THE EXPERIENCES OF EMERGENCY MEDICAL CARE PRACTITIONERS (EMCP) AFTER EXPOSURE TO FATAL MOTOR VEHICLE ACCIDENT SCENES

by

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MINI-DISSERTATION

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DECLARATION OF ORIGINALITY

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Declaration

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2.   I declare that this mini-dissertation is my own original work. Where other people's work has been used (either from a printed source, Internet or any other source), this has been properly acknowledged and referenced in accordance with departmental requirements).

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DEDICATION

This study is dedicated twofold –

To my beloved brother, Thabo Joy Ramahuta, who lost his life in a fatal motor vehicle accident.
You will always be remembered and your spirit will always live on in our hearts.
Rest in peace.
Mokwena' moilalethlaka moroka' a meets a pula……

AND

To all Emergency Medical Care Practitioners who spend most of their time caring for others and saving lives in the scorching sun, the cold and the rain, attending scenes of traumatic events, and who put the lives of others before their own

To you I say:
Colleagues, Soldier On!
And remember to always stay prepared!
Semper Paratus

ABSTRACT

Title:	The experiences of Emergency Medical Care Practitioners (EMCP) after exposure to fatal motor vehicle accident scenes
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Although many international sources in literature describe the stress experienced by emergency workers, very few actually evaluate the experiences of emergency medical care practitioners and the care that is offered, and whether it is beneficial to and supportive of an optimal level of health. The researcher initiated this study with the specific goal of exploring the experiences of Emergency Medical Care Practitioners after exposure to fatal motor vehicle accident scenes. The research will constitute an initial exploration of possible factors related to the daily work exposure of EMCPs and will thus explore and describe the situation broadly.

By exploring the experiences of these EMCPs it is hoped that insight may be gained into factors influencing their experiences and behaviour and the attainment of successful working environments. The information that was gathered has been incorporated into the writing of recommendations for Emergency Medical Service towards the improvement of EMCPs.

The objectives of the study are:

- to describe the field of practice of EMCPs, their constant exposure to trauma and the phenomenon of fatal motor vehicle accident scenes;
- to explore the experiences of EMCPs of fatal motor vehicle accident scenes;
- to determine EMCPs' experience of their constant exposure to trauma and its effect on their daily functioning;
- to explore the experiences and awareness of EMCPs of current EAP services; and

- to formulate recommendations for EAP support services to EMCPs regarding their exposure to trauma and specifically to fatal motor vehicle accident scenes.

A qualitative approach guided the research process of gathering detailed data that is rich in context, in which nine one-on-one semi-structured interviews were held with Emergency Medical Care Practitioners. This study was conducted in an Emergency Services station in Gauteng, South Africa.

The bio-psychosocial approach was used in this study as an appropriate theoretical framework. This approach views health and wellness as the result of the interaction of biological, psychological and social factors, hence all three components should be taken into consideration when the illness, or rather the holistic wellness, of an individual is assessed. In this study, the case study design was used, specifically the collective case study, in order to study various participants. The unit of analysis comprised all EMCPs in the field of the Emergency Medical Care Division in the City of Tshwane Metropolitan Municipality who had experienced being on the scene of a fatal motor vehicle accident. Non-probability volunteer sampling was specifically employed, which meant that participants chose whether they wished to participate in the study or not, so as not to feel obliged or coerced. It was found to be the best method to use, as participants were known to one another and encouraged one another to become involved in the study. The researcher made use of semi-structured one-on-one interviews which were voice recorded in order to gain a detailed picture of the participants' experiences after being exposed to fatal motor vehicle accident scenes. The interviews were transcribed and subsequently analysed using the steps set out by Creswell (2004:155).

Trustworthiness was considered a primary means to ensure rigour in qualitative research without any concomitant sacrifice of relevance. The researcher employed the constructs of credibility and dependability in order to ensure trustworthiness in this research. Trustworthiness is established when findings reflect as closely as possible the meanings described by the participants. Member checking and peer debriefing were the strategies that the researcher used to support the argument that the researcher's findings are worth paying attention to. Compliance with ethical principles was crucial to the researcher. Before the research commenced, letters of approval were obtained from the Ethics Committee of the Faculty of Humanities,

University of Pretoria and the City of Tshwane: Research and Innovation. Ethical principles governing the manner in which the research was conducted were also observed, as the study involved human subjects and the researcher aimed to protect the participants. The following ethical considerations were relevant to this study: no harm to participants, informed consent, voluntary participation, confidentiality, debriefing and release or publication of findings.

The themes generated from this study were communication, professional counselling, training, quality improvement, family/significant others and stress. Participants in this study emphasized the value and importance of effective communication, professional counselling, training, quality improvement, the presence of family members or significant others and the stress they have to deal with in their daily functioning. Co-operation and a positive attitude on the part of management were recommended to improve the EMCPs' level of functioning. Prolonged response times contribute to an increased level of anxiety for the EMCP and the patient and their significant others. Effective communication should guide all interventions.

It is undisputable that EMCPs are exposed to gruesome incidents on a daily basis and are affected by the circumstances in which they work. Trauma is not something to which one can become accustomed; rather, strategies need to be implemented to develop ways of dealing with such experiences. The need to improve the general well-being of EMCPs in order for them to be able to deliver effective and efficient services to the communities cannot be underestimated.

Various responses emanating from EMCPs' experiences after exposure to fatal motor vehicle accident scenes and any other incident they find disturbing warrant maximized and vigorous interventions to be made on their behalf by Employee Wellness: Corporate and Shared Services, in order to alleviate their stress and enable them to function effectively and efficiently. It is evident that repeated exposure to traumatic events results in the development of PTSD, which should be avoided at all costs.

EMCPs stressed that it is vitally important that management provide them with a welcoming and non-threatening environment. Strong emphasis was also placed on

team work which will ultimately lead to the success of the whole team involved. They should be encouraged to participate in making decisions that affect them.

Relevant, qualified personnel should be employed to counsel EMCPs, in order to preclude the use of counsellors who are not properly equipped to deal with this counselling; such a situation could possibly result in distress on the part of EMCPs.

Vigorous awareness sessions should be employed to familiarize EMCPs with Employee Wellness services and their importance. Employee wellness services need to be strengthened and optimally utilized. Prompt and competent interventions by empathetic multi-disciplinary team members will improve EMCPs' satisfaction and provide the needed support.

Resources need to be strengthened to accommodate the rising population in the City of Tshwane Metropolitan Municipality to improve response times. Turn-around strategies for vehicles that go in for maintenance, service or accident repairs need to be improved.

The role of continuous professional development in the form of training cannot be underestimated, as the medical fraternity is dynamic, so that EMCPs can be kept abreast of the latest protocols, knowledge and skills in order to meet the demands of their clients and ensure continued delivery of quality patient care.

