICRC of 1982 in order to be able to assist
their patients. They are also obliged to respect medical ethics, provide care without
discrimination, carry only light arms for self-defence and be identifiable as medical
personnel (Perrin 1996).

Dandekar and Gow (1997) maintain that challenges during peace support operations
arise when there is a gap between what the mandate authorises, what may work given
the conditions on the ground and the means provided to peacekeepers to achieve the
mandate, such as equipment and political will. In addition, further challenges occur if
there is a perceived inconsistency or lack of clarity in the mandate of the operation.

2.3.2 Disaster relief and humanitarian operations
Military forces are expected to be ready to perform tasks that are essential to
maintaining stability and order when civilian organisations are not able to do so. EMC
and disaster response form an integral component of stability and security cooperation
programmes (Waller 2015). Humanitarian operations are used to stabilise the existing
state of affairs and to prevent the escalation of a situation. The purpose of such
operations is to alleviate the negative effects of human actions such as conflict, natural
disasters such as floods and prevailing conditions such as disease with the aim of
reducing the human suffering, pain and deprivation, arising as a result of the existing
state of affairs and which may result in poor health, material loss, loss or alteration of
cultural values and even the loss of life (Dimitrova and Nichev 2011).

A study by Miller and Moskos (1995) found that soldiers’ experiences during
humanitarian missions were strongly associated with their attitudes. These attitudes
may be divided into three stages:

a) High expectations: The media depicts a widespread famine but does not
provide commentary on the cause of the conflict. This, therefore, results in the
soldiers expecting that, on humanitarian deployment, they will be peacefully
distributing food and supplies and providing emergency medical care and
rescue to a grateful local population.
b) Disillusionment: The second stage which occurs when the soldiers arrive in the mission area and do not find the mass starvation as depicted by the media. They also find that they are not able to serve as primary aid givers and they are abused by the people whom they are coming to help.

c) Reconsideration: The deployed soldiers start to perceive all locals as militants and rioters and thus they start treating the entire population as the enemy. Another pattern develops when the other deployed soldiers become offended by the negative stereotyping of the local population, and try to contextualise the behaviour of the local population by seeking political and cultural explanations for the behaviour (Miller and Moskos 1995).

In the main, humanitarian operations are characterised by displaced communities, sexually abused community members, socioeconomic breakdown and mental disorders amongst the local population due to post traumatic reactions. This is often the result of the militias targeting the civilian population as a primary objective. Militias attack civil society more often than they attack each other and measure their strength through their domination over the local population (Dimitrova and Nichev 2011). Militias further threaten civil society in order to obtain humanitarian assistance which they then seize by violent means and add to their resource inventory. This results in the local population being deprived of food and essential resources as the humanitarian operations would have been seeking to provide access to healthcare and food supply for the local civilian population. This then poses a challenge to the humanitarian relief organisations, military personnel and military PECPs as they are ambushed by these militias who use violence to seize the humanitarian relief from the convoys transporting the resources required during the humanitarian assistance operations. Furthermore, this also results in the PECPs and other military personnel witnessing the first-hand effects of human rights violations such as sexual abuse, hunger, violence and death and which may predispose them to stress, mental disorders and post traumatic reactions (Langston, Gould and Greenberg 2007).

2.4 Experiences of PECPs when providing health care during deployment
The PECPs working at the SAMHS and other military EMS worldwide serve a dual role, namely, that of soldier and PECP (Chapman et al. 2012). However, unlike their civilian counterparts and comrades in arms, they have to carry the heavy medical equipment
that caters for primary health care and EMC, together with their combat gear such as weapons.

In view of the unpredictable and austere nature of deployment, the known experiences of military PECPs, when providing EMC, include hostile enemy contact, resource constraints, prolonged casualty evacuation times, unique casualty transportation, darkness, harsh environments, receiving orders from their superiors, tactical decisions that may affect healthcare, and a lack of trauma care experience (Chapman et al. 2012).

Challenges during deployment are usually reported in formal military reports. However, these reports often do not address the in-depth, detailed experiences of military personnel. Furthermore, the issues reported in these military reports do not provide explicit knowledge and, hence, may not affect policy change (Mark et al. 2009). The military personnel in peacekeeping operations are expected to cooperate with NGOs, government personnel, technical experts and politicians. This may result in challenges for them if they have not been adequately trained in multidimensional peacekeeping operations. In addition, during peacekeeping operations, military personnel also encounter hardships such as unclear missions, physically remote locations, confusing channels of command, role ambiguity, lack of knowledge of foreign cultures and languages, landmines, sniper fire, ambushes, repetitive work, and continuous exposure to death (Sigri and Basar 2015). They may also experience resistance and lack of cooperation from both the civilian population and the civilian organisations that form part of the multi-disciplinary peace support force (Sigri and Basar 2015).

During deployment, the military PECPs also have to perform routine medical tasks such as the primary health care of the deployed soldiers which is done through manning a military medical clinic to treat sprains, rashes, sexually transmitted infections and influenza and to ensure soldiers are taking their malaria prophylaxis (Kennedy 2007).

Enemy tactics are changing and, hence, the evaluation and treatment of military casualties should be informed by the past experiences of military PECPs as well as the experiences of their counterparts from other countries. The evolution of enemy tactics is contributing to the current rise in unconventional enemy tactics such as suicide.
bombings, improvised explosive devices and landmines. When combined with the armoured vehicles and the personal protective gear worn by the military casualties, this presents the military PECPs with unique injury patterns and also poses challenges in terms of patient access and safety (Schoenfeld, Lehman and Hsu 2012).

Deployment has an effect on both the deployed military personnel and their families. Pre-deployment briefings inform the soldiers about what to expect when deployed while post deployment debriefing helps them adapt to society. Due to deployment being an abnormal environment, it is usual for military personnel to be stressed. Every individual has a different way of coping. Communication is an integral component of coping mechanisms and forms the cornerstone of the support services that are aimed to provide support to soldiers and their families during external deployment. Chaplains, social workers and psychologists are made available for military personnel on deployment and for their families at home. In addition, recreational programmes, parcel services and means of communicating with families are made available for those who are deployed to ease the stress on both the soldiers and their families (Lanigan 2008).

2.5 Theoretical framework of the study

The theoretical framework for this study was based on the concept of organisational climate. This concept emerged in 1992 and is defined as a series of proven properties of the work environment as viewed by the personnel. It contributes to either hindering or facilitating service delivery (Al-Shammari 1992; Rusu and Avasilcai 2014). To enable the organisation to achieve its goals, it is imperative that it determines the factors that encourage workers to perform to their potential (Rusu and Avasilcai 2014). The purpose of the concept of organisational climate is to determine the job satisfaction of the employees in an organisation while also influencing the employees’ motivation and work performance.

The main characteristics of organisational climate in healthcare are well-known and include leadership, the quality of work life and co-worker behaviour (Aiken, Sloane and Sochalski 1998; Gershon et al. 2004; Poghosyan et al. 2013). This study explored and described the experiences of the PECPs working at the SAMHS according to the unique organisational culture in the organisation. Healthcare providers require adequate support and resources to enable them to provide high quality healthcare with the lack of such support and resources resulting in the underutilisation of the PECPs.
knowledge and capabilities, thus posing a challenge to the PECP professional practice (Poghosyan et al. 2013).

The interpretation of the theoretical framework concept in relation to the PECPs working at SAMHS may be described according to the three characteristics of the organisational climate as mentioned above:

**Leadership**
SAMHS is an organisation which includes managers and human resources and it has a direct influence on the experiences of its workers (PECPs) (Poghosyan et al. 2013). Leadership, task distribution, teamwork and communication have been found to reduce task overload and increase patient outcomes in the care for patients requiring EMC (Hunziker et al. 2011).

**Quality of work life**
The experiences of the workers, which include their working conditions during external deployment, have a direct influence on the quality of the EMC provided (Gershon et al. 2004; Rojas, Seghieri and Nuti 2014).

**Co-worker behaviour**
The ability of an employee to fit into the workplace and complete group tasks depends on:

a. How an employee interacts with the group.

b. How an employee perceives trust between his/her co-workers.

c. Degree of group supportiveness and group cohesion.

Co-worker behaviour has an effect on an employee’s ability to fit into the group and complete team based tasks as well as on service delivery (Gershon et al. 2004). The role of military healthcare is important given that the military PECPs provide EMC in order to reduce both morbidity and mortality and thus enable the soldiers to return to their military duties to achieve military objectives.

The presence of the above-mentioned characteristics of organisational climate in a military EMS organisation are associated with a high morale, teamwork, increased quality of the EMC provision, higher rate of service delivery and an increase in the
overall success rates of missions. Inversely, if they are not in place, the opposite will occur (Gershon et al. 2014). These characteristics were, therefore, deemed relevant to guide this study in its exploration and description of the lived experiences of Gauteng based military PECPs during external deployment. The outcome of the study may assist military EMS providers to meet the service standards that are necessary during external deployment to ensure an optimal quality of care.

2.6 Summary
In short this chapter presented the findings, views, thoughts and assumptions of various different researchers and writers on PECPs during external deployment. The literature reviewed focused primarily on the working environment of military emergency care providers from both an international and a South African perspective. However, there are no studies focusing on the experiences of South African, Southern African Development Community or sub-Saharan-based military PECPs during external deployment. The next chapter focuses on the research methodology employed by the researcher to conduct the study.
CHAPTER THREE

DATA AND METHODS

3.1 Introduction
This chapter discusses the research design, study setting, sampling process, inclusion criteria, exclusion criteria, study procedure, pretesting of the data collection tool, trustworthiness, data interpretation and ethical considerations observed during the study.

3.2 Design

![Research Onion Diagram]

Figure 3.1: Research onion (Saunders, Lewis and Thornhill 2012)

According to Brink, Van de Walt and Van Rensburg (2012), a paradigm is a set of ideas about basic phenomena, how they interact and how they may be projected as reality. The paradigm used for this study was interpretivism as it provided the PECPs with an opportunity to voice their experiences. Interpretivism assumes that the significance of human action exists in that action and that the researcher aims to
uncover that meaning (Schwandt 2007). Similarly, Saunders and Tosey (2012) maintain that researchers reflect on the philosophy of interpretivism when they are primarily interested in attaining an insight into the individual meanings ascribed to a social phenomenon.

Creswell (2013) describes a research design as a plan in terms of which to conduct a study. This study was conducted using a qualitative, exploratory and descriptive research design. The qualitative approach was guided by social phenomenology in order to explore and describe the lived experiences of Gauteng-based military PECPs when providing EMC during external deployment. According to Creswell (2013), a phenomenological approach is used to describe what a population experiences and how they interpret their experiences of a particular phenomenon. Similarly, Thorpe and Holt (2008) assert that phenomenology seeks to explain the meaning of the relevant population’s direct understanding of the phenomenon in question. According to Schutz (1967), social phenomenology is a social action theory that explores, describes and interprets individual experiences within the daily lives of individuals.

Qualitative research into the lived experiences of health care providers investigates the reality as seen and lived by the participants. This helped me to understand what it means to provide care under specific conditions while listening to the PECPs voices further helped me understand their concerns and challenges.

According to Polit and Beck (2012), exploratory designs illuminate the way in which a phenomenon manifests. I used an exploratory design to obtain a better understanding of the lived experiences of Gauteng based military PECPs when providing EMC during external deployment.

3.3 Study setting
I conducted the study at the SAMHS units situated in Gauteng province, South Africa. SAMHS Gauteng consists of five units which provide EMC, namely, 7 Medical Battalion Group (7 Med Bn Gp), 8 Medical Battalion Group (8 Med Bn Gp), School for Military Health Training (SMHT), Presidential Medical Unit (PMU) and Area Military Health Unit Gauteng (AMHU GT).
3.4 Sample

3.4.1 Study population

Four units only were selected because they provided EMC during external deployment. These units included:

a. 7 Med Bn Gp
b. 8 Med Bn Gp
c. SMHT
d. AMHU GT.

Thus, the study population was selected from the 276 PECPs working in these four units.

3.4.2 Recruitment of participants

I sent an advertisement (Annexure A) inviting the members of each of the four selected units to attend a recruitment presentation. I hosted the recruitment presentation at the Military Health Training Formation where I distributed recruitment letters (Annexure B). Thereafter I explained the study further and answered questions raised by the target population about the study. During the presentation a participant sign up form (Annexure C) was used to screen participants based on inclusion and exclusion criteria. I then scheduled one on one interviews for a date and time most convenient to each of the selected participants.

The purposive sampling method is a type of non-probability sampling where the decisions in relation to the individuals to be included in a study are taken by the researcher (Oliver 2006). When using purposive sampling the qualitative researcher has to identify the population that is a possible source of data significant for the purposes of the study. This is achieved by highlighting the eligibility requirements of the study population (Morgan and Given 2008). I used eligibility requirements as contained in the inclusion criteria and assessed them by using the participant sign up form. This enabled me to purposefully select participants who had been deployed externally from the four units.

3.4.3 Sample size

At the time of the study there were 276 PECPs providing military EMC in Gauteng but not all have been externally deployed. I employed purposive, random sampling to
purposively sample 55 PECPs from the study population who had previously deployed. From the sample obtained 25 participants were randomly selected using the Microsoft Excel Randomization tool. Data saturation was reached after 18 participants had been interviewed thus concluding data collection. In line with Polkinghorne’s (1989) recommendation regarding optimal sample size I decided to interview at least five to 25 individuals who had carried out pre-hospital EMC during external deployment.