Measuring quality and seeking improvement in practice are part of the daily routine and have become an integral part of the EMCP's work experience.

Key words: experiences, fatal motor vehicle accident scenes, emergency medical care practitioner, stress, training, employee wellness, support.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1. CHAPTER 1: GENERAL ORIENTATION TO THE STUDY

"A journey of a thousand miles begins with a single step" (Lao Tzu).

1.1 Introduction

Emergency Medical Services (EMS) are intended to provide expert and highly specialized medical care to people in a number of critical and often life-threatening situations. EMS personnel, commonly referred to as Emergency Medical Care Practitioners (EMCP), are highly trained and skilled professionals whose job it is to provide the first form of treatment to patients and to stabilize them until they can be transported to a hospital or any other medical facility (Louria, 2005:1).

The City of Tshwane (CoT) was established in December 2000 as a category A municipality. It incorporated 13 former local authorities with the objective of improving service delivery. In 2006, the Department of Emergency Management Services was disbanded and was placed under the Department of Health and Social Development, CoT, while other groupings such as the Fire Brigade and Disaster Management were placed under the Community Safety Department (CoT Social Cluster Achievement Report 2007/8). Today, the same department is called the Emergency Services Department, providing emergency medical services, fire brigade services, support services and disaster management services that focus on the needs of the community, more specifically on preventing losses – both of life and of property – in times of natural emergencies and disasters or those caused by human agency (CoT Intranet Portal, 2013).

This chapter will define the key concepts, contextualize the topic, provide a rationale and problem statement, set out the goals and objectives, present a brief synopsis of the research methodology, explain the limitations of the study and outline the contents of this mini-dissertation.

1.2 Definition of key concepts

The key terms used in this study are defined below:

1.2.1   Emergency Medical Care Practitioner (EMCP)

Since this term is made up of four separate concepts, each concept will be defined before the actual definition is provided of the way in which the concept as a whole is applied in this study.

Emergency is defined by the Oxford English Dictionary (2008:98) as "a serious, unexpected and potentially dangerous situation requiring immediate action."

Medical is defined as relating to the science or practice of medicine or to the treatment of patients by drugs (Encarta Webster's Dictionary of the English Language, 2008:336).

Care is described as a general term for the application of knowledge and experience in order to benefit a person, family or community. In a more restricted medical sense, it means providing "medical or health care related services to a patient" (Stedman's Medical Dictionary for the Health Professions and Nursing, 2005:239).

Practitioner is defined as "somebody who practices a particular profession, especially medicine" (Encarta Webster's Dictionary of the English Language, 2008:225) and is defined by the Oxford English Dictionary (2008:89) as "a person engaged in an art, discipline, or profession, especially medicine."

For the purpose of this study, the term emergency medical care practitioner will include any person registered under the Health Professions Council of South Africa as an EMCP.

1.2.2   Fatal

Fatal is defined as "causing ruin, destruction or death" (Encarta Webster's Dictionary of the English Language, 2008:145).

1.2.3   Accident

An accident is explained as "an unplanned and unfortunate event that results in damage, injury or upset of some kind" (Encarta Webster's Dictionary of the English Language, 2008:15). For the purpose of this study, a fatal accident refers to an

unfortunate incident that happens unexpectedly and unintentionally to a motor vehicle, typically resulting in damages, injuries or even death.

1.2.4 Experience

Experience is defined by Encarta Webster's Dictionary of the English Language (2008:189) as "the knowledge of and skill in something gained through being involved in it or exposed to it over a period of time" and "knowledge acquired through the senses rather than through abstract reasoning." Experience is defined by the Oxford English Dictionary (2008:145) as "practical contact with and observation of facts or events" as well as "knowledge or skill acquired over time."

Craig (2007:1) defines experience as "knowledge, skills and/or abilities attained through observation, simulation and/or participation that provide depth and meaning to learning by engaging the mind and/or body through activity, reflection and application."

Experience implies that people consequently grow and develop by merging intellectual and social processes (Phitayakorn, Gelula & Malangoni, 2007:158). EMCPs thoughts and feelings are influenced by their learning experiences (Russell, 2006:349).

For the purpose of this study, the word 'experiences' refers to the experiences of the EMCP at a fatal accident scene and comprises both the event as it occurred and its meaning.

1.3 Contextualization of topic

South African citizens, like those of other countries, are vulnerable to critical incidents such as fatal motor vehicle accidents that may occur in their daily lives. This places EMCPs and other multi-disciplinary teams, specifically police officers, medical doctors, therapists and counsellors, at great risk of trauma related to emotional and psychological symptoms and disorders.

Regarding the motivation that prompts a researcher to undertake research into a particular topic, Mouton (2005:34) differentiate between self-initiated and contract research. Leedy (2005:56) implies that self-initiated research can be prompted by

mere curiosity about an interesting phenomenon or about something which presents a puzzle.

The researcher in this study has to a large extent become motivated to undertake the research as a result of her practical and professional experience in the Emergency Medical Services Division. Much of the researcher's daily work is supervising EMCPs who are exposed to traumatic and fatal motor vehicle accidents on a daily basis. According to Schulz (2008:137), the reaction to trauma is a complex process that affects every aspect of human existence to a certain extent. The researcher's argument in this context is that the reaction to trauma is as universal as the exposure to it, and this has a real, negative impact on the effective functioning of EMCPs if they are not assisted and handled properly.

1.3.1 Emergency Medical Services (EMS) in the South African context

EMS is vital to any society, especially one as fraught with accidents as South Africa. As can be gleaned from any South African newspaper reporting on fatal motor vehicle accidents and car hijackings, the services provided by EMS personnel are essential, and the effective training of such service providers is crucial.

The researcher agrees with the old saying "knowledge is power," and this in turn is a core objective of EMS, where developing and providing training and education in pre-hospital emergency medical care is a priority. The art and science of emergency medical care is continually developing and progressing. Different scenarios in which victims need to be rescued present themselves in various ways. Being able to manage the scene of a fatal motor vehicle accident efficiently demands a slick combination of knowledge, psychomotor skills and practical experience. Within the framework of knowledge lies the challenge for individuals to stay current and informed of global best practices, which are carefully integrated into the South African context with the aim of ensuring that the next rescue is conducted in the best possible way (McClelland, 2002:79).

There is also the question of ethics, which has become a growing concern in medical practice across the board. Although this is indeed a positive development, it goes without saying that the number of disciplinary inquiry processes by the Health

Professions Council of South Africa (HPCSA) against registered health professionals is on the rise.

Briefly, the structure of EMS in South Africa is such that personnel are employed by either a governmental or provincial structure (for example Tshwane Metropolitan Municipality) or a private company (for example, Netcare 911). EMCPs in Tshwane (CoT) work in 12-hour shifts and are dispatched from fixed physical locations. They thus form physically separate and interchangeable groups who have to work together and depend on one another, often in highly critical and dangerous situations (Louria, 2005:68).

Fatal motor vehicle accidents are some of the most stressful and emotionally upsetting scenes for an EMCP to work at. At the scene of a motor vehicle accident, the responsibility for the management and co-ordination of the scene is automatically delegated to the most highly medically qualified individual present. This may place increased pressure on EMCPs, causing them to feel ousted from a position of control by having to work under the supervision of a more qualified colleague. The converse is also true, in that if no more qualified personnel are available to assist, then the responsibility falls wholly on the first EMS personnel on the scene. The job of EMCPs is thus one of being constantly in motion and under pressure (Louria, 2005:76).

EMCPs are likely to encounter several incidents daily of severe injuries, life-threatening illnesses, contagious diseases and sometimes multiple-patient scenarios. EMCPs may find themselves having to work in potentially hazardous or awkward environments, where they are physically and/or emotionally at risk themselves. They also need to perform their duties within a multicultural society, where racial tensions and language barriers may hamper effective medical care. An example of the danger to which EMCPs are exposed was reported in *The Citizen* on May 4, 2000. The article reported on the deaths of two paramedics who were shot on the night of 25 April 2007, while transferring a patient from one ambulance to another in Soshanguve, North of Pretoria (cited in Cosser, Jansen van Rensburg, Niewoudt, Rathlagane, van Staden & Wade, 2007). Hazard (2002:56) alludes to some of the dangers experienced by all rescue workers (including firefighters, police and metro police officers) attending the scenes of traumatic events, such as motor

vehicle accidents. He points out that motorist is unaccustomed to encountering rescue vehicles on a road, and that this has resulted in a number of incidents in which rescue personnel have been injured or killed while providing roadside assistance.

1.3.2   The nature of Emergency Medical Services (EMS)

Research has shown that people who are attracted to a career with inherent powerful stressors have very different personalities from the average person who holds a far less risky or demanding job (Mitchell & Bray, 2007:25). EMCPs tend to have high levels of commitment welcome a challenge, enjoy a sense of control and are more resilient to stress (Hetherington, 2005:28). They find the job rewarding and set high personal standards, but experience considerable anguish in the event of failure. They are also more likely to be outgoing, and are motivated by internal factors such as the satisfaction of the job and a personal sense of competence. They are also frequently action-oriented, task-oriented and quicker to make decisions, take risks and lay themselves open to dangers associated with exposure to disease, violence, mutilation and death (Hetherington, 2005:32). It is the researcher's opinion that EMCPs are motivated to assist and to rescue others, intervene actively in disputes, conflicts, disasters and potentially dangerous situations. It is also to be noted that the patient is unconditionally valued as a human being and not just as a source of symptoms and information. EMCPs who have committed themselves to providing more personalized care for their patients should make it part of their practice to acquire a more nuanced understanding of how the patients themselves 'see their world' (O'Hagan, 2007:12-13). Equally, when members of the public are emotionally overwhelmed by a traumatic event, effective interpersonal interaction by an EMCP can help restore a sense of control to the situation and manage some of the associated mental anguish for those involved.

On an emotional level, EMS work is stressful. EMCPs work long hours and are responsible for the lives and well-being of their patients. They often perform their tasks under the scrutiny of their patients' families and bystanders, rendering it necessary for them to also contend with the distress experienced by those around them (Carrington, 2006:88). For some EMCPs, a special area of emotional difficulty arises when working with children (Cosser et al., 2007). The helplessness and

vulnerability of children seem to make treating them especially difficult and heartrending.

Given that EMS personnel face types of occupationally related hazards daily, much research has been aimed at stress levels experienced and coping styles adopted within this field. It is well documented that repeated and continual exposure to trauma may have secondary-traumatic effects for those exposed to them (Carrington, 2006:89). Rescue workers never become fully desensitized to trauma and may eventually suffer from burnout and/or post-traumatic stress disorder (PTSD), amongst other disorders. The term burnout refers collectively to occupationally related symptoms resulting in physical or emotional exhaustion (Carrington, 2006:36).

Working for the emergency services is a challenging and potentially highly rewarding vocation. Yet, by the nature of the job, it is one of the most stressful occupations (Hetherington, 2005:22). The cumulative stress and trauma of the job can have damaging effects on EMCPs' personal and professional lives, yet the unpredictability of the amount and type of work in the emergency service is also found to be an attractive feature of the job to certain personality dispositions.

The use of counselling can improve communication, clarify understanding, challenge dysfunctional perceptions and promote empathy and emotional support in crises.

The job of an EMCP is thus one of being constantly in motion and under pressure on a daily basis. As an Operational Director of the Emergency Medical Services Division at Tshwane Emergency Services Department, the researcher has found that a large number of EMCPs do break down emotionally and experience burnout. The question arises: what factors may be contributing most significantly to the high rate of sick leave taken by EMCP personnel? Insight into this question would be in the interest not only of the EMS but also of the Emergency Services Department (ESD) and the community at large and could possibly lead to improvement of support services.

Using the phenomenon of fatal motor vehicle accidents as the backdrop to the study will help to determine how EMCPs experience such extremely stressful situations and give an indication of what can be done to improve the EAP support services provided to them by the City of Tshwane: Corporate and Shared Services: Employee Wellness. The study will thus investigate the experiences of EMCPs currently working in the Tshwane Emergency Services Department: Emergency Medical Service Division, in order to understand their personal experiences after exposure to fatal motor vehicle accident scenes.

1.4   Theoretical Framework

It is essential to make decisions about the choice of a particular theoretical framework and its philosophical underpinnings on the basis of its appropriateness to the circumstances of the study (Appleton & King, 2002:642). The bio-psychosocial model stems from the general systems theory, which proposes that a person with an illness may affect the different systems and sub systems in the environment in which they function. Sheridan and Radmacher (2008:4) describe the bio-psychosocial model as being "based on general systems theory" with the basic assumption of the general systems theory being that "systems exist within systems … nothing exists in isolation."

According to Green and Thoroghood (2006:19), the bio-psychosocial model is an approach to health and wellness that views these states as the result of the interaction of biological, psychological and social factors. They refer to the biological factors as the 'given' factors such as genetics; environmental factors that affect physiological functioning, such as pesticides which may cause birth defects and cancer if they migrate to food; and behaviour's that affect biological functioning such as smoking, diet and exercise. The psychological factors are those such as personality, stress management, life goals, perceptions, feelings, and health and sickness, while social factors include social systems such as family, work, school, church, government, as well as social values, customs, and social support.