3.4.4 Inclusion criteria

a. Full time staff members at the SAMHS units in Gauteng.
b. Registered with the HPCSA under the Professional Board of Emergency Care (PBEC).
c. A minimum of two years’ experience in order to ensure that only PECPs with work experience in military EMC and who understood military culture were included in the study.
d. Have been externally deployed and served in peacekeeping forces and external military operations conducted by the SANDF.
e. Participants who had qualified as one of the following in emergency care:
   • Operational Emergency Care Orderly (OECO).
   • Ambulance Emergency Assistant (AEA).
   • Emergency Care Technician (ECT).
   • Paramedic.
   • Emergency Care Practitioner (ECP).

3.4.5 Exclusion criteria

a. Basic ambulance assistants (BAA).
b. Not registered with the HPCSA under the PBEC.
c. Less than two years’ experience.
d. PECPs who had never been deployed and those working in the Presidential Medical Unit (PMU) and other military units not mentioned.

3.5 Pre-testing of the data collection tool

I conducted pre-test individual interviews with three PECPs working at the Area Military Health Unit Kwa-Zulu Natal (AMHU KZN) to validate the data collection tool and interview questions, check the digital audio recorder and develop my interviewing skills. The pilot study helped me to develop and refine my interview skills by assisting me
determine the questioning techniques that would ensure rich responses from the participants. The pilot study also helped me predict the time required for each interview and to mitigate against challenges during the data analysis process. The results of the pre-test interviews are not included in this study. Amendments to the grammar used and changing closed ended questions to open-ended questions were made after the data collection tool had been pre-tested (Annexure L).

3.6 Study procedure
After obtaining ethical approval for the study from the Durban University of Technology (DUT) Institutional Research Ethics Committee (IREC) and 1 Military Research Ethics Committee (1MHREC), I then conducted face to face, semi-structured, in-depth individual interviews using probing questions during August 2016. All the participants were given a letter of information (Annexure D) beforehand in order to ensure their informed consent (Annexure E). I obtained a written informed consent form from each participant before the interviews were conducted. All the interviews were conducted in English and voice recorded using a digital audio recorder. As per the recommendation of the 1Military Hospital Research Ethics Committee (1MREC), I also obtained verbal consent from the participants before the start of each interview. The interviews were conducted in various offices and classrooms at the respective military bases.

I conducted the interviews, transcribed them and recorded field notes. I used field notes to supplement the interview data and to serve as evidence in making meaning of and understanding both military culture and the lived experiences of military PECPs (Schwandt 2015). I had been trained and guided by a research mentor with qualitative research experience to conduct individual, in-depth interviews in order to ensure that I obtained the relevant information from the interviews.

3.7 Data interpretation
I used the process of thematic analysis to interpret the data. This thematic analysis involved searching for themes that emerged as key to describing the experiences of PECPs working at the SAMHS, Gauteng. The process of thematic analysis started when I noted themes in the data during the data collection, continued while I was transcribing the data and ended when I reported on the themes. I transcribed the data verbatim. I then uploaded the verbatim transcripts onto NVivo Computer Aided Qualitative Data Analysis Software (CAQDAS) and familiarised myself with the data by
repeatedly reading the data whilst listening to the original audio interviews to check for accuracy. I also noted down and brainstormed my initial ideas. This allowed me to immerse myself in the data (Braun and Clarke 2006; Creswell 2013; Lewins and Silver 2007).

I then produced initial codes from the data and organised them into nodes in NVivo. Coding refers to the procedure of ascribing important labels to data segments (Paulus, Lester and Dempster 2014). Some codes were established during data collection. As I continuously immersed myself in the data, the codes emerged during the data analysis. When all the data had been coded, the codes identified were then combined in NVivo to form broader themes. Some of the codes formed main themes, some formed sub-themes while some formed categories within the sub-themes. Themes are patterns in the data sets which are linked with the research question and which are essential for the description of the phenomenon in question (Creswell 2013). Thereafter, I reviewed the relevant literature and attended a peer review with my research mentor. This resulted in the generation of well-defined themes.

I reviewed the literature in order to validate my findings (Creswell 2009). The findings are presented in chapter 4 to provide a clear and precise account of the lived experiences of Gauteng based military PECPs when providing EMC during external deployment (Creswell 2013).

3.8 Trustworthiness
Trustworthiness was addressed by using Lincoln and Guba’s (1985) four criteria. These include:

3.8.1 Credibility
Credibility addresses the issue of internal validity and ensures that the study measures what it is intended to measure. In order to ensure credibility, I used the following techniques:

a. Adopted a qualitative, exploratory and descriptive research design which is an appropriate and well-recognised research method.

b. Acquired an early familiarity with the culture of the participating organisation. Accordingly, I became familiar with the culture of the SAMHS, Gauteng and was engaged with the participants for a prolonged period before the data collection.
c. Employed the purposive, random sampling of the participants to eliminate researcher bias.

d. Ensured the triangulation of the data through the inclusion of participants working at four different SAMHS units situated in Gauteng. In addition, I also included AEAs, OECOs, ECTs, paramedics and ECPs in the study. This ensured that I obtained various perspectives so as to obtain a broad view of reality in question and ensured the credibility of the study.

e. Established rapport with the participants to ensure honesty throughout the research process.

I ensured peer scrutiny of the research project by conducting peer debriefings with my research mentors in order to obtain scholarly feedback during each step of the research process. This allowed for a deeper understanding of the data and eliminated bias (Lincoln and Guba 1985).

### 3.8.2 Transferability

Transferability addresses the issue of external validity. In the context of this study transferability may be defined as the degree in which the research findings of this study can be applied in a different context (Polit and Beck 2006). Chapter 3 and chapter 4 present rich and thorough descriptions of the context and research setting of the study. These rich and thorough descriptions provide ample detail to allow both judgement and comparisons to be made (Shenton 2004; Lincoln and Guba 1985).

### 3.8.3 Dependability

Dependability addresses the issue of reliability and aims to verify whether, if the research project were repeated using the same methodology in the same context with the same participants, then similar results would be obtained (Polit and Beck 2006). In order to ensure dependability, the research report detailed the methodology used and its implementation in the research project and the data gathering process and also provided an introspective evaluation of the research project in order to enable the reader to develop a meticulous understanding of the methodology used and its efficacy in the research study. I provided this comprehensive description of the methodology used in order to allow the study to be repeated (Shenton 2004; Lincoln and Guba 1985). Lincoln and Guba (1985) further state that dependability may be described as the steadiness of the data acquired over time and circumstances.
3.8.4 Confirmability

Confirmability in the context of this study addressed my objectivity in the study and my aim to ensure that the steps taken to ensure that the findings of the research were based on the participants’ experiences and not a result of researcher bias. To ensure confirmability I used the following strategies;

a. I acknowledged the methods used in the study in chapter 3. In addition, chapter 3 explains my choice of the research method I used (Shenton 2004; Lincoln and Guba 1985).

b. Triangulation was used to minimise the effects of researcher bias by obtaining data from different participants in different venues at different times (Flick 2004).

c. A thorough methodological description allowed the reliability of results to be scrutinised and enabled the readers of the study to establish the degree to which the data and constructs that emerged from the study may be accepted (Shenton 2004; Lincoln and Guba 1985).

3.9 Ethical considerations

The study was approved by the Institutional Research Ethics Committee (IREC) of the Durban University of Technology (DUT) (IREC 047/16) (Annexure I). Following the IREC approval, the study proposal was also approved by the 1MHREC (1MH/302/6/01.02.2016) (Annexure J) while gate keeper permission was obtained from by the SAMHS. In addition, I sought authority (Annexure K) to conduct the study from Defence Intelligence (DI) (DI/SDCI/DDS/R/202/3/7) in order to ensure that the research would not pose a threat to the security of either the SANDF or the Republic of South Africa.

The culture of the military makes military personnel a vulnerable population group as they carry out orders issued by their seniors and, consequently, they may feel obliged to participate in the study. I hold the rank of a Candidate Officer (CO) and this may have resulted in the participants feeling obliged to participate as all the OECOs selected to participate were Non-Commissioned Officers (NCOs) and of a lower rank than NCO while only the paramedics were officers. Furthermore, due to the structures and customs of the military, the selected participants were released on the authority of the Officer Commanding (OC) to participate in the study and this may have created an impression of their being ordered to participate. I conducted insider research as a
PECP appointed at the SAMHS, Gauteng and this facilitated my complete acceptance by the participants. In fact, the data gathered may even be more in-depth than may otherwise have been the case as the participants were typically open with me. Adler and Adler (1987) maintain that “objectification of the self has occurred in the analyses rather than the fieldwork”. Accordingly, I hosted a Continuous Professional Development (CPD) accredited presentation (Annexure H) on 29 July 2016 in a classroom at the Military Health Training Formation (MHTF) for military PECPs working in Gauteng on research ethics and informed consent to mitigate against the participants’ feeling that they had been ordered to participate.

The use of Lincoln and Guba’s (1985) four criteria relating to the trustworthiness of the data analyses meant that I experienced no role conflict in relation to my role of researcher. My position as a member of the SAMHS also allowed me access to a population group that is not as accessible to civilian researchers (outsiders). However, the disadvantage of insider research is that the researcher may share common experiences with the population in question and this may result in researcher bias, despite the fact that not all experiences will be the same and there will be differences (Dwyer and Buckle 2009). Simmel and Wolff (1950) argue that only a neutral outsider is able to obtain in-depth and intimate information from a population group due to the level of detachment of such an individual. Merton (1972) further argues that, due to the influence of the organisational customs, an insider may mistake error for truth. In order to minimise the negative effects of insider research, there must be no preconceptions affecting the researcher's perception of the phenomenon being studied and a detailed description of the research process must be provided (Dwyer and Buckle 2009). The outsider doctrine affirms the opposite, namely, that the outsider is incapable of comprehending organisational culture and customs due to the fact that he/she has not engaged in the experiences that constitute its existence and therefore will not be able to obtain the direct insight that makes empathic understanding possible (Merton 1972; Mercer 2007). However, it would not have possible for an outsider to conduct this research as the study population is not accessible to civilian researchers.

All the participants were informed about the nature, conduct, risks and benefits of the study. They were also required to sign a separate consent form for the voice recording of the interviews using a digital audio recorder (Annexure F). In addition, all the participants were given a letter of information (Annexure D) beforehand in order to
obtain their informed consent. Participation in the study was voluntary and the participants were allowed to withdraw at any time during the research process.

A counselling psychologist based at the MHTF debriefed the participants after the interviews as they may have relived traumatic experiences. The psychologist confirmed that no participant required a follow up counselling session.

I kept the data collection audio recordings and transcriptions confidential and locked in a safe to which only I have access. The information obtained was used for the purposes of this study only. It was hoped that it would add value to the quality of the EMC at SAMHS. I shared the results through conference presentations and publications.

In order to ensure that participant confidentiality was maintained so as to protect the participants from harm as a result of sharing their experiences and to respect their privacy the participants were assigned reference numbers instead of my using their names during both the data collection and in the results. This also ensured that no participant was known to anyone but the researcher. The interviews were conducted in private settings. In addition, anonymity was maintained by not including the participants’ details in the research report.

3.10 Summary
This chapter described the way in which the study was conducted, the data collection and the data analysis processes. The chapter also discussed the ethical considerations that were upheld. The following chapter presents the data obtained during data collection.
CHAPTER FOUR

RESULTS

4.1 Introduction
This chapter presents the data that was obtained from the face to face, individual interviews. Utilising a qualitative, exploratory and descriptive research design, the study explored and described the lived experiences of Gauteng based military PECPs when providing EMC during external deployment through the carrying out of one on one interviews. The chapter also describes the data analysis procedure used. The data analysis highlighted the themes and structural and textural descriptions emanating from the interviews with the participants and synthesised the descriptions of all the participants.

The aim of this study was to explore and describe the lived experiences of Gauteng based military PECPs when providing EMC during external deployment. The main research question was “What are the lived experiences of PECPs working at SAMHS in Gauteng when providing EMC during external deployment?”

4.2 Demographic data
Face to face, semi structured interviews were conducted with a total of eighteen \(n=18\) military PECPs. Table 4.1 below presents the demographics characteristics of the military PECPs who participated in the face to face interviews;
Table 4.1: Demographic characteristics of the participants

<table>
<thead>
<tr>
<th>Code</th>
<th>Unit</th>
<th>HPCSA PBEC registration category</th>
<th>Experience in years</th>
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<tr>
<td>P1</td>
<td>7 Med Bn Gp</td>
<td>OECO</td>
<td>6-10</td>
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<tr>
<td>P2</td>
<td>7 Med Bn Gp</td>
<td>OECO</td>
<td>3-5</td>
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<td>P3</td>
<td>7 Med Bn Gp</td>
<td>OECO</td>
<td>11-15</td>
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<td>P4</td>
<td>7 Med Bn Gp</td>
<td>ECT</td>
<td>6-10</td>
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<td>P5</td>
<td>7 Med Bn Gp</td>
<td>OECO</td>
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<td>P6</td>
<td>AMHU GT</td>
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<td>P7</td>
<td>AMHU GT</td>
<td>ECT</td>
<td>6-10</td>
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<tr>
<td>P8</td>
<td>AMHU GT</td>
<td>ECT</td>
<td>6-10</td>
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<tr>
<td>P9</td>
<td>AMHU GT</td>
<td>ECT</td>
<td>6-10</td>
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<tr>
<td>P10</td>
<td>AMHU GT</td>
<td>OECO</td>
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<tr>
<td>P11</td>
<td>SMHT</td>
<td>Paramedic</td>
<td>6-10</td>
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<tr>
<td>P12</td>
<td>SMHT</td>
<td>Paramedic</td>
<td>3-5</td>
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<tr>
<td>P13</td>
<td>SMHT</td>
<td>OECO</td>
<td>6-10</td>
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<tr>
<td>P14</td>
<td>SMHT</td>
<td>OECO</td>
<td>20-25</td>
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<tr>
<td>P15</td>
<td>SMHT</td>
<td>Paramedic</td>
<td>6-10</td>
</tr>
<tr>
<td>P16</td>
<td>SMHT</td>
<td>ECT</td>
<td>6-10</td>
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<tr>
<td>P17</td>
<td>8 Med Bn Gp</td>
<td>OECO</td>
<td>6-10</td>
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<tr>
<td>P18</td>
<td>8 Med Bn Gp</td>
<td>OECO</td>
<td>20-25</td>
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*Although the inclusion criteria included Emergency Care Practitioners (ECP), no ECP was included in the study as, during the recruitment of the participants, no military ECPs within the study population were found to have experience in providing EMC during external deployment.