Ogden (2005:4) explains the bio-psychosocial model from a health psychology perspective, stating that "health psychology suggests that human beings should be seen as complex systems and that illness is caused by a multitude of factors and

not by a single causal factor." Health psychology attempts to shift from a "simple linear model of health" and claims that "illness can be caused by a combination of biological (e.g. virus), psychological (e.g. behaviours, beliefs) and social (e.g. employment) factors," this approach reflects the bio-psychosocial model of health and illness.

This model is referred to by Ross and Deverell (2010:14) as a 'psycho-socio-environmental' model, with its focus being "the promotion and maintenance of health through socio-environmental and behavioural changes." It may be caused by a combination of the biological, psychological and social factors; thus all three components should be taken into consideration when assessing the illness of a patient.

Much of the researcher's daily work involves, among other things, supervising EMCPs who have been exposed to traumatic situations. This has caused her to notice how applicable this bio-psychosocial model is, as the traumatic situations affect the EMCPs in three ways: physically, with them taking sick leave and experiencing lack of appetite, inability to sleep, and headaches (bio); they experience feelings of sadness and depression (psycho); and they isolate themselves at home and work, or experience strained relationships with families, colleagues and friends (social). This has led the researcher to be interested in the experiences of EMCPs mainly from a bio-psychosocial perspective.

1.5   Rationale and Problem Statement

The motivations for doing research are varied and not always purely tied to knowledge development as one may wish to believe. The decision to do this research was motivated by the extensive amount of literature describing reactions to the experience of trauma in different settings such as war and natural and man-made disasters (Hetherington, 2005:67). However, not much work has been done on EMCPs' experiences of and reactions to scenes of fatal motor vehicle accidents, which occur frequently in South Africa. It is a well-known fact that the working environment of EMCPs is a stressful one; hence this research has been commissioned to establish and provide insight into the experiences of EMCP after they have attended to fatal motor vehicle accident scenes. No research has yet

been carried out in SA into EMCPs' experiences of fatal motor vehicle accident scenes. The phenomenon is usually interpreted in terms of the current theory of Post-Traumatic Stress Disorder, the practices of trauma debriefing, and the latest available motor vehicle statistics. In order to arrive at a fuller understanding of the phenomenon, however, it is essential to explore, describe and note the actual nature of these experiences on the part of EMCPs.

Given that EMS personnel face occupationally related hazards daily, much research has been focused on the stress levels experienced and the coping styles adopted within this field. It is well documented that repeated and continual exposure to violence and trauma may have secondary-traumatic effects for those exposed to them (Carrington et al., 2006:94). There is substantial individual variation in terms of specific manifestations and the speed with which people move through the trauma or secondary traumatization. From the researcher's professional experience, it is difficult for people to recover from such impact of trauma either on a primary or on a secondary level. EMS personnel never become fully desensitized to trauma and may eventually suffer from burnout and/or post-traumatic stress disorder (PTSD), among others.

The term 'burnout' refers collectively to occupation-related symptoms that result in physical or emotional exhaustion (Carrington, 2006:118). Burnout involves feelings of depersonalization and a reduced sense of personal accomplishment, resulting in deterioration of job performance and job satisfaction. PTSD, on the other hand, suggests a severe anxiety disorder, which, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), involves persistent re-experiencing of the trauma, avoidance and hyper-arousal (American Psychiatric Association, 2013:88). Repeated exposure to traumatic events is believed to result in the development of PTSD.

It is hoped that the analysis of what is learned in this study will be of use and practical value to researchers in this area of interest and investigation, as well as adding value to counsellors and EAP's dealing with EMCPs who have been exposed to fatal motor vehicle accidents. The research results will be used by other researchers as a springboard for further studies. They will also be used for presentations at related forums, as well as for publication in scientific journals.

The importance of this study is that it undertakes to explore and describe in detail the experiences of EMCPs after exposure to fatal motor vehicle accidents. It will further provide researchers and emergency care practitioners with a great deal of useful and relevant information that can be used to enhance clinical practice. The richness and depth of the descriptions that emerge from this research will enable practitioners to revise their approach to the kind of care appropriate for EMCPs. This study is geared towards gaining insight into EMCPs' experiences of exposure to fatal motor vehicle accident scenes. Realizing that not much has been written on the experiences of daily life exposures of EMCPs' to fatal accident scenes, the researcher plans to fill this gap in research. The results of this study could:

- contribute to a larger body of literature on the experiences of EMS employees who respond to calls, more specifically fatal vehicle accident calls;
- assist employees who participate in the study in clarifying their attitude towards their jobs; and
- provide insight into employees' perceptions of how they need to take care of themselves when dealing with fatal accident scenes.

EMCPs throughout the world are increasingly being challenged to improve the overall quality of their service delivery by conducting relevant research, carrying out continuous analysis and evaluation of the processes involved, and reflecting on how improvements can be made.

The research question is formulated as follows:

What are the experiences of Emergency Medical Care Practitioners (EMCPs) after being exposed to a fatal motor vehicle accident scene?

1.6   Aim and Objectives

The aim and objectives of the study are as follows:

1.6.1   Aim

The researcher initiated the study with the aim of exploring the experiences of Emergency Medical Care Practitioners (EMCPs) after exposure to fatal motor

vehicle accident scenes. This will contribute towards generating an in-depth under-standing of the lived experiences of EMCPs and the care and support they receive, not only in the emergency medical service, but more comprehensively in the City of Tshwane as well.

It is hoped that exploring the experiences of these EMCPs will lead to insight into the factors that influence their experiences and behaviour, and the attainment of successful working environments. The information gathered will then be incorporated into the writing of recommendations for Emergency Medical Service towards the improvement of the well-being of EMCPs.

1.6.2   Objectives

Objectives are specific results that a person or system aims to achieve within a timeframe and with available resources. Objectives refer to those specific changes in programmes, policies or practices that are believed to contribute to the broader goal (Neumann, 2006:546).

To achieve this aim the objectives of the study are:

- to describe EMCPs' field of practice, their constant exposure to trauma and the phenomenon of fatal motor vehicle accident scenes;
- to explore EMCPs' experiences of fatal motor vehicle accident scenes;
- to determine how EMCPs experience their constant exposure to trauma and its effect on their daily functioning;
- to explore the experiences and awareness of EMCPs of current EAP services; and
- to formulate recommendations for EAP support services to EMCPs regarding their exposure to trauma and specifically to fatal motor vehicle accident scenes.

1.7   Research Methodology

Burns and Grove (2006:211) state that research methodology implies the complete plan for a study, starting from conceptualizing the research problem to the final strategies for data collection. Research methodology includes the research process and the different tools and procedures used (Mouton, 2006:56). Methodology refers to the framework of theories and principles on which the design and method of

research are based (Holloway & Wheeler, 2005:287). A brief overview of the research methodology and design used in this study is presented here, and a detailed discussion is provided in Chapter 3.

1.7.1 Research approach

Qualitative research was adopted as an appropriate methodology for this study, and the research itself made use of a systematic, subjective approach. It was felt that the qualitative approach would offer an appropriate method for identifying and recording the experiences of EMCPs after exposure to fatal motor vehicle accident scenes. The steps involved in the application of a qualitative research approach comprised the gathering of data, the analysis and classification of the data thus gathered, the identification of emergent trends and patterns in the data, the drawing of conclusions from recurrent patterns, trends and observations and finally drawing up recommendations for the enhancement of the effectiveness of the support services for EMCPs.

1.7.2 Type of research

Research is distinguished by the specific functions inherent in its findings (De Vos, Schurink & Strydom, 2011:8). Applied research aims at developing solutions to problems and applications in practice. It is described as extending knowledge of human behaviour relating to human service intervention and aiming to make a qualitative researcher more humanistic and their research more relevant to the lives of the people (Fouché & De Vos, 2008:69). In the context of this study, applied research was pursued with a view to putting into perspective the EMCPs' emotional experiences arising from their exposure to a fatal accident scene.

1.7.3 Research Design

A research design, according to Polit and Beck (2008:509), is a broad plan intended to answer the established research questions and incorporating the requirements for augmenting the validity and reliability of the study. In this study, the case study design was used. Fouché and De Vos (2008:75) defines the case study as a design that uses detailed in-depth data collection methods, involving multiple sources that are rich in context.

1.7.4   Research Methods

Research is a process that begins with a problem and ends when the problem has either been resolved or addressed in a satisfactory way (Brink, 2006:50). The research method includes an indication of the techniques that were used to structure the study, and methods that were used to gather and analyse the information that had been collected in a systematic and coherent fashion (Polit & Beck, 2008:765). The study population, sampling, methods of data collection and analysis and trustworthiness are briefly discussed here.

1.7.5   Study population and sampling

The study population and the method that the researcher used for selecting the participants in this study are described below.

1.7.6   Study population

A population is a group of individuals that has collective qualities (Polit & Beck, 2008:506). The entire set of objects and events, or group of people, that constitutes the research object whose characteristics the researcher wishes to determine is called the population or unit of analysis (Bless & Higson-Smith, 2005:85).

The term population sets up a boundary and refers to individuals who possess the specific characteristics. The unit of analysis in this study comprised all EMCPs in the field of Emergency Medical Care Services in the City of Tshwane Metropolitan Municipality who had experienced being on the scene of a fatal motor vehicle accident.

1.7.7   Sampling

Sampling is the process of selecting a research sample from a given population. Burns and Grove (2006:750) state that sampling entails the selection of groups of people with whom to conduct a study.

Non-probability volunteer sampling specifically was used in this study, which meant that participants could choose whether they wished to participate in the study or not, so as not to feel obliged or coerced. Silverman (2010:159) states that volunteer sampling works well when the participants are known to one another, or are at least

aware of one another and can encourage one another to become involved in the study.

In this particular study, the researcher presented an introductory information session at Wonderboom Emergency Station, informing the EMCPs about the research. The researcher then left a box in the office of the Advanced Life Support Officer at Wonderboom Emergency Station in which those who wanted to participate in the study could provide their contact details. The researcher then contacted these volunteers, and a convenient date and time for the interview was negotiated.

In case volunteer sampling failed to yield the necessary results, the researcher planned to alternatively make use of purposive sampling. This technique is also referred to as selective or judgmental sampling and would be used as a way of selecting the required sample from the population (Rubin & Babbie, 2005:247).

1.7.8   Methods of data collection

Data collection describes the process of gathering material to address the research problem (Polit & Beck, 2008:498). Fouché and De Vos (2008:75) defines data collection for the case study as a process that entails detailed in-depth data collection methods, involving multiple sources that are rich in context. These can include interviews, documents, observations or archival records. The researcher used semi-structured one-on-one interviews that were audio taped to gain a detailed picture of the participants' experiences after exposure to fatal motor vehicle accident scenes. Creswell (2004:54) describes semi-structured one-on-one interviews as flexible, hence allowing the researcher to modify and pursue unexpected insights. A semi-structured interview schedule was used.

1.7.9   Methods of data analysis

Data analysis is the exploration of the meaning of data through processes of organization, reduction and transformation (Holloway & Wheeler, 2005:291). Data analysis was carried out in order to arrange the collected data in a meaningful way (De Vos et al., 2011:339). Data was analysed using the steps set out by Creswell (2004:155).

1.7.10 Trustworthiness

Trustworthiness refers to the degree of methodological accuracy inherent in any kind of qualitative research and includes "the means by which we show integrity and competence" (Aron, 2009:250, cited in Holloway & Wheeler, 2005:251). Krefting (2006:216) also regards trustworthiness as a primary means of ensuring rigor in qualitative research without any concomitant sacrifice of relevance. The aim of trustworthiness in qualitative research is to support the argument that the researcher's findings are worth paying attention to (Lincoln & Guba, 2005:290). Member checking, reflexivity and peer review were used to ensure trustworthiness.

1.7.11 Pilot study

Strydom (2011:211) indicates that a pilot study may be regarded as a small-scale trial run of all the aspects planned for use in the main inquiry and that, in order to undertake a scientific research on a specific problem, the researcher should have thorough background knowledge about the problem.

The researcher pre-tested the interview schedule, (see Addendum 5) with two participants, who would not form part of the main study. The researcher went personally to Region 1: Rosslyn Emergency Station to ask two participants who met the sampling criteria to participate in the pre-test. The participants were informed about the aim and objectives of the study and told that participation was strictly voluntary and also that the data collected from them would not form part of the main study. The pre-test enabled the researcher to check the relevance of the questions on the interview schedule and to see if amendments would have to be done. The voice recorder was also tested.

1.8 Ethical Considerations

Compliance with ethical principles is crucial (Polit & Beck, 2008:84). Before the research commenced, letters of approval were obtained from the Ethics Committee of the Faculty of Social Work and Criminology, University of Pretoria and the City of Tshwane: Research and Innovation.

To conduct the research in an ethical manner it was essential to obtain informed consent from potential participants (Burns & Grove, 2006:206). Informed consent

consists of four elements, namely disclosure of fundamental information, comprehension, competency and voluntarism (Burns & Grove, 2006:207).