4.3 Presentation of the results

Table 4.2 below presents the themes and sub-themes that emerged from the interviews.
Table 4.2: Overview of themes and sub-themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-themes</th>
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<tbody>
<tr>
<td>Organisational culture of the SAMHS</td>
<td>• Challenges reported in formal military reports</td>
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<td></td>
<td>• Tactical decisions that may affect healthcare</td>
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<td></td>
<td>• Working in harsh environments</td>
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<td>Political situation during external deployment.</td>
<td>• Political will of the host country</td>
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<td></td>
<td>• Civilian hostility</td>
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<td></td>
<td>• Gaps between what the mandate authorises</td>
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<td></td>
<td>• Prolonged casualty evacuation times</td>
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<td>Resources</td>
<td>• Limited resources</td>
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<td></td>
<td>• Unique casualty transportation</td>
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<td>Human resources</td>
<td>• Mental stress</td>
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<td></td>
<td>• Lack of trauma care experience</td>
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<td></td>
<td>• Task overload</td>
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<td></td>
<td>• Training expectations</td>
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<tr>
<td>Safety</td>
<td>• Inadequate guarantee of safety</td>
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</table>

The results of the study are presented together with the themes and sub-themes that emerged from the analysis of the interviews. Pertinent direct quotes are included to corroborate the results.

4.4 Organisational culture of the SAMHS
This theme refers to the way things are done in the SAMHS. As a military organisation, SAMHS has unique features which distinguish it from civilian organisations, for example, a specific code, rules and doctrines.

4.4.1 Challenges reported in formal military reports
The participants indicated that they reported their challenges to their superiors using the available channels and procedures and, yet, these challenges remained unresolved. Thus, they finish their deployment with the challenges unresolved and experience the same challenges when they are deployed again. The participants stated that they did not receive enough support from management. The challenges they indicated that they reported in formal military reports are illustrated in the following quotations:
“We try and raise our challenges each time we have meetings with our management. Like, sometimes it is difficult to give cover when you don’t have equipment and then we, we are told that the situation will be better, they are waiting for things from back home to be delivered that side and then, up until deployment ends, being promised ‘No things will be ok, we will deliver, we will deliver equipment, the situation will be better’ but you find yourself finishing deployment without equipment” [Participant 10].

“Uh, SAMHS, thing is when, when you are at De Brug [SANDF’s mobilisation centre for external deployments] where you do your mobilisation and preparation, they promise you a lot of things, you know, this and this and this, we’ll make sure that you get it on time and, whenever you experience any challenges, you must just, uh, call us but using your approved channels and then everything will be sorted out. The minute you get there, I just felt like they forget about you, like I said previously about the equipment and, every time when we have inspection, we need to borrow from a certain base just to make as if we have everything, but we didn’t really have everything because, after that inspection you return that. So what are you left with, basically, you’re not combat ready, in terms of medically and also operationally as a, as a soldier, you are not ready, and I feel like I personally didn’t get enough support” [Participant 14].

“You give feedback, during the staff visits you tell them. We have commanders, we report to them but yet they are still doing nothing”[Participant 7].

“They didn’t do anything. It’s still the same, even today even if I can tell you that I’m going for deployment today I’ll still find the same thing that I left in 2014” [Participant 7].

“…so what I can say is that, uhh, you go there and then you are expected to do with what you have and only to find that, maybe it’s being in a different country, so to say you have to comply with whatever you get because, even if you request or even if you complain, they will tell you that they’ve been ordering but then there is nothing that they can do”[Participant 9].
“... like you can even, you know, you go to the commanders and then try to explain the situation. They will tell you that there is nothing that you can do so, instead of going to the commanders, we ended up, like, supporting each other as colleagues – if you've got a challenge then you come to me and if I have a challenge then I go to them so that was the kind of support that I had. Otherwise some of the frustrations, you need support from home, you call, you know, just to get to hear that everyone is still fine and then it keeps you pushing” [Participant 9].

4.4.2 Tactical decisions that may affect healthcare

The participants also reported that, during deployment their commanders make tactical decisions that have a negative impact on healthcare provision. These decisions are made evident in the following quotations:

“My second one was in Sudan when we didn’t have ambulances at all, we had to use mambas [armoured personnel carrier], caspirs [armoured personnel carriers] there as ambulances but they were unserviceable. Apparently it's been a long time since di parkile [Sesotho: Parked] not being serviceable. So we had to use mambas, which is a transport that transports troops to the bush for patrols, so as a medic I have to ride in those mambas with them and then, first of all, it’s not an ambulance, if I had an emergency it was much of a hassle” [Participant 10].

“My safety was, eish … I myself had a bad experience especially about safety. Whilst I was transporting my patients in the mamba, myself, I got injured, by the mamba, and the worst part, like, when I got injured, like, the hatch fell on top of my fingers, the hatch of the mamba, and I broke two of my fingers I had closed fractures of two of my fingers. Nhe, as a medic, I didn't have assistance there because I myself was a medic in the bush for the troops, I’m getting injured, I was rushed to the base, in the base it’s only a sickbay with the doctor who can only assist with taking the pain away, like giving me a pain medication, that’s it, and then he, only thing that he could do was just give me a splint, and that was it. I had to wait to be taken to the level two hospital. I waited for two weeks for the chopper [helicopter] to come and take me to the level two hospital” [Participant 10].
“Eh, it’s more like, eh, the same when we are in South Africa, just outside is a different story because you have to cater for the people of the country that you are deployed to, even though the rules, somewhere, somehow, they don’t allow that so, most of the time, the challenge is you must get, eh authority, first before you treat the civilians, especially of the country that you are deployed to, so that becomes more of a challenge, but, when you help, eh, the fellow soldiers of our country South Africa, is not, eh, much of a hassle”[Participant 13].

I think we need to be given that platform of being in charge of ourselves because now they, as a paramedic, I was under, eh, so-called MTT commander which stands for military – oh, I forgot, but MTT commander and you have another one, it’s a colonel who is also in charge of the overall MTG commander, so it’s medical task group, medical team, ja [Afrikaans: Yes], MTT medical task team so I had a boss, mini boss and there was another one. So those people, they are not really, they don’t understand, they can have anyone being in charge of you, as long as it is a captain. I had someone who was working in protection, that person had no medical background, literally knew nothing, and then he’s supposed to stand up for me when they, uh, uh go to meetings and really…”[Participant 14].

“… they didn’t understand what I was there for, they don’t know my qualification, what are the type of skills that I have, they, just, they are used to having an OECP being there and, and doing everything so then they, because I was in a green area I didn’t even get to practise the advanced skills from the advanced life support part. So, ja, we need someone who is going explain everything, our roles and, ja, not to be just taken for granted by army people who literally know nothing about SAMHS”[Participant 14].

“Yes, training can improve. If you sometimes have more knowledge about the country where you go, if there more, for example; more reconnaissance is done in certain places where, sometimes, you must go and build a base, sometimes you find you send in soldiers to certain bases or people to certain bases or to go and pitch up a base, but they was not aware of the, the, the environmental health, uh, uh, hazards on the ground, for example, they have not done, maybe, samples of the ground, of the physical ground. So that means that some people.
get some sand worms or ring worms in the foot, or, sometimes, the, eh, they were not told, told, uh, about the certain poisonous plants in that area that also affect, affect like allergic reactions, like some of the, the, uh, some of the plants and then, sometimes, the water, water problems, water related illness, sometimes we don’t have those things on the ground because, because most of the time the environmental health officer is not part of the reconnaissance team when they go, so that’s why, sometimes, they are not told about, actually, those things on the ground” [Participant 16].

“My actual main concerns is actually our ambulances, our vehicles, other than that then I don’t have a problem actually, like our ambulances and if we can receive the, what you call, the medical equipment in time, like we are struggling to get a, what you call, the oxygen, the oxygen cylinders. They will tell you that the oxygen cylinders won’t fly and all those stuff and, to me, it is useless to have a casualty where you won’t have even just a mere oxygen cylinder and that is a main concern to me. If those kind of, like equipment, can be taken into consideration then I think ja” [Participant 4].

“Ja, you find, sometimes, you have a patient, nhe, not ness, not necessarily an emergency one, you have a patient and then you, as the health care provider, you feel that the patients deserve a day off, a day or two to recuperate, then they come to you saying they not supposed to get sick leave on deployment. What, what, what, so it, kind of, and then they’ll start pulling rank which kind of made it a bit difficult for me to do my work” [Participant 8].

“Ja, like I said, ehm, when you get there you find that you know there is medication but its minimal, the medication that is there, it’s meant for people who are consulting at the sickbays at the base. When you go out, they will tell you that you are only going, you only go out for a few hours and then you’ll be back so there is nothing that you need, not bearing in mind that sometimes you get stuck and then you have to stay overnight away from the base, eh, sometimes you get ambushed, for instance, nhe, and then still you can’t go back to the base and then some of the patients need medication right there and then ... “ [Participant 9].
4.4.3 Working in harsh environments

The participants emphasised that PECPs work in harsh environments during external deployments to provide EMC. The participants described their experiences working in harsh environments as follows:

"Ja, I mean staying, eh, 12 months, let me say you are giving a company, you are staying in a tent, a tent of 10 members … which is, let me say, 16 by 32 [tent size in metres] which is 10 members. The first thing you are overcrowded, electricity generators on and off, it’s hot, it’s a tent, there are flies all over the show. So those are the challenges, you go to the kitchen, there isn’t enough food at the mess because of, I don’t know, whose problem, logistics didn’t deliver so you use your own money to buy food. All those things so you must be really organised …to, to survive” [Participant 1].

“Yes, because one challenge was, eh, to get to the location of where the incident was, because the roads there are not as nice as here in South Africa. Yes, the tar road, you find it most of the time in town but, eh, not in rural areas because we used to travel to rural areas where the Prados [sports utility vehicle manufactured by the Japanese car manufacturer Toyota] that we were driving at high speed rolled. Then it was a challenge to get, get to the patients themselves so we had to carry our bags and walk a distance to arrive at a particular location where the incidents occurred” [Participant 13].

“Ok, my experience during external deployment especially, I was deployed in Sudan, so the area was very remote, it’s a very remote area very different from South Africa –, its dry, hot, population, lifestyle different, so, ja, the adjustment was a challenge and learning cultures, getting to know the language and, ok, ja, the military, we are provided with accommodation and everything according to the military standards. It was ok, probably because it was deployment so it was better than I expected, actually, because we had showers, we had running water though we had to fetch water, but it was a lovely experience somehow and …ja, I got to appreciate being a South African, especially being in that part of Sudan where seeing a house built with stones is a luxury, ja” [Participant 17].
“Mhh, all that I can start with is that the experience, you know, like it was a first time experience, like in a foreign country, like the terrain, like the people that you see At first it was very difficult, then also the change of the, the, the environment again, like that side again is very hot, you are used to the temperatures in South Africa but when you get there is very, is, is extremely hot, so it was, it was a challenge at first for the first, eh, two weeks it was, was all about adjusting, then also again the language barrier was a serious challenge but like, eh, as time goes on, as time goes by, like you get used to it and then you tend to adjust. You see, like you just take it and say, no, like now, at least, ja, is good, at least like we had a luxury of having water, the food was nice also... eh, the Sudanese, the way they operate is totally different to the way we operate but, all in all, like, it was a nice experience that side” [Participant 18].

“Uhm, ey there’s a lot [cough], ok, let me think of something else, uhm, the challenges that, uhm, we actually came across is, like, to receive food in time … nhe, because, especially, when is raining that side you cannot drive to go and fetch food to another side of the, eh, ja, its desert. When it’s raining the trucks and the vehicles get stuck along there so, firstly, you have to wait to the, for the rain to come a little bit down and, ja, is one of the challenges that I’ve experienced” [Participant 4].

4.5  Political situation during external deployment
This theme refers to the political state of affairs in the host country during the period of external deployment.

4.5.1  Political will of the host country
The participants reported that a lack of political will on the part of the host country often caused a delay in supplies and a lack of resources. They stated that sustenance and logistical flights were not given landing rights and that this delayed the arrival of supplies and resources. This was expressed as follows:

“OK, yes, there, we, we had a challenges because, eh, for us to be sustained, uh, those guys need, eh, flying rights, landing rights, and of which that, eh, lead us to get, eh, to use the [stuttering] resources which the, [stuttering] they were using that side so we couldn’t find our food parcels which contained our
cosmetics and some food which was our preferred food so we have to eat from that side, yes” [Participant 15].