Confidentiality was ensured by stating clearly in the information letter that the data obtained from participants might be reported in scientific journals, but that no information would be disclosed that could identify them as participants in the research. The right to privacy and confidentiality would be strictly applied in the research, and pseudonyms would be used to protect participants' identity. They would be debriefed and referred for counselling if necessary. For a more elaborate discussion on ethical considerations refer to Chapter 3.

1.9   Limitations of Study

Because of the qualitative nature of the study, the researcher reflected on its research limitations (Holloway & Wheeler, 2006:267). Chapter 4 contains the researcher's reflection on methodology and the study-specific reflection and a discussion of the limitations of the study.

1.10   Contents of Report

The findings of the study are reported in four chapters.

Chapter 1: General Introduction
Chapter 1 offers an introduction to the study topic and an overview of the planned research project. It also explains the theoretical framework, rationale for and contextualization of the study, as well as the aim and objectives, an overview of the research methodology and ethical considerations.

Chapter 2: Literature review
Chapter 2 reviews the existing literature on Emergency Medical Care Practitioners after attending a fatal motor vehicle accident scene and provides an overview of the most important factors that influence the experiences of EMCPs. It contains a detailed discussion on the nature of EMS, the EMCP and personality profile, EMS qualifications, EMS norms and standards, emergency response standards, motor vehicle accidents, fatal motor vehicle accidents, impact of EMS on EMCP, stress, disorganization and disequilibrium, breakdown in coping, phases and stages, outcome of crisis, trauma debriefing, crisis, burnout, post-traumatic stress disorder

(PTSD), professional support services, supervision, employee assistance programmes, continuous professional development, quality improvement, learning and support, trauma debriefing, trauma debriefing process, phases of a formal debriefing session, prevention of PTSD, prevention of burnout, job satisfaction, definitions of job satisfaction, improving job satisfaction and the summary.

Chapter 3: Research methodology and findings

Chapter 3 describes the research methodology, ethical considerations and the research findings.

Chapter 4: Conclusions and recommendations

Chapter contains the aim and objectives of the study and the research question, and how they were met, the key findings and conclusions and the recommendations.

The following chapter will focus on the literature review.

2. CHAPTER 2: LITERATURE REVIEW

"There are three principal means of acquiring knowledge … observation of nature, reflection and experimentation. Observation collects facts; reflection combines them; experimentation verifies the result of that combination." (Denis Diderot).

2.1 Introduction

A literature review is an organized written presentation of what has been published on a topic by scholars (Burns & Grove, 2006:93). The purpose of the literature review, according to Polit and Beck (2008:133), is to "provide the reader with a background for understanding the current knowledge on a topic and illuminate the significance of the new study." The literature review for this study was conducted to provide a broad overview of the experiences of EMCPs after exposure to fatal motor vehicle accidents and to provide reflection as a learning strategy to enhance continuous professional development of EMCPs, ultimately leading to quality improvement. Being able to predict and understand with some confidence an EMCP's experiences after exposure to fatal motor vehicle accidents is of concern to EMS institutions everywhere.

According to Mouton (2005:119), a literature study serves as a map of the terrain and provides guidelines for the design of one's own project. He furthermore states that, where focus is concentrated on a specific phenomenon, the researcher has an obligation to acquaint himself with the publications on major research already conducted in the field.

Factors that have an impact on the individual's experiences were identified (Tarr, 2007:139). These factors were divided into intrinsic job satisfaction factors (ability, utilization, activity, achievement, authority, creativity, independence, moral values, responsibility, security, social service, social status) and extrinsic job satisfaction factors (advancement, company policy, compensation, recognition, supervision, human relations, technical aspects, co-workers and working conditions).

2.2 Background of Emergency Medical Services

EMS is a fairly recent development in the history of medical care. The modern EMS system began in the 1960s, but the idea of emergency medical service started

almost two hundred years ago (Hetherington, 2005:130). In the 1790s, the French began to transport wounded soldiers so that they could be cared for by physicians away from the scene of battle. No medical care was provided for the wounded on the battlefield (Hetherington, 2005:9). Wars in other countries inspired similar emergency services. Clara Barton, a nurse, began such a service for the wounded during the American Civil War and later helped establish the American Red Cross. During World War I, many volunteers joined battlefield ambulance corps. Non-military ambulance services began in some major American cities in the early 1900s – again as transport services only, offering little or no emergency care (Hetherington, 2005:118). Years ago, an ambulance crew's job was to lift the patient into the ambulance and deliver him to a hospital. The only qualifying criteria were strength and a driver's licence.

Today the ambulance attendants have been replaced by EMCPs, who serve as an extension of the hospital emergency department. From the moment of arrival at the emergency scene, the EMCP is responsible for providing an unbroken chain of pre-hospital medical care: at the scene and en-route to hospital, until the hospital emergency staff takes over. An Emergency Medical Service is a complex and extensive organization of people, equipment and facilities that come together specifically to respond to the emergency healthcare needs of the community. Ambulance services are a major integral part of an Emergency Medical Service (Provincial Gazette Extraordinary, 2003).

2.3　　The nature of Emergency Medical Services

Today's EMCPs are trained and skilled medical professionals, whose jobs carry serious responsibilities and legal implications. Workers in Emergency Services organizations, such as the police service, ambulance service and rescue squads, are not only exposed to everyday stressors common to many work environments but can also face extreme stressors associated with emergency incidents such as traumatic accidents or disasters.

A practitioner is defined by Encarta Webster's Dictionary of the English Language (2008:16) as "somebody who practices a particular profession, especially medicine"

and by the Oxford English Dictionary (2008:122) as "a person engaged in an art, discipline, or profession, especially medicine."

Police officers, firefighters, disaster workers, emergency medical care practitioners and voluntary emergency personnel all contend with considerable stress as a result of their responsibility for the life and safety of others (Hetherington, 2005:3).

The EMCP deals with both injury and illness and the emotional problems that result from such emergencies. In the EMS environment, the EMCP provides basic, intermediate and advanced life support for patients if they cannot breathe adequately, have stopped breathing, have developed cardiac arrest or shock. They also provide care for patients with cuts, bruises, fractures, gunshots, burns and internal injuries. They are called on to deal with seizures, diabetic emergencies, childbirth, poisoning and problems due to excessive heat and cold. In addition, the EMCP may have to provide care for patients suffering emotional or psychiatric emergencies. Some problems will be simple to deal with, while others will be life-threatening, but all will require professional emergency care. Studies have shown that Emergency Services personnel work long hours and at times have to sacrifice their free time to attend to incidents and accidents (Pike, 2009:56). EMS is therefore quite a labour-intensive undertaking.