“OK, SAMHS assist us, very good on, on deployments but, sometimes, there are also challenges, for example, when you deploy outside the country, uh, there’s not always, for example, flights available, sometimes you must wait. If you, for example, if you want to get medicine into a certain country you must wait for, for that peoples’ foreign affairs members to allow, sometimes, an aeroplane into the, the country. That’s why, sometimes, there are, sometimes, there are challenges because, sometimes, you get medic, uh, the support, uh, the supporting things like medicine or equipment, sometimes you get it little bit late, but that doesn’t mean SAMHS doesn’t support you. The things is on the ground, it stands at the airport but it can’t, for example; maybe land in that country because of the, uh, landing rights of certain countries” [Participant 16].

“… eh, like when it comes to getting the rations from South Africa, sometimes, it was a, a little bit of a challenge because, you know, like, eh, in Sudan you don’t just do things as you please like here in South Africa where you just get, eh, anything that you want. There, like, eh, eh, whenever we need to get, eh, our, our parcels from South Africa here you find that they tell you that there are no flights that are allowed to land that side, so, sometimes, also with the, with the support maybe, eh, eh, the things like the logistical things that we needed, it was also a challenge, like, to get because, like, eh, the Sudanese, the way they operate is totally different to the way we operate but, all in all, like, it was a nice experience that side” [Participant 18].

“Ok, like I said, the only thing that we were having challenges about it was, eh, medication, shortage of medication but we managed to deal with the medication that we had, so we were using what we have, like, for instance, let me just make an example with ops medics, uhm, you find that you have, you don’t have enough, eh, equipment or you don’t have equipment, you’ll improvise, so whatever that we were having that side, we used it because we were told that we have challenge with the plane to go from here to Sudan. Those eh, eh, eh, things that the Sudanese are doing, like, uh, there mustn’t be any plane in
because of these Ramadan things so, besides that …everything was fine” [Participant 2].

4.5.2 Civilian hostility

The participants reported that they were occasionally not well received by the local population of the country in which they were deployed. They further reported that some of the local population members sought to take advantage of their encounters with the deployed soldiers for financial gain. These sentiments were expressed as follows:

“That is anything, the patients are sometimes civilian patients, that is when it becomes tricky because in, for instance, one time with the military, vehicle accidents, one of the civilians was bumped of his bicycle and the problem with that is, uhm, you only have to treat emergencies but sometimes people can exaggerate the injuries, especially civilians, because they are looking sometimes for compensation especially when it involves military or United Nations vehicles so they can try to exploit the situation by even aggravating some injuries. So the only thing that you have to do because the, oh, another thing is the crowd also around the injured person is also taking, is playing a very big role, so when you do attend to certain things that is a problem and you need to have protection. Uhm, so, in certain circumstances it can be very volatile because the crowd can be, uhm, they can become very aggressive especially when there is real, a real injury then some of the members might only be on the spot for compensation they want. Always for them is money, even when someone is killed is money; money is the biggest big, big factor there. The thing that you must do is treat the patient if it’s an emergency and is life threatening, then evacuate the patient, because it is best to get that person out of that situation, uhm, coming to gunshot wounds, own experiences…only do the, if you do your basics right and from basic treatment” [Participant 12].

“I mean, it was terrible, even if you have to buy the medication you must go in there and then you are not allowed and you must go in and check what you need and then some way, somehow, because we are foreigners they were giving us less, eh, we were buying medication – very high, highly expensive, ja” [Participant 15].
“...sometimes the community will also deceive you, sometimes they will call you to come only to find out that there is a trap for you, so, like, we were told that we must not be close to the community there, we must just go there and assist them, like, for an example, if they need a school we can go assist them, maybe try and build a school for them, thereafter get finished. You see, we’ll not like, like we were not too close to them because those people, they can deceive you, you see, if they want something from you they will call you and then try and manipulate you”[Participant 18].

4.5.3 **Gaps between what the mandate authorises**

The participants revealed that there were often gaps between what the deployment mandate authorised. This posed a challenge to their ability to do their jobs effectively. Below are some of their views:

“Eh, it’s more like, eh, the same when we are in South Africa, just outside is a different story because you have to cater for the people of the country that you are deployed to, even though the rules, somewhere, somehow, they don’t allow that so, most of the time, the challenge is you must get, eh, authority first before you treat and the civilians, especially of the country that you are deployed to, so that becomes more of a challenge. But when you help, eh, the fellow soldiers of our country, South Africa, is not, eh, much of a hassle”[Participant 13].

“Uhm, ja, with the safety, what I can say is that, eh, you know, mos, like, we have different missions like, eh, the missions that we went there in Sudan, it was falling under chapter 6, you know, mos, chapter 6, is peacekeeping, and then, like, some of the countries that were there, they were falling under chapter 7 which is peace enforcement. So I felt that, like, there were cases that I felt that, eh, our safety was a little bit compromised because, like, eh, whenever you do a chapter 6 mission there are certain weapons that you are allowed to have and then, whenever you are doing a chapter 7 mission, you can have these type of weapons. So, for those countries that were in chapter 7, I felt that their safety was, was more secured, unlike ours, because, like, the places that we were going, it was very, very dangerous places, so our safety was little bit compromised that side. I can say that but, in terms of, eh, eh, preparations like, eh, eh, being battle ready, we were always ready for that”[Participant 18].
4.5.4 **Prolonged casualty evacuation times**

The findings reveal that PECPs often cared for patients for prolonged periods in the pre-hospital setting. This was as a result of the long distances travelled by road, curfews imposed in the deployment areas and waiting times to obtain authority for air evacuation. This is how they described their experiences:

“... whilst I was transporting my patients in the mamba, myself, I got injured, by the mamba, and the worst part, like, when I got injured my, like, the hatch fell on top of my fingers, the hatch of the mamba, and I broke two of my fingers. I had closed fractures of two of my fingers. Nhe, as a medic, I didn't have assistance there because I, myself, was a medic in the bush for the troops, I’m getting injured, I was rushed to the base. In the base it’s only a sickbay with the doctor who can only assist with taking the pain, like giving me a pain medication, that’s it, and then he, only thing that he could do, was just give me a splint, and that was it. I had to wait to be taken to the level two hospital. I waited for two weeks for the chopper to come and take me to the level two hospital”[Participant 10].

“...transportation, it’s a challenge, most of the times with own forces it’s very far from the base because we drive long distances to do your laers [military jargon defined in glossary], like to transport trucks and all that, so the challenge was the resources and transportation, mostly, ja”[Participant 17].

“...and then, like, it will take you two days to transport the patient to, to a hospital, you see, because the terrain and also the transport, because you cannot transport the patient from where we were situated with the mamba, for a distance of about 300 kilos [kilometres], you see, you will drive for 5 days. It was a challenge”[Participant 18].

“...sometimes you get stuck and then you have to stay overnight away from the base. Eh, sometimes you get ambushed, for instance, nhe, and then still you can’t go back to the base and then some of the patients need medication right there and then and then, when it comes to emergency drugs, unfortunately nothing”[Participant 9].
4.6 Resources
This theme refers to the tools and equipment military which PECPs require to perform their duties during external deployment.

4.6.1 Limited resources
The majority of participants indicated that they had been poorly resourced during external deployment and that they often lacked the essential lifesaving equipment that they required to do their jobs, and thus they had to improvise when providing EMC to their patients. In addition, the available equipment was outdated and some of it was damaged. There were also challenges involved in receiving equipment when ordering. PECPs also had to purchase equipment such as medication from their own pockets in order to provide EMC. They described their experiences as follows:

“Emergency Care Practitioner, they can, there’s nothing wrong with personnel, I will say, equipment, personnel, everything is fine, I will say equipment, if we can have equipment, I mean SAMHS without equipment is, is something else, we need equipment to do our work. So, you go to external deployment your, you, I’m going to find the same equipment that I saw 2013 or even before is still in there. It’s broken, we are fixing. So, I understand they say medical equipment is expensive but it’s a must have.., so, if we can get equipment then everything, I think, will be fine. Medical bags, you go there, I’ll find the same bag I was using 2011, not even 2013, I’m still going to find the same medical bag. I mean, if you can improve on equipment then everything is sharp, personnel wise there’s no problem” [Participant 1].

“I encountered a lot of challenges because we were using the ambulance that side that didn’t have equipment. The only equipment I had was my medical bag, with the medication I stocked mo [Sesotho: Here], here in South Africa before I left” [Participant 10].

“[Sigh] There’s a lot of challenges, there’s a lot of challenges, because the support we don’t get, especially logistically, we don’t get a lot of support. We use what we have and then we try most of the time to save the lives but there’s a lot, there’s a lot, we use old stuff. There will we write, also request, they will say we will bring, we will bring , that’s why some of the things we borrow to
other countries, there’s a lot of, there’s a lot of challenges, I don’t know if I must, like, specify, like [laugh]”[Participant 11].

“I was at Lubero [town in the province of Kivu in the DRC] and we get our medication at Sake [town in the province of Kivu in the DRC] so it was, it was a challenge and, besides the transportation part, uhm, you find that there’s no medication at all where we supposed to get our medication, like, at HQ. There was a point at which we had to buy from our own pocket as emergency medical care providers, including the doctor, we had to pop out some money, buy vacoliters and admin sets because we didn’t have but, otherwise we just, literally, medication and equipment, because when we do our inspection you find that we, we are supposed to have certain things at the sickbay but then we do not have and it’s not promising that we, we can get those things within the period that we are deployed for”[Participant 14].

“Medication, it was not really much of a problem in terms of buying because sometimes they, they gave the, the, the, what do you call this?, the pharmacist a budget and money like, he or she could go to Goma [city in the DRC] and buy, like, locally instead of having the medication being bought from South Africa but, otherwise, it is a long process to acquire some of the equipment. So, that was the biggest challenge that we used to have, because you feel, like, you are incompetent”[Participant 14].

“Yes, a big 1; challenge number 1. it was resources, limited number of resources that we had to use, most of the time we had to improvise, and transportation, because the terrain, it’s bad, transportation, it’s a challenge. Most of the times with own forces its very far from the base because we drive long distances to do your laers like, to transport trucks and all that, so the challenge was the resources and transportation … mostly ja”[Participant 17].

4.6.2 Unique casualty transportation
This study revealed that participants had to use combat vehicles to transport patients due to the shortage of ambulances. The combat vehicles are not suitable for patient care and are not marked with either the Red Cross or Red Crescent and, hence, do not
comply with the Geneva requirements for the transportation of patients. Their experiences were described as follows:

“My second one was in Sudan where we didn’t have ambulances at all, we had to use mambas, caspiros were there as ambulances but they were unserviceable, apparently it’s been a long time since di parkile [Sesotho: They are parked (not being serviceable)]. So we had to use mambas which are a transport that transports troops to the bush for patrols, so, as a medic I have to ride in those mambas with them and then, first of all, it’s not an ambulance. If I had an emergency it was much of a hassle” [Participant 10].

“Even the vehicles, sometimes the vehicles, you find one vehicle there, other vehicles are broken and then you must utilise other means of transport when you are there, not even your specific marked medical vehicle, you must use the combatant’s vehicle to move around” [Participant 3].

“OK, for starters, the vehicles that we were using, external deployment, it’s not, they are not conducive for patient care because we travelled, when I was deployed, we travelled in the same vehicle as the infanteers [Infantry troops] and then it was a mamba, it’s a very small car for you to, even, even if I, should I, if I had a patient it was going to be very difficult for me to treat that patient, especially if it was a lying patient it was going to be very difficult because there is no bed there, it’s only sitting and you in the same space as their weapons, their rifles and all that. So, they could start with the vehicles, maybe improve equipment, equipment changes, mos, it gets improved as time goes on, maybe they should also improve the equipment as it goes, as technology evolves” [Participant 8].

4.7 Human resources
This theme refers to military PECPs as employees of the SAMHS and their issues during external deployment.

4.7.1 Mental stress
The participants reported that external deployment is extremely stressful. They also reported that they became homesick as they missed their families while on external
deployment. However, they also reported that communicating with their families through social media and telephone calls, the support they received from colleagues during external deployment and sport and recreation helped to relieve both mental and emotional stress. This is how they described their experience:

“The only problem that I have with this deployment is that, most of the time, medical personnel are not debriefed. Everybody else in incidents, sometimes, are debriefed and medical personnel are looked as people who can handle everything and that is a concern. It is not now, it is a few years going on. Medical personnel are seen as superheroes so, whatever, they can handle everything because they are just used to such things, trauma, they are used to certain things there. They don’t know the effects that could have on people and that, I think, can hamper later on in the military experience or in their lives. They can, some of those things can trigger again because of not being debriefed so that is the one concern I have for the deployments of medical personnel” [Participant 12].

“Obviously you miss home, first of all, uh, I left my daughter, so I was missing her very much but then the only thing that can help you to cope is establishing, like, friendship around, like having friends and keeping busy, because, most of the time, you are contained within a certain area so you not allowed to just gallivant and go out and have fun. So you need to make it happen for yourself and call home as much as you can for those people who love you to keep you grounded”[Participant 14].