The City of Tshwane Emergency Services Department operates 24/7 throughout the year, and operational employees work twelve-hour shifts in a system that comprises three shifts (CoT Intranet Portal, 2015). The term 'ambulance service' means any private or state organization that has trained dedicated staff and is equipped to render emergency medical care, inter-facility transfers and specialized standby services. The CoT Emergency Medical Services Department qualifies as and meets the criteria for an ambulance service. Besides EMS and Fire Operations, the non-core competencies of support services and media liaison services are also present in the Emergency Services Department and are supportive in the execution of its mandate. Emergency Service is labour-intensive and its nature is such that it demands the use of expensive technical equipment.

2.4 The Emergency Medical Care Practitioner (EMCP) and personality profile

In this study, personality will be defined according to Cattell (2006:9), who by means of factor analysis identified certain traits that are thought to constitute personality. From this perspective, traits are described as the elements that form the structure of personality. More specifically, traits are mental constructs inferred from behaviour, which predispose a person to behave consistently from one situation to another over time. Briefly, according to Cattell's theory, there is a set of 16 source traits that exist in relative amounts in each individual, which underlie personality and distinguish one person from another (Phares, 2009; Reber, 2005). Through the empirical measurement or assessment of these source traits, an individual's personality profile can be mapped onto a trait matrix in order to predict behaviour. This mapping of traits also allows individuals to be compared to one another with regard to their individual differences in the clustering of traits.

Personality needs to be distinguished from what is known as temperament, which the literature describes as having a narrower meaning than personality in that it focuses on the more emotional aspects of a person's biological and psychological dimensions (Meyer, Moore & Viljoen, 2007:13). In other words, temperament refers to particular patterns of emotional reactions to stimuli that have a genetic basis. Fromm (cited in Meyer et al., 2007) further differentiates between character and temperament by suggesting that temperament includes those responses determined by an individual's constitution which cannot be modified, while character on the other hand refers to those components of personality that are shaped by personal experiences and socialization, and are subject to change as the individual acquires new experiences.

Linked to this concept are attitudes. Briefly, attitudes are a combination of cognitive, emotional and behavioural components (Weiten, 2009: 89), on the basis of which an individual evaluates situations and forms judgements. The cognitive aspect of an attitude refers to the beliefs centred around a specific object or situation, while the emotional aspect is determined by the affect the object or situation stimulates. The behavioural component consists of predispositions to act in certain ways towards an object or situation.

This complex structure of attitudes may explain why attitudes and behaviours are not always consistent with one another. For example, although the cognitive components of an attitude may suggest a certain behavioural response, the affective aspect may differ quite substantially, thus affecting behaviour. The behavioural component, as Weiten (2009:35) points out, is thus predisposition only and depends on interaction with social norms and values. This links to the idea of habitual behavioural responses which are thought to be learned reactions in response to certain stimuli. According to Reber (2005:63), a habit is a pattern of activity that has, through repetition, become automated and durable. It is closely linked therefore with the concept of traits.

By researching personality traits, habits and attitudes, it is hoped that this study will highlight those aspects that are inherent to an individual and modify the experience of EMCPs.

2.5   EMCP Qualifications

South Africa has a great need for dedicated, skilled people committed to the highest standards of emergency medical care. The profession has grown enormously over the last 25 years. It can no longer be considered a job but is, rather, a professional calling. A commitment to patient care, professional integrity and lifelong learning is vital to success in this career. The Health Professions Council of South Africa (HPCSA) governs the standards of all medical training in South Africa.

Given the conditions surrounding EMS work in this country, EMCPs need to be properly trained and supervised. They also require a certain amount of personal resilience, good stress management skills, adaptability and flexibility, leadership skills and intellect. Many candidates who have recently matriculated have the required academic record and can afford to attend university full-time for three to four years, depending on the degree route. Many others who do not have the means to attend university choose the short course route. There has been a move to discontinue short course training in favour of university education; however, the latest directive from the Ministry of Health indicates that short course training will continue in its current form for the foreseeable future, until further clarity and agreement have been reached.

Students intending to study Emergency courses can embark on one of the following: Basic Ambulance Course (BAC), Advanced Emergency Assistant (AEA), Critical Care Assistant (CCA), Emergency Care Technician (ECT), BTech: Emergency Medical Care and Bachelor's Degree: Emergency Medical Care. These courses will be elaborated on below.

- The BAC (Basic Ambulance Course) is the Basic Life Support (BLS) level, which is the introductory qualification and takes seven weeks of training. It is the entry-level requirement for a career in emergency services.

- Ambulance Emergency Assistant (AEA) – Intermediate Life Support (ILS) level is a four-month course that builds on the foundation laid during the BAC course. In order to take this course, one must have a Matric Certificate, have been registered with the Health Professions Council of South Africa as a Basic Ambulance Assistant (BAA) for at least six months, and have 1000 documented, verifiable hours of patient care experience as a BAA (Castle 2003:56).

- The Emergency Care Technician Course (ECT) is a two-year National Certificate course. This qualification is offered by certain institutions, and those who qualify work under the indirect supervision of a BTech: Emergency Medical Care Practitioner (paramedic).

- Diploma: Emergency Medical Care. The Diploma: Emergency Medical Care is only offered on a full-time basis. Successful completion leads to registration with the Health Professions Council of South Africa as an Emergency Care Technician (ECT).

- The Bachelor's Degree BTech: Emergency Medical Care is a four-year full-time degree. It includes phases which can be organized roughly alongside the intermediate qualification of AEA (Advanced Emergency Assistant) and the introductory qualification of BAC (Basic Ambulance Course). During the first year of training of the BTech: Emergency Medical Care degree, students gain basic clinical and rudimentary drug administration skills (Castle 2003:45). These skills are honed during the compulsory practical component of the course, which requires that a certain number of hours be worked on the road with an ambulance crew and in emergency and labour wards (Castle 2003:50). During the second and third years of training, students work towards Advanced Life

Support (ALS) qualifications for the BTech: Emergency Medical Care. They continue with their practical exposure, being required to complete 1000 hours on a response vehicle during the second year and another 1000 hours in the third year (Castle, 2003:56). Students are also taught rescue training during the course. This provides them with the technical skills for a rescue operation, as well as patient management and incident and command control competencies (Castle, 2003:56).

- The Department of Emergency Medical Care & Rescue at Durban University of Technology has both a national and an international reputation in the education of high-quality, professional Emergency Care Providers, who are highly sought-after across the globe. The department currently offers the Bachelor of Health Sciences (BHS) and the Bachelor of Technology (BTech) degrees in Emergency Medical Care and has developed a robust post-graduate programme offering the Master of Health Sciences in Emergency Medical Care degree and more recently the Doctor of Philosophy (PhD) in Emergency Medical Care. Graduates of the Bachelor Degree programmes may register to practise at the highest level of the scope of practice of the Emergency Medical Care Practitioner (EMCP), as an autonomously practicing clinician, with the Health Professions Council of South Africa (HPCSA) [www.dut.ac.za/faculty/health_sciences]. Once students have successfully completed the first year of study, they qualify as Intermediate Life Support (ILS) providers and register with the Health Professions Council of South Africa (HPCSA). With this registration, they can enter the level of independent practice.