“You know, deployments are not easy, make no mistake, I know ukuthi [IsiZulu: That], ja, ey, we do get an extra money but deployments are not easy, they are frustrating. Remember, you are away from work, I mean, you are away from home, you miss family, blah, blah, blah, but, in a nutshell, social media, it can take your mind off things, right?. Sometimes, yes, the people whom you work with, remember we are working with the infantry personnel and they are human beings and human beings can be a headache sometimes … but, ja, running, jogging, playing sports, watching TV, social media, it helps to a certain extent to alleviate the stress, if I can use that word” [Participant 6].
“Aah, the coping mechanism there, you know, you are a soldier you have to switch on, but I, again, like in order for you to survive, because you must remember you are far away from your family, so, like, calling your family makes life better, Whatsapping [social media platform] them, using Skype [video messaging platform] there, seeing them, it was good, sometimes when you get parcels from them, it was a good motivation also, and then also socialising there, playing sports, eh, taking part in activities there, you see, because, like, sometimes if ever you can just be in your room alone there you’ll be stressed because the environment there is very different to the one in South Africa” [Participant 18].

4.7.2 Lack of trauma care experience
The participants reported that they were not exposed to much trauma during external deployment as most of their patients tended to suffer from minor ailments and required primary health care. These were some of their views:

“Training can be improved, you can improve, like these, eh, these young guys that qualify now, it’s fine, their qualifications they are right, it’s just their mindset, discipline, all this small things, just to channel them to do the right thing because you’ll find you go there, you go on deployment, you find this guy, he knows his work, but the thing, mentally, he is not mentally fit, maybe he’s scared or he’s never been exposed to, to, to some things, when things happen he is afraid. This guy, you can see, he is afraid of blood, if he sees a, a limb standing there he’s just scared, so it’s just to let these guys have …I would say, more practice just for them to be exposed, especially in the military. In the military, we know because we work in safety, you go to Madimbo [South African Special Forces training centre at an undisclosed location], you know the course is going to be presented but safety comes first so it’s not like you are exposed. So, in the deployment area you see there is no safety there, you see, you talk about the real thing. So, you’ll find out somebody has been working as a ops medic for long but he didn’t really see the real thing happening so when that thing happens, you see, it’s chaos, this person is, he’s scared, he knows what to do but he’s just scared. So mental exposure we don’t have. If we can be exposed, especially the ops medics, I know nurses they are working in, in the
sickbay, the hospital. They go to theatre, all those things but especially ops medics, they are not exposed” [Participant 1].

“Eh, I was deployed in Sudan, eh, DRC also Mozambique and then in Sudan it was only our guys and then, most of the time we, we conduct patrols, eh, long distance patrols and then most of the incidents that I got in were minor ones, not bigger ones, like, eh, not so big, not so big ones the whole time. The whole, like, eh, deployment that I conducted in, in Sudan, then we do only minor ailments like sick reports but the, let’s say the, how can I put it …the injuries, let’s say the injuries, no, I never attended them in, in Sudan” [Participant 11].

“It was more like on a primary health care, as I’ve said I was not in a red area, eh, like normal colds and flu’s, and just diarrhoea, but there was lot of malaria cases, so we had to deal, I had to deal with that, and every now and then someone playing soccer will injure his or her ankle but there were no major like, eh, pre-hospital care that I had to render that side, no” [Participant 14].

“Uhmm, pfew, in most of the time, kuba [Isizulu: Becomes] just normal sick reports, I’ll be honest, where someone complains about flu, headache, runny stomach, blah, blah, blah. But it happened minor cases whereby I met, like, trauma, I’m talking about gunshots, but that almost, maybe, accounts for 5% of all the patients that I’ve seen, mara [Vernacular slang: But] basically ama [IsiZulu: plural] patient wami [IsiZulu: My] amaningi [IsiZulu: A lot] it’s just, just basic sick reports, ja” [Participant 6].

4.7.3 Task overload
The findings of the study revealed that PECPs are overloaded with responsibilities during external deployment. PECPs provide EMC to the SANDF, local population, rebel forces and foreign military forces while, during external deployment, they provide EMC without an assistant. In addition, the PECPs not only provide EMC but also primary health care and counselling. Below are some of their views:

“OK. During external deployments, uhm., you get more work on primary health care, uhm, not a lot on medical emergencies. The medical emergencies that we do get, uh, is anything from accidents to gunshot wounds to or psychological
emergencies [laugh]. So, in a nutshell, when you work you work hard, sometimes you don't work, ah, a lot but you are always on standby for the unforeseen. But the experience there is things that you cannot actually replace for anything else, is not something, uhm, that you do in civilian life outside when you in the country”[Participant 12].

“Ja, eish, I was, supporting, in the external deployment we support civilians and our own, eh, military people and also the other military guys from other countries. Eh, in my experience we, we provide the same, eh, ethics or, eh, we provide the same ways as we support our guys – there no different challenges”[Participant 11].

“Mhhhh, we should, I feel it is taken as in the normal, eh, what you call natural place, how do I, how can I put it, we should take the deployment, the emergency care like here when we are here in South Africa we should consider factors like the, your distance, your scarcity, the population itself, like because we dealing with, like, maybe they come to the force that you are going, like you are preparing for that platoon that you are going to supply emergency care for, whilst, if you encounter an emergency within the population, you have to attend to them and, like when you go to, sometimes, you going to another area there’ are those check points and what, you’ll get people standing there, they’ll say for you to pass here you have to take care of these people, you’ve got people who are injured, who are ill and what , so they call a medic, you have to look for that. So, the resources that you have they’ll be used up for there, so we shouldn’t only prepare for the certain platoon that we covering, so it should not be treated like an ordinary, everyday lifestyle, I don’t know if I make sense, OK”[Participant 17].

"I think the, the, because us medics on the ground, we are few, maybe the infanteers, the SAMHS can also., emphasise that, eh, some of the infanteers, at least they have BAA, so that, if maybe it’s only me going from a patrol at least there is one person who can understand me if I need help, like we know we’re are on the same page, not only first aid because first aid …it doesn’t help that much if you, you encounter problems alone on the scene”[Participant 7].
“Uhm, personnel to start with, personnel, the, the, there has to be, like when you being prepared you are told about the SAMHS doctrine, you have to be, have enough manpower to prevent fatigue, to start with, because, like you can’t strain yourself and expect again to deal with patients. In that case you put yourself in danger, you also put the lives of those who are entrusted in you in danger, so reinforcement, like the personnel” [Participant 9].

4.7.4 Training expectations
The participants reported that the training that they receive in South Africa does not fully prepare them for the terrain and the situations that they encounter during external deployment. Some of the participants reported that the training is not realistic as it does not include how to improvise when faced with equipment shortages and it also does not cover prolonged casualty evacuation. They expressed the following views:

“How can it be improved? I feel, ok, mmmh, in my field I can suggest that, maybe before we deploy we be given, maybe a, a refresher for paramedics, for OECPs, for ECTs to get a, eh, retraining and also to teach us how to deal with situations. Like when you get that side the scene sometimes are not the same as here, we encounter different situations compared to here, back at home, so if we can be trained re, like, according to what is happening that side, and according to the terrain that side then it will be better because we will have better skills to cope with situations that we encounter that side – not only to be trained about things that are happening here, like here at home only” [Participant 10].

“The … I think the training is not much they can improve but I think the people who are doing training but I’m not sure if they go straight to the place or they always refer. They send people to bring them photos or something because, most of the time, is one thing, one thing, one thing they and then, as you know, because in life there’s changes – like this year will not the same as next year. Because they say, I don’t know if it’s their own way, their using their own methods because they take long to change the training. Let’s say, for example, we are doing patrols as a group walking and then they will do that, do that, do that but, at the other side is not the same, you are using vehicles and then is a dense, a, a, forest, they don’t take you on that specific, like tell you that where
you are going is like this, like this, yes, I don’t know if I’m explaining clearly, for example, another example is that they will drive you on, on the road on the right hand side, they just tell you that that side you going to drive on he left but, when you get that other side to drive on the left is not the same as they will have taught you is a little bit difficult to adjust to the other side. But it’s not much things that they can change. Training, I think is, is relevant and is helping a lot”[Participant 11].

“As a ops medic concerning ac, eh, external deployments, sometimes you find out that the procedures or the situation doesn’t allow you as you was taught in class about what is happening because each incident or deployment is unique, on its own”[Participant 16].

“Mmmh, ja, according to my deployment experience, improving the training, it must be more realistic. Like, ok, I know we create scenarios with them but we do it, like within that time when everything is accessible so, sometimes, maybe we should create scenarios where you have to improvise like you see with BATLS and BARTS. You know you are doing that run around in the bush there, there’s shooting, there’s patients, you take the patients already to that field hospital that they have created. Everything is there, maybe that’s how it’s supposed to be, however, in the deployment it’s not like that, like the distances covered, eh, and all those things. I think they should be realistic in applying the scenarios, I’d say so”[Participant 17].

“Well …ay, I don’t know, they say they train us for war, but when we got there it was, I don’t know if relaxed is the word that I should use, nhe, but it was none of the things that we did during that training ever. It wasn’t useful to me, to be honest, because we had, we didn’t carry rifles, we didn’t carry those big bags, the H frames [combat backpacks], we didn’t carry them, there was no need for them during deployments so it was, I don’t want to say useless but it didn’t, I didn’t show any, how can I say it, mara, it wasn’t useful, but it wasn’t useless, but it didn’t come in handy. Now I’m talking military wise now, not medical wise” [Participant 8].
4.8 Safety

This theme refers to the protection of military PECPs against risk, danger and injury during external deployment.

4.8.1 Inadequate guarantee of safety

The participants reported that they did not feel safe during external deployment. They indicated reported that they had sometimes experienced hostility from rebel forces during external deployment. They also reported that, in some instances, the rebel forces are equipped with a higher calibre of weapons and this gives them the strategic advantage. They shared the following views:

“Sho, the safety obviously is not guaranteed, even when we are doing, eh, mobilisation in De Brug, they always emphasise; the safety is your own safety, is also a safety for a next person because, obviously, you are going to a foreign country and the, yes, there’s a lot, ja, because the other guys there they don’t have, they, they don’t like, they’re not formal soldiers, they do whatever they want, they can point a gun at you, anytime a weapon at you, anytime, iyo. One incident, I think it was, I can’t remember the year, we were patrolling and then suddenly this rebel just climbed in top of the mamba and was, like, pointing his weapon at us. But we did, eh, did our own, eh, movements that we are trained to do and then luckily we go, we survived, the guy didn’t pull the trigger. Oh, eish there’s a lot, cross fire, I’ve been in cross fire in Mushake [town in the DRC], the, ah, the government soldiers fighting with the rebels treating their own patients, forcing us to treat patients. Sho, safety is not guaranteed. I always say what I can say but, luckily, you can come back safely by means of a, by means of, by mercy of God anywhere [laugh]” [Participant 11].

“Uhm, I can say our safety was jeopardised because, ah, we were having, ok, our weapons were under their, how can I say, oh, ours, we were having smaller calibre of weapons than the other parties or than the rebels themselves because, eh, there is a weapon we call it 12, 7s which is of more calibre and so, when the enemy is operating that, first thing you have to take cover and later you’ll think of getting out of your vehicles and then, ja. So, but, eh, the, we were safe because of our kind of training we are doing in the military because those
guys, they are not, eh, well trained because they are just taken from their homes and taken to the bush, yeh”[Participant 15].

“Ya, the challenges there, like, whenever I remember this other day we, we had 3 patients. I was the only medic on scene, we were ambushed there and then we had 3 patients. Out of those 3 patients I had 1 p1 and 2 p2s, you see, and then, like, it was a challenge because I was the only medic, I was rend, I was rendering a service to a section and then we got ambushed in that section and then we had 3 casualties”[Participant 18].

“Mmh, Ok, my safety, I can say I was deployed with 7 SAI [acronym: 7 South African Infantry Battalion] and it was for the first time with 7 SAI and I heard, like, ok, 7 SAI, with 7 SAI you can relax, they are highly trained and there is a platoon of recce [abbreviation: Reconnaissance], they call it 9-0 and, where I was based in Khartoum [capital of Sudan], it was us with them. So, my safety I felt, like, I’m with them, I’m safe. We only started being worried when we just in the middle of the night and then you be hearing gunshots, you don’t even see where they coming from, then people will be screaming, stand two, stand two then you have to and then there’ll be people firing from nowhere and then you just have to be, you just have to prepare and then, ja from a safety point of view, I felt safe”[Participant 5].

“Safety is, is, is another issue. Safety is not confirmed but, eh, I will say, South African contingents, they are well organised and well trained, but safety everywhere is not guaranteed. But, in foreign countries, it is not guaranteed that when you go to, to, to deployment you will come back or you will see the following day. It is just like that, it’s just a deployment is like that but the wellbeing as well. I won’t say its 100%, the wellbeing of soldiers deployed externally. We can talk about food, shelter, the ablution blocks …they are not 100%, is tents the toilets, it’s just a chaos, the kitchen, the food that that they are preparing there, I would say they are not 100% food that a normal person must eat [cough] but, ja, the days goes by and …we come back”[Participant 1].

“Ja, that’s basically it, so I felt as though hore [Sesotho: That] the safety there for us is really compromised, not because, not medically wise alone, even for,
like, encountering like di [Sesotho: The] rebels out there because I experienced an ambush as well by the people there, one of our troops got shot, we had nothing to do, we like, eish. our safety was compromised, I don’t know how to explain this because we couldn’t get out of our own mamba to assist the people who were being shot outside in the other mamba – just because why, we have to remain in the cars …and then that was the only place of safety, the car itself” [Participant 10].

“Eh, by, why I’m saying the safety, it’s not, we are not safe as I mentioned earlier. You cannot take a medic and pilots only to the field where you staying. There were rebels during the night, we were fetching patients who were shot by the rebels but, yet, you are saying medics and pilots must go there to fetch patients without protection– driving patients from airport to town it will be an ambulance only and you, driving civilians from the airport to town, medics without protection, still it’s not safe”[Participant 7].

4.9 Summary
This chapter presented the analysis of the data from the interviews and the themes that emerged. The themes included the organisational culture of the SAMHS, political situation during external deployment, resources, human resources and safety. Table 4.1 contained a summary of both the themes and the sub-themes. Chapter 5 contains a detailed discussion of the study’s findings.
CHAPTER FIVE

DISCUSSION

5.1 Introduction
The discussion of the results is guided by the research question cited in chapter one and is arranged in line with the theoretical framework of organisational climate as well as the themes that emerged from the analysis of the interviews. The literature that was cited in the previous chapters as well as new literature is incorporated into the discussion in order to contextualise the meaning of the themes and subthemes that had emerged during the data analysis.

5.2 Overview of the research discussions
The aim of this study was to explore and describe the lived experiences of Gauteng based military PECPs when providing EMC during external deployment. The following five major themes were identified, namely:
Theme 1: Organisational culture of the SAMHS.
Theme 2: Political situation during external deployment.
Theme 3: Resources.
Theme 4: Human resources.
Theme 5: Safety.

These themes and their sub-themes are interpreted below and authenticated using both pertinent literature as well as the organisational climate theoretical framework to support the interpretation of the findings.

5.2.1 Organisational culture of the SAMHS
The findings of the study revealed that SAMHS is characterised by a military organisational culture. The military organisational culture of SAMHS was identified as having a direct impact on the experiences of PECPs during external deployment and also a negative impact on the quality of the EMC. According to Gogoescu (2014), a military organisation has a specific code with distinctive features which distinguish it from civilian organisations and also rules and doctrines which serve as proof of the organisational culture of military institutions.
The participants in this current study described the use of both formal military reports and the available military channels, such as meetings and a channel of command, to report their challenges to their commanders. A study by Rizescu and Stroea (2009) reports that military organisations are based on structured leadership which is channelled from the bottom to the top, and a command chain which is structured in accordance with the centralisation principle. This presents the central structure of the determination and development process implemented in order to expand organisational actions. Pertinent information is transmitted from top to bottom as the competence to initiate action is limited to the base of the hierarchal structure.

The majority of the participants verbalised that, although they communicated their challenges to higher authority using the proper channels, they were of the opinion that the issues had not yet been resolved despite their commanders assuring to the contrary. Those participants with six years and more experience reported they had experienced similar challenges to those they had encountered on previous deployments although they had reported them during every deployment. The military organisational culture includes persistence and perseverance and thus the participants indicated that they had persevered despite unresolved challenges until deployment had ended and that this led to anger and frustration (Gogoescu 2014). A study by Mark et al. (2009) concurs that challenges during deployment are usually reported in formal military reports. However, these reports often do not address the in-depth, detailed experiences of military personnel. The study further stated that issues reported in these military reports are not codified and, hence, may not affect policy change.

The participants in the study also reported that, during external deployment, some commanders make tactical decisions that impact negatively on the provision of healthcare. They also indicated that military commanders also sometimes use their military rank to overrule medical decisions. This may have an adverse effect on the healing process of the ill and injured, thus delaying the return of injured soldiers to battle.

The participants also stated that they sometimes had to delay the provision of lifesaving EMC intervention as a result of having to obey orders and perform ambush drills on the instruction of the platoon commanders during combat and patrol. Furthermore, PECPs have to obtain authorisation in order to provide care to both their
own injured soldiers during an ambush as well ill and injured civilians during patrols and that delayed healthcare provision.

A study by Chapman et al. (2009) revealed that, due to the unpredictable and austere quality of deployment when providing EMC, military PECPs may be exposed to tactical decisions that may affect healthcare. These tactical decisions are intended to preserve the life and safety of other uninjured soldiers. Chapman et al. (2009) further stated that military PECPs serve a dual role, namely, that of soldier and PECP. Furthermore, a study by Ben-Abraham et al. (1999) highlighted that not only is EMC provision during deployment essential for patient outcomes, but it is also essential in terms of realising military objectives by enabling military commanders to have available a healthy combat ready force to engage the enemy.

The participants deployed as paramedics reported that, during external deployment, military commanders did not understand the different tiers of EMC and this often resulted in role ambiguity between them and the PECPs registered as OECOs. They further reported that commanders often did not understand their capabilities. A study by Sigri and Basar (2015) concurs that, during peacekeeping missions, PECPs often experience hardships such as role ambiguity. This may result in a lack of effective delegation to and utilisation of PECPs during external deployment.

It was reported that the participants usually lived in harsh conditions during external deployment. They also provide EMC in remote areas with a harsh terrain, such as deserts and mountains, as well as adverse weather conditions. Sigri and Basar (2015) concur that military PECPs often encounter physically remote locations while Chapman et al. (2012) also attest to the fact that PECPs experience harsh environments during external deployment with these environments resulting in challenges in relation to patient access and delayed EMC provision.

### 5.2.2 Political situation during external deployment

The findings of this study reveal that the political situation in the host country during external deployment may have a direct impact on the provision of EMC. The findings further suggested that, when the host country offers little or no political support to the mission, the means provided to peacekeepers to successfully complete the mission are unsuited to the conditions on the ground, thus creating challenges for the
peacekeepers. A study by Dandeker and Gow (1997) concurs that the overall success of a peace support operation depends on both diplomacy and political momentum.

A study by Kime (1996) found that peace support operations are often conducted in order to realise political objectives determined on a diplomatic level and aim to support diplomatic efforts to restore and maintain peace in conflict areas. Dandeker and Gow (1997) maintain that the decision to deploy a peace support force is usually made either by a state under pressure or by international organisations. They further suggest that intervention by international organisations is often triggered by the media exposing humanitarian crises and human rights violations and that the only diplomatic solution is then to deploy a multi-disciplinary, peace support force. These operations are conducted under guidelines and boundaries set out by the UN, AU, rebel or combatant forces and other parties involved.

This study has also revealed that the guidelines and boundaries set out by the parties involved in a peace support operation are, at times, unsuited to the conditions on the ground, thus creating challenges for the peace support force and, consequently, challenges in respect of the provision of EMC.

The participants in the study reported that, during deployment in Sudan, there had been a lack of political will and that this had delayed the delivery of resources and supplies to the peace support force. Furthermore, sustenance flights were often not given landing rights and this delayed much needed resources and supplies. According to Dandekar and Gow (1997), a lack of political will presents an obstacle to a peace support force achieving its mandate during a peace support operation. The participants also reported that, during Ramadan, aeroplanes were not permitted to fly in the Sudanese airspace. A study by Sigri and Basar (2015) noted that, during external deployment, deployed military personnel experience hardships owing to a lack of knowledge of foreign cultures, including religion.

The participants in the study also reported that they were not always well received by the local population during external deployment. Sigri and Basar (2015) concur that, in addition to the hardships of external deployment, military personnel, including PECPs, may also encounter resistance and a lack of cooperation from the civilian population. Some of the participants also reported that the local population sometimes sought to
take advantage of the peace support force personnel for financial gains. This may, however, be the result of economic stagnation, unemployment and poverty (Buhaug and Urdal 2013).

The participants also reported that, although they have a mandate to provide EMC to the SANDF, peace support forces from other countries and civilians who are critically ill and injured, they are sometimes required to seek authority from their superiors before providing EMC to civilians. This delays the provision of EMC and decreases the quality of life of the local population who are probably already experiencing the effects of a collapsed health care system. The participants who had been deployed to Sudan also reported that, since the mandate of their mission was authorised as a chapter VI mission, the militants had a higher calibre of weapons as compared to those that they were allowed to use during deployment, with this resulting in the militants having an unfair advantage over peacekeepers during contact. According to Bialke (2001), during chapter VI operations, peacekeepers are armed but use weapons purely for self-defence. Bialke (2001) also found that peacekeepers have no mandate for an offensive attack and are often outgunned by the parties they are required to observe and discourage from being hostile. According to Dandekar and Gow (1997), challenges during a peace support operation arise if there is a perceived inconsistency or lack of clarity in the mandate and also when there is a gap between what the mandate authorises, what works given the conditions on the ground and the means provided to peacekeepers to achieve the mandate. This may create frustration and fear and increase both morbidity and mortality on the part of the outgunned peacekeeping force.

The participants shared that they often cared for patients in the pre-hospital setting for prolonged periods of time. PECPs often have to transport patients over distances of approximately 300 kilometres (KM) by road and this may take up to five days because of the terrain, the political situation and imposed curfews. Sigri and Basar (2015) reported that military PECPs are required to carry out their tasks in unstable, dangerous and challenging environments. Some of the participants also reported that they have had to wait for as long as two weeks for patients to be evacuated to a definitive healthcare facility. Chapman et al. (2012) agree that the known experiences of military PECPs include prolonged casualty evacuation times.
5.2.3 **Resources**

The findings of this study revealed that PECPs are often poorly resourced during external deployment with resource constraints being identified as an obstacle to their providing EMC to ill and injured patients’ during external deployment. A study by Sigri and Basar (2015) ascertained that operational resources such as healthcare equipment are often scarce during external deployment. Similarly, a study by Chapman *et al.* (2012) found that the known experiences of military PECPs during external deployment include resource constraints.

The participants in this study reported that they often did not have sufficient equipment to perform their duties. According to Bialke (2001), it is the responsibility of the deploying country to equip its soldiers adequately. Furthermore, the participants reported that the available equipment is often outdated and some is damaged. This does not enable PECPs to perform their duties effectively and efficiently. Similarly, Mark *et al.* (2009) also found that resource constraints are a common challenge experienced by military PECPs.

The participants indicated that PECPs often had to purchase equipment using their own money to enable them to provide EMC during external deployment, for example, they purchased lifesaving medications from local pharmacies in order to provide EMC to their patients. This signifies the determination of the PECPs to provide military EMC to their patients despite their circumstances. The participants also reported that, during inspections, management would borrow equipment from other bases to display in order to deceive the inspectors into thinking that they were fully equipped. However, this practice of borrowing equipment delays the supply of equipment to mission areas because senior management and policy makers believe the soldiers on the ground are fully equipped.

The participants described how they sometimes had to use combatant vehicles for casualty transportation. These findings are similar to those of Chapman *et al.* (2012) who also found that PECPs use unique casualty transportation during external deployment. PECPs also sometimes have to use combat vehicles which are not marked with a Red Cross or a Red Crescent due to the shortage of ambulances which, according to them, is as a result of poor maintenance. According to Perrin (1996), when PECPs do not use a vehicle marked with the Red Cross or Red Crescent, they
may not be protected as it is not possible to identify them as medical personnel. Furthermore, the PECPs lose protection under the Geneva Convention as combatant vehicles such as mambas and caspies have heavy weapons mounted when in the operational areas. Using such vehicles is in violation of the responsibilities of medical personnel according to the International Committee of the Red Cross (ICRC) of 1982 and Geneva Convention which stipulate that light weapons for self-defence only may be carried by medical personnel. The participants also reported that these combat vehicles are not designed for the management and evacuation of casualties and thus they do not provide a favourable environment for patient care nor comply with Geneva Convention requirements in respect of casualty evacuation.

The financial constraints and budget cuts that the SAMHS and the SANDF experience may be a contributing factor to the lack of resources. However, despite the financial challenges, South Africa. Department of Defence (2014) asserts that military PECPs in South Africa are becoming more mobile over remote geographical areas in order to fulfil the SANDF mandate and meet military objectives.

5.2.4 Human resources

This study highlighted that PECPs work under stressful conditions during external deployment. Studies by Lewis et al. (2012) and Ben Abraham et al. (1999) also noted that military PECPs provide EMC under stressful conditions during external deployment while Langston et al. (2007) found that military PECPs were extremely vulnerable to mental health disorders due to the high risk of exposure to traumatic events during external deployment.

The participants in this study reported feeling homesick during external deployment as a result of being away from home for a prolonged period of time. They also indicated that calling home and using Skype to communicate with their loved ones brought relief and eased their anxiety. Deployment often has an adverse effect on the deployed military personnel and their families. In view of external deployment being an abnormal environment it is normal for military personnel to become stressed. Communication is an integral component of coping mechanisms and forms the cornerstone of the support services that are intended to support soldiers and their families during external deployment (Lanigan 2008).
The participants in this study also revealed that they engaged in exercise, sports, watching television, social media and communicating with their loved ones as these activities provide a means of stress relief and coping. Recreational programmes, parcel services and means of communicating with families are made available for those who are deployed to ease the stress on both the soldiers and their families (Lanigan 2008).

The participants reported that they were required to provide EMC, primary health care and counselling during external deployment. Kennedy (2016) concurs that, during deployment, military PECPs also have to perform routine tasks such as primary health care to treat minor ailments. It appears that patients suffer more from minor ailments than trauma and injury and thus they require primary health care more than they require trauma care. Chapman et al. (2012) indicated that a lack of trauma care experience is a common occurrence for military PECPs during deployment. This may, however, result in the deterioration of the military PECPs EMC skills.

The participants also reported that they are overloaded with tasks when providing EMC during external deployment. They are not assigned a skilled assistant during patrols and this, therefore, results in their having to care for the ill and injured without an assistant. In addition, they are also required to provide EMC to the SANDF, local population, rebel forces and foreign military forces, thus further overloading them with tasks. McNally et al. (2012) maintain that PECPs must be deployed in teams of two OECOs, an ambulance and a driver per platoon. However, this is not the case in reality and results in a lack of medical leadership and teamwork as there is little or no task distribution. This results in task overload and a decrease in positive patient outcomes in those patients requiring EMC (Hunziker et al. 2011).

The participants in this study revealed that training does not fully prepare them for external deployment. They stated that training is often not realistic as it does not prepare them for the terrain and for situations encountered during external deployment as well as how to improvise. PECPs operate in hostile environments with poorly defined boundaries amid ongoing armed conflict. In their study Sigri and Basar (2015) noted that, when military personnel are not adequately trained in multi-dimensional peacekeeping operations, this results in challenges. Deploying inadequately trained military personnel may jeopardise the safety of personnel and also compromise the success of the military operations.
5.2.5 **Safety**

The results of this study revealed that PECPs have little or no guarantee of safety during external deployment. According to Johnson (2015), South African military PECPs are deployed in areas beset with unrelenting armed conflict, thus resulting in insufficient safety assurances.

The participants in this study reported that they felt safe during enemy contact at the base but not during patrols. They reported that they had experienced hostilities from rebel forces during patrols. They also reported that, in some countries, the rebel forces are armed with a higher calibre of weapons as compared to the weapons carried by the SANDF and they felt that their safety was being compromised. Similarly, Sigri and Basar (2015) established that PECPs encounter adversities such as ambushes, sniper fire, landmines and continuous exposure to death during external deployment. Furthermore, Dimitrova and Nichev (2011) found that militias often use violence to try to sadistically seize humanitarian relief and weapons from peace support operations forces and civilian humanitarian relief organisations in order to supplement their resources by ambushing humanitarian relief and logistic convoys and, hence, endangering peace support forces and military PECPs.

Although this study was not about the attitudes of the PECPs, an element of attitude was identified in the responses. This did not indicate an actual fact but may have signified that PECPs often do not trust the locals during deployment. This may, however, be addressed by more interventions during pre-deployment training.
5.1 Conclusion

This is the first study to explore and describe the experiences of South African military personnel during peace keeping and peace support operations and also the first to explore and describe the experiences of South African military PECPs during external deployment. Thus, the study contributed to the existing body of knowledge on operational military healthcare research in South Africa. In order to archive the aim of the research study I posed the question; what are the lived experiences of PECPs working at SAMHS in Gauteng when providing EMC during external deployment?

In order to answer the research question the study was required to realise the objective of describing the experiences of PECPs working at SAMHS in Gauteng when providing EMC during external deployment. The study described the following experiences of PECPs working at SAMHS in Gauteng when providing EMC during external deployment:

The participants reported that they often experienced anger and frustration as a result of the organisational culture of the SAMHS. This anger and frustration arose as a result of the reports that were forwarded to higher authorities using the recommended military channels but that the challenges cited in such reports were usually unresolved before the next deployment. They also indicated that, in some cases, a non-medical qualified commander was appointed to lead the deployed team. These commanders often overruled medical decisions based on their military experience and not on EMC experience.

In some instances, the participants reported a lack of political will in countries such as Sudan. They also experienced resistance and a lack of cooperation from the local population. In addition, the PECPs also experienced the impact of providing EMC within the context of a collapsed healthcare system with this resulting in both delays in casualty evacuation to definitive care and prolonged casualty evacuation times.
Working in harsh environments with limited resources is a challenge experienced by military PECPs worldwide. The participants reported that they attempted to improvise by buying medications using their own money to improve service delivery. They also cited having to use unique casualty transportation to transport casualties through the use of combatant vehicles not designed for patient transportation.

The study also revealed that the military PECPs experience of working under stressful conditions during external deployment increased their vulnerability to mental health disorders. They also cited feeling homesick during external deployment. In addition, they were exposed to a lack of trauma care experience which could result in the deterioration of their EMC skills. They further experienced task overload during patient treatment as they were usually the only skilled EMC providers when treating patients in the field. Furthermore, military PECPs sometimes experience hostile action such as ambushes, sniper fire and landmines from the rebel forces.

Among the OECOs, ECTs and paramedics there appeared to be problems in relation to task delegation. This happened because at times the non EMC qualified military commanders did not understand the role of the PECPs, resulting in the underutilisation of their skills.

In terms of the theoretical framework of organisational climate, the study findings indicated that the Gauteng based military PECPs interact well and receive a high degree of group support from their co-workers. This decreases the morbidity and mortality rates of their patients during external deployment. The findings further suggested that military PECPs are often under inadequate leadership during external deployment and that this impacts adversely on patient outcomes. In addition, they experience a low quality of work life, which negatively influences the quality of the EMC they provide during external deployment. The above mentioned may result in a low rate of service delivery by military PECPs and this may have an adverse effect on the external missions conducted by the SAMHS and the SANDF.

5.2 Limitations of the study
Military PECPs are not an easy group to research. It is difficult to access them as many are always either on internal or external deployment, deployment leave, courses or out in the field providing medical support to the South African armed forces. This research
was conducted using military PECPs based in Gauteng only and thus the other provinces were excluded. Accordingly, the findings of this study reveal only the experiences of Gauteng based military PECPs and cannot be generalised to South Africa as a whole.

The experiences of military PECPs during special operations, naval operations, airborne operations, presidential operations and internal deployment were not studied but only those of PECPs externally deployed in land based, peace support operations. Although deployed South African military personnel may also share some similar experiences with PECPs during external deployment, this study did not focus on the experiences of South African military personnel but only those of Gauteng based military PECPs.

5.3 **Recommendations**

Based on the findings of the study, the following recommendations may help to enhance the provision of military EMC during external deployment by Gauteng based military PECPs:

a. Inventory guidelines on the medical equipment and medications that are necessary for military PECPs during land based, peace support operations, external deployment should be formulated and the results should be in cooperated and included in the Military Health Support Doctrine.

b. A framework on quality assurance, monitoring and evaluation should be developed in order to monitor and evaluate the quality of the military EMC provided during external deployment.

c. The development of a training course in conjunction with curriculum planners, the School for Military Health Training, the EMC Training University affiliated with SAMHS and South African Army Infantry School may address the training gap with regard to the current training and what really happens on the ground. The training course should be structured to equip and educate military PECPs to specialise in the provision of military EMC during peace support operations in the African context and should include, but not be limited to, the evacuation of casualties under fire, how to protect oneself during external deployment, the provision of EMC in remote areas and harsh environments, the provision of EMC during infantry drills and ambushes and the provision of EMC to the civilian casualties of conflict.
d. Future studies should endeavour to explore and describe the challenges that South African PECPs encounter when providing EMC during external deployment.

e. The SANDF should consider revising the training of command staff to include the training of military commanders on making decisions in conjunction with military health care professionals during military operations as such decisions may help in the realisation of military objectives and also decrease the morbidity and mortality rates of ill and injured soldiers.

f. Guidelines on the provision of EMC to civilians during external deployment should be developed for military PECPs and should be relevant to resource constraints and hostile third world regions with collapsed health care systems. It is further recommended that these guidelines be included in the UN rules of engagement and in the Military Health Support Doctrine with which military PECPs should be familiar.

g. The impact of diplomatic and political intervention by the South Africa government on the effective service delivery by military PECPs who are deployed in regions characterised by a lack of political will should be investigated.

h. There is a paucity of research on the collaboration between military PECPs and local provincial EMS in providing EMC. Furthermore, no research is available on the use of a clinical practice portfolio to encourage skills retention by military PECPs.

i. Further studies should be conducted to investigate the experiences of South African military PECPs during external deployment as well as the knowledge and perceptions of military commanders of PECPs during external deployment and peace support operations. Based on such findings, the quality of the military EMC provided by SAMHS during external deployment may be enhanced, hence improving the morbidity and mortality rates of deployed SANDF soldiers and thereby escalating the probability of the overall success of the peace support operations conducted by the SANDF.
REFERENCES


Kennedy, K. 2007. For medics, battlefield is hard to endure, hard to leave. Army Times: 15.


ANNEXURES
Annexure A: Research study advertisement

Research Study Advertisement

Study Title: Exploring lived experiences of Gauteng based military prehospital emergency care providers during external deployment.

Principal Investigator: Tshikani L. Khoza (BHSc EMC)

Introduction: Prehospital Emergency Care Providers (PECP) have been deployed in support of the SANDF to various operations and gained a wealth of external deployment experience. Despite this wealth of experience, very little research has been conducted to address lived experiences of PECPs working at SAMHS in Gauteng province during external deployment.

Who is conducting the study? Tshikani L. Khoza

Purpose: To explore and describe the lived experiences of Gauteng based military PECPs when providing EMC during external deployment.

Participation is voluntary: You can withdraw at any time.

Who can participate in the study?

- Staff members working full time at 7 Med Bn Gp, 8 Med Bn Gp, AMHU GT and SMHT (SAMHS Gauteng Province)
- Registered with the HPCS under the Professional Board of Emergency Care (PBECE)
- A minimum of 2 years experience
- Have been deployed and served for peacekeeping forces of the SANDF, locally and international.
- Intermediate and Advanced levels of care.

What does the study involve? At least 5 one on one interviews at the following units: 7 Med Bn Gp, 8 Med Bn Gp, AMHU GT and SMHT.

Procedures: The in-depth one on one interviews will take less than an hour of your time and will be conducted in January. They will be conducted at a time most convenient to you and other participants. The interviews will one on one at the conference room. The interviews will be digital audio recorded.

Benefits of the study:

- improve the body of knowledge about experiences of SAMHS PECPs with regards to battlefield casualty care.
- contribute to add value to the SAMHS doctrine.
- contribute to the future training of SAMHS PECPs

Participation: A presentation about the study will be held at 7 Med Bn Gp, 8 Med Bn Gp, AMHU GT and SMHT, the exact dates T.B.A. Sign up forms will be made available on the day.

Who do I contact if I have questions about participating in the study? Tshikani L. Khoza at 076 7055 560 or 012 674 6358 (ext 812 6358) or alternatively tshikani@yahoo.com
Annexure B: Recruitment letter

Dear Prehospital Emergency Care Provider (PECP),

My name is Tshikani Lewis Khoza and I am currently conducting a research project to fulfil the requirements of the Master of Health Sciences in Emergency Medical Care Degree (MHSCEMC) at the Durban University of Technology. I am aware that you and your colleagues have been deployed in support of the SANDF to various operations and gained a wealth of external experience. Despite this wealth of experience, I realized that no research has been conducted to explore your experiences with providing emergency medical care during external deployment.

I will therefore be conducting a research project at your Unit to discuss your experiences. The information gathered from the interviews may add value to the SAMHS doctrine and contribute to the future training of SAMHS PECPs.

The one on one interview will take less than an hour of your time and will be conducted in January. They will be conducted at a time most convenient to you and other participants.

Anything that you say in the one on one interview will be kept confidential, and will only be used for this study and nothing else.

Here is an opportunity to make a difference in your profession and the Military. You are very important.

Please complete and return the enclosed participant sign up form. I will contact you by phone and setup a date and time for the one on one interviews. Should you have any questions please contact me on 076 7855560 or tshikani@yahoo.com.

Sincerely,

___________________________

Mr Tshikani Lewis Khoza
MHSCEMC Student

___________________________

Dr Nombeko Mshunqane
Supervisor

___________________________

Professor Hermann Du Plessis
Co Supervisor
**PARTICIPANT SIGN UP FORM**

- **Unit:**
  - [ ] 7 Med Bn Gp
  - [ ] 8 Med Bn Gp
  - [ ] AMHU GT
  - [ ] SMHT
  - [ ] OTHER

- **Name of Participant:**

- **Are you currently registered with HPCSA:**
  - [ ] Yes
  - [ ] No

- **If yes, as?**
  - [ ] BAA
  - [ ] AEA
  - [ ] OECO
  - [ ] ECT
  - [ ] CCA
  - [ ] NDIP
  - [ ] ECP
  - [ ] Other

- **For how long have you been working as a PECP at SAMHS?**
  - [ ] (Years) ______ (Months)

- **Telephone Number (Work):** ____________ (Cell):

- **How would you like to be contacted?**
  - [ ] Cell
  - [ ] Work

- **Email address:**

- **Preferred days to participate in interviews?**

- **Preferred times to participate in interviews?**

- **Have you ever been deployed?**
  - [ ] Yes
  - [ ] No

- **Have you ever participated in face-to-face individual interviews?**
  - [ ] Yes
  - [ ] No

*Thank you for your time and interest. All information written on this form will only be used for this study. This form will be kept confidential. You are very important.*
LETTER OF INFORMATION

I am conducting this research project in order to fulfill the requirements of a Master of Health Sciences degree in Emergency Medical Care through the Department of Emergency Medical Care and Rescue, Durban University of Technology.

Title of the Research Study: Exploring lived experiences of Gauteng based military prehospital emergency care providers during external deployment.

Principal Investigator/s/researcher: Tshikani Lewis Khoza (Master of Health Science in Emergency Medical Care student, student number 21139352)

Co-Investigator/s/supervisor/s:
Dr Nombeko Mshunqane (Doctor of Philosophy in Physiotherapy)
Prof Herman Du Plessis (Master of Medicine in Surgery)
Mr Simpiwe Sobuwa (Master of Science in Emergency Medicine)

Brief Introduction and Purpose of the Study:

South African Military Health Service (SAMHS) provides multi-disciplinary health care including EMC to the South African National Defense Force (SANDF) (Naidoo 2009). In the 2013/2014 financial year, SAMHS PECPs’ were deployed to operations in Democratic Republic of Congo (DRC), Sudan, Central African Republic (CAR), Mozambique and the SA borders (South Africa. Department of Defense 2014).

Military PECPs’ serve a role of providing EMC to forward elements of armies and navies worldwide. The PECPs’ hence play a vital role in trauma care and survival of wounded soldiers during external deployment (Ben-Abraham et al 1999). Although daily lived experiences of PECPs have a direct influence on the quality of EMC, there is paucity of literature addressing daily lived experiences of PECPs’ working at SAMHS in Gauteng province during external deployment (Nuti, Rojas and Seghieri 2014).

The aim of this study is to explore and describe the lived experiences of Gauteng based military PECPs when providing EMC during external deployment

Outline of the Procedures:

Inclusion criteria
- Full time staff members at the SAMHS units in Gauteng
- Registered with the HPCSA under the Professional Board of Emergency Care (PBEC)
- A minimum of 2 years experience
- Have been deployed and served for peacekeeping forces of the SANDF, locally and international.
- Intermediate and Advanced levels of care.
Exclusion criteria
- Basic life support providers
- Not registered with HPCS under the PBEC.
- Less than 2 year experience
- PECPs who have never been deployed and those working at PMU and other Military units not mentioned.

Face to face in-depth individual interviews will be conducted with participants from each of the four study units. The study units include 7 Medical Battalion Group (7 Med Bn Gp), 8 Medical Battalion Group (8 Med Bn Gp), Area Military Health Unit Gauteng (AMHU GT) and School for Military Health Training (SMHT). At least 5 participants will be randomly selected to participate in the one on one interviews.

All participants who have signed consent form agreeing to participate in the study will sign a second consent for voice recording. All interviews will be voice recorded using a digital audio recorder. All one on one interviews will be conducted in the conference room in each unit for 45 minutes to an hour.

Risks or Discomforts to the Participant:
There will be no risks to participants. There will be no harm to the participants. The interviews will only be used for this study and will be kept confidential.

Benefits:
- The study may improve the body of knowledge about experiences of SAMHS PECPs' with regards to emergency medical care during external deployment.
- The study may help realize efforts to mitigate PECPs’ concerns and challenges when providing EMR during external deployment.
- The study may provide SANDF policy makers and management with codified knowledge that may be used to improve EMS delivery, operational readiness and retention of PECPs in the SAMHS.
- The study may contribute to add value to the SAMHS doctrine.
- The study may contribute to the future training of SAMHS PECPs’.
- The study may contribute to future pre deployment training for SAMHS PECPs’ and Military PECPs’ in the SADC regions.
- The study may be presented at a national conference.
- The study may be presented at the SAMHS research day.
- A paper may be published on an emergency medical care journal.
- A paper may be published on a military health care journal.
- A paper may be published on the SAMHS medical journal.
- A military staff paper with the findings of the research may be presented to the SAMHS.

Reason/s why the Participant May Be Withdrawn from the Study:
Participants can elect to be withdrawn from the study. Participants do not have to provide reasons as to why they are withdrawing and there will be no adverse consequences for the participants should they choose to withdraw.
Remuneration:

There is no financial remuneration for participating in the study. All participants are volunteering to participate.

Costs of the Study:

Participants will not be expected to cover any costs towards the study. All costs will be covered by the researcher.

Confidentiality:

The data collecting tapes and sheets will be kept confidential by the researcher and stored in the researcher’s home. The information contained will only be used for this study. No names or personal details will be used during the one on one interviews. No names or personal information will be disclosed when presenting the results.

Research-related Injury:

There will be no injuries as a result of the study hence there will be no compensation. There will be no medical procedures conducted throughout the study. There will be no harm to participants.

Persons to Contact in the Event of Any Problems or Queries:

(Dr Nombeke Mshungane, 031 373 2400 ) Please contact the researcher (076 705 5560) my supervisor (031 373 2400) or the Institutional Research Ethics administrator on 031 373 2900. Complaints can be reported to the DVC: TIP, Prof F. Otieno on 031 373 2382 or dvc-tip@dut.ac.za.

General:

Potential participants must be assured that participation is voluntary and the approximate number of participants to be included should be disclosed. A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g. isiZulu.
Annexure E: Consent form

CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, __________ (name of researcher), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: __________.
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the data will be collected with the use of a tape recorder and therefore give the researcher consent to record my voice with a tape recorder.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

____________________________  __________  __________
Full Name of Participant    Date    Time    Signature / Right
Thumbprint

I, ________________ (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

____________________________
Full Name of Researcher

____________________________  __________
Full Name of Witness (If applicable)    Date    Signature
Full Name of Legal Guardian (If applicable) Date   Signature
Annexure F: Consent to voice recording

ANNEXURE F

CONSENT TO VOICE RECORDING

I ____________________________________ hereby consent to my voice being audio tape recorded with the use of an audio tape recorder during a one on one interview. I also agree that all information contained on the audio tape recordings may be used in any way for the Research Study titled: "Exploring lived experiences of Gauteng based military prehospital emergency care providers during external deployment".

Full Name of Participant ___________________ Date __________ Time __________ Signature __________

I, ____________________________________ (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher ___________________ Date __________ Signature __________

Full Name of Witness ___________________ Date __________ Signature __________
Annexure G: Gate Keeper permission letter

RESEARCH PROJECT FOR MASTER OF HEALTH SCIENCE IN EMERGENCY MEDICAL CARE

1. I 03018447 MC, Pte T.L Khoza currently studying Masters of Health Science: Emergency Medical Care at the Durban University of Technology:

2. I am currently busy with a research project which is due in April 2016.

3. I am hereby kindly requesting permission and ethical clearance to conduct research at the South African Military Health Service in order to fulfill the requirements of the Master of Health Sciences in Emergency Medical Care degree.

4. The topic of the research is: Exploring lived experiences of Gauteng based military prehospital emergency care providers during external deployment.

5. I am aware that Prehospital Emergency Care Providers (PECP) have been deployed in support of the SANDF to various operations and gained a wealth of combat experience. Despite this wealth of experience, I realized that no research has been conducted to explore their experiences with battlefield casualty care.

6. The purpose of the research therefore is to explore and describe the experiences of PECPs working at SAMHS during battlefield casualty care.

7. The study will benefit the SAMHS by:
   a. Improving the body of knowledge about experiences of SAMHS PECPs with regards to battlefield casualty care.
   b. Contributing to add value to the SAMHS doctrine.

Health Warriors Serving the Brave
c. Contributing to the future training of SAMHS PECPs.

d. Contributing to future pre-deployment training for SAMHS PECPs and Military PECPs in the SADC regions.

7. The units that are identified for data collection are Area Military Health Unit Gauteng (AMHU GT), School for Military Health Training (SMHT), 8 Medical Battalion Group (8 Med Bn Gp) and 7 Medical Battalion Group (7 Med Bn Gp).

8. The study procedure will include in-depth one on one interviews voice recorded with a digital audio recorder.

9. The study will be registered as secret by the Durban University of Technology Higher Degrees Committee.

10. All data will be kept confidential and only be used for this research project.

11. Hope you find this in order.

(T. L. KHOZA)
MASTER OF HEALTH SCIENCE IN EMERGENCY MEDICAL CARE STUDENT: PTE

Remarks by Emergency Military Life Support Program Manager


(L.K.S MATHE)
EMERGENCY MILITARY MEDICAL WING PROGRAM MANAGER: LT COL

Health Warriors Serving the Brave
RESEARCH PROJECT FOR MASTER OF HEALTH SCIENCE IN EMERGENCY MEDICAL CARE

Remarks by Officer Commanding School for Military Health Training

Recommended for this research project

OFFICER COMMANDING SCHOOL FOR MILITARY HEALTH TRAINING: COL

Remarks by General Officer Commanding School for Military Health Training

DISTR

For Action
7 Med Bn Gp
8 Med Bn Gp
AMHU GT
SMHT
D EMMC
Defence Intelligence
1Military Hospital Research Ethics committee

Internal

File: SMHT/R/103/23

Health Warriors Serving the Brave

Restrictd
Annexure H: Continuous Professional Development presentation

SCHOOL FOR MILITARY HEALTH TRAINING

I, the undersigned acting as representative of the aforementioned CPD Provider, hereby certify that

T.L. Khoza
ECP0003573

Participated/attended the following approved CPD Activity/activities Programme

Ethics in Military Health Science
On 29 July 2016

The WITS Health Consortium CPD accreditation number, MDB08/003/09/2016 Category 1B certify that the said practitioner qualifies for 4 credits of CPD points

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SIGNATURE on behalf of the provider

HPCSA REG NO: ANT0017566
Designation: SMHT
Date: 25 August 2016
Place: Thaba Tshwane

Private Bag X 1022, Thaba Tshwane 0143, Tel: 012 674 6431 Fax: 012 674 6431
Annexure I: Institutional research ethics approval

22 July 2016

IREC Reference Number: REC 43/16

Mr T L Khoza
149 Alethine Drive
Protea, South
Extension 1
Chiaowel
1818

Dear Mr Khoza,

Exploring lived experiences of Gauteng based military prehospital emergency care
providers during external deployment

The Institutional Research Ethics Committee acknowledges receipt of your final data collection tool
for review.

We are pleased to inform you that the questionnaire has been approved. Kindly ensure that
participans used for the pilot study are not part of the main study.

In addition, the IREC acknowledges receipt of your gatekeeper permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with
data collection.

Yours Sincerely,

[Signature]

Professor J K Adam
Chairperson: IREC
CLINICAL TRIAL APPROVAL: “EXPLORING LIVED EXPERIENCES OF GAUTENG BASED MILITARY PREHOSPITAL EMERGENCY CARE PROVIDERS DURING EXTERNAL DEPLOYMENT.”

1. The 1 Military Hospital Research Ethics Committee (1MHREC) registered in South Africa with the National Health Research Ethics Council (NHREC) (REC-111208-019-RA) adhering to GCP/ICH and SA Clinical Trial guidelines, evaluated the above-mentioned protocol and additional documents.

2. The following members approved the study:
   a. Lt Col M.K. Baker: Neurologist, male, chairman 1 MHREC.
   b. Lt Col C.S.J. Duvenage: Specialist physician, female, member 1 MHREC.
   c. Lt Col S. Hassim: Medical Doctor, male, member 1 MHREC.
   d. Lt Col A.D. Moselane: Urologist, male, member 1 MHREC.
   e. Lt Col E.I. Venster: Periodontist, male, member 1 MHREC.
   f. Maj M.L. Kekana: Specialist physician, female, member 1 MHREC.
   g. DR T.J. Maré: Advocate, independent of the organization, male, member 1 MHREC.
   h. Mrs. C. Jackson: Layperson, independent of the organization, female, member 1 MHREC.

3. The following documents were evaluated:
   a. Research Proposal
   b. Participant information and informed consent document
   c. Research advertisement
   d. Recruitment Letter
   e. Interview schedule
   f. Ethics presentation
   g. Curriculum Vitae:
      i. T.L. Khoza
      ii. N. Mshunqane
      iii. H.J.C. du Plessis
   h. Ethics declaration/ declaration of data storage and declaration of Helsinki

4. The recommendations are: The study was ethically approved on 7 April 2016. The principal investigator, Private T.L. Khoza, will be supervised by Dr N. Mshunqane and Prof H.J.C. Du Plessis. Report backs are to be made to the 1MHREC six monthly, in the event of any serious adverse events and on completion or termination of the study. Should publications result from the study the relevant manuscripts will also need to be approved by Military Counter Intelligence.

Health Warriors Serving the Brave
RESTRICTED
5. The 1 MHREC wishes you success with the study.

Post Script 1: On 6 June 2016 the notice of restructuring of research topic was reviewed and approved.

(M.K BAKER)
CHAIRMAN 1 MILITARY HOSPITAL RESEARCH ETHICS COMMITTEE:
LT COL / PROF

DIST

For Action

Private T.L. Khoza
Annexure K: Defence Intelligence Approval

RESTRICTED

defence intelligence
Department of Defence
REPUBLIC OF SOUTH AFRICA

Telephone: (012) 315-0216
Fax: (012) 326-3246
Enquiries: Brig Gen M. Sizani

Defence Intelligence
Private Bag X367
Pretoria
0001
21 January 2016

AUTHORITY TO CONDUCT RESEARCH IN THE DOD: PTE T.L. KHOZA


2. Permission can only be granted after the ethical committee has given a signed consent document as the research will be done in the SAMHS environment.

3. For your attention.
   The signed consent must be forwarded to DI for confirmation. However, research can go ahead as shown once it is done.

   [Redacted]

(MAJ GEN T. MATLAKENG)
CHIEF OF DEFENCE INTELLIGENCE: LT GEN

WWM/WWM (Pte T.L. Khoza)

DISTR

For Action

GCC SMHT

Internal

File: DI/SDCI/DDS/R/202/3/7

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Annexure L: Interview schedule

Interview Schedule

Research Aim:

To explore and describe the lived experiences of Gauteng based military PECPs when providing Military EMC during external deployment.

Interview questions

1. Tell me about your experience as a Pre-hospital emergency care provider during external deployment?

2. How did you feel about your safety and wellbeing during external deployment?
   *Probe: elaborate*

3. Describe the type of patients you've rendered your services to during external deployment?
   *Probe: Were there any challenges faced during the process?*
   *Probe: Please elaborate*

4. How did you deal with your experiences during external deployment?
   *Probe: How did SAMHS assist you? What other coping methods did you use?*

5. How has the type of training you've received prepared you for external deployment?
   *Probe: According to your deployment experience how do you think the training could be improved?*
   *Probe: According to your deployment experience how do you think emergency care during external deployment could be improved?*