In order to cope with the demands of the courses offered in EMS, students need to be physically fit and have little fear of heights or enclosed spaces. The BLS course up to the National Higher Diploma level attempts to provide training that is as comprehensive as possible, in order to equip EMCP to provide the best possible service.

One of the most critical and visible health problems today is the sudden loss of life and disability caused by catastrophic accidents and illnesses. Every year, more people receive emergency care than in the previous year. Too often those who

arrive first at the scene of an accident are not sufficiently trained to give proper on-the-scene emergency care or in-transit emergency assistance. Often too much time passes before proper emergency care is given, and victims who might have been saved die because of lack of necessary care. The Emergency courses aim to instill a working knowledge of emergency medical procedures, physical rescue procedures and practical encounters. This is achieved by exposing students to various academic courses as well as providing practical, hands-on experience on the road with qualified EMS personnel.

Employment opportunities exist in provincial emergency and rescue services, private emergency services, the SANDF, the mining industry, as well as in international occupational health and safety and emergency services.

Minimum requirements are typically: HPCSA registration as a BAA, a valid driver's licence and a Professional Driving Permit (PDP). There is currently an oversupply of Basic Life Support (BLS) providers in the country but a significant demand for Intermediate Life Support (ILS) and Advanced Life Support (ALS) providers. As a result, in the researcher's opinion, the demand in these areas is very high.

2.6   EMS Norms and Standards

The most important standard that an emergency service administrator can set is the minimum response standards required during an emergency (fire and ambulance). This response standard specifies the minimum (statistically averaged) time (that is, the predetermined number of minutes) that the response vehicles should take to travel from an emergency station to an incident.

The Emergency Medical Services (EMS) Department of the City of Tshwane currently renders an ambulance service as an agent on behalf of the Gauteng Provincial Government (GPG). This arrangement is in terms of the Memorandum of Agreement between the City and the Province, and the addendum is signed annually.

In terms of section 156 of the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996), the city has to demonstrate the capacity and the ability to render the service.

- Whereas in terms of the provisions of section 16 (1) (b) of the Health Act 1997 (No. 63 of 1977) it is the function of a Provincial Government to ensure that Ambulance Services are provided within that Province;

- And whereas the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996) section 238 (b) enables the Competent Authority to allow the Local Government to perform the functions on an agency basis;

- And whereas the Competent Authority is desirous, subject to Section 238 (b) of the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996), to allow the performance of certain functions on an agency basis relating to the provision of Ambulance Services by the Agent;

- And whereas the national and provincial governments must assign to a municipality, by agreement and subject to any condition, the administration of a matter listed in part A of schedule 4 or part of schedule 5 which necessarily relates to local government, if: –

- that matter would most effectively be administered locally and:

- the municipality has the capacity to administer it;

- And whereas a municipality has the right to exercise any power concerning a matter reasonably necessary for, or incidental to, the effective performance of its functions;

- And whereas the Agent is willing to accept, subject to section 238(b) of the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996), the performance of certain functions on an agency basis as agreed to by the Local Government. The service should be rendered in terms of an existing signed Memorandum of Agreement (MOA) and should comply with prescribed norms and standards.

- **Emergency Response Standards**

Response standards are a significant cost-driver of the emergency services. The benefits of varying response standards and the distribution of emergency response vehicles are easily measured by the use of Emergency Response Management Information System (ERMIS). As reported in the Master Plan (CoT Master Plan 2003:5), the initial response standards for the Emergency Services Department are based on the time taken to attend to an incident and the number of vehicles

operational per day. The Communication Centre is the most important asset of Council and provides the public with a single point of contact for emergency services aid. It is a centralized point where all calls are received and dispatched.

According to Brunacini and Brunacini (2004:7) (the Fire Chief of the City of Phoenix: Arizona Fire Department), the mission of Emergency Services Department is to prevent harm. Preventing harm would cover many areas, including specialized rescue, health and wellness of the citizens, and prevention of further injury. Protecting property would include protecting community resources, people, property, natural resources, the environment and the community infrastructure from harm and loss.

2.7   Motor Vehicle Accidents

Motor vehicle accidents (MVA) are the fifth largest cause of death among people of all ages, and the largest cause of death for people aged less than 40 years. If lives are to be saved and mortality reduced, it is obviously important that treatment of the severely injured in the first minutes after arrival on scene must be of a high standard (Peters, 2016).

The major contributory factors to the fatal accidents include:

- Speeding
- Overtaking when not safe to do so
- Fatigue
- Overloading
- Tyre bursting
- Alcohol

The number of fatal crashes per province during the period 1 December 2015 to 11 January 2016 is given in the table below:

2.7.1   Fatal MVAs

Table 2.1:   Fatal crashes: 1 December 2015 – 11 January 2016 (Baloyi, 2016).

Year	GP	KZN	WC	EC	FS	MP	NW	LI	NC	Total RSA
2014/15	246	308	122	227	131	159	108	186	48	1535
2015/16	271	302	162	278	157	184	136	208	57	1755
Change	25	-6	40	51	26	25	28	22	9	220
% change	10	-2	33	22	20	16	26	12	19	14

Number of fatalities per province: 1 December 2015 – 11 January 2016. (Peters, 2016).

A closer look at the road crashes and fatalities over the 2015/16 festive season depicted the following trends: (Peters, 2016)

- Small motor vehicles accounted for 47.9% of total crashes during this season, followed by light delivery vehicles at 22.7%, minibuses or kombis at 10.1% and trucks at 4.8%.
- The majority of people who died were passengers at 38.3%, followed by pedestrians at 34.9%. Drivers contributed 23.9% of the fatalities and cyclists 2.8%.
- The age group most affected among drivers as well as passengers and pedestrians was the group between 25 and 39 years, accounting for about 47.9% of the fatalities among drivers, 38.5% of those among passengers, and 34.3% of those among pedestrians.
- Children from 0 – 4 years contributed 10.4% of pedestrian deaths.
- The gender mostly affected was males, accounting for 74.4% of total fatalities.
- The gender of 0.4% of the people was undetermined because their bodies were burned beyond recognition.

> As the sun continues to rise to banish the darkness of unwarranted carnage and fatalities on our roads, we find solace and inspiration in the words of the current President of South Africa during his inaugural speech, when he attested that the road ahead is long and demanding and that even when the challenges ahead may seem insurmountable we are determined to succeed as we have always succeeded in our efforts to overcome challenges (Peters, 2016).

The preliminary statistics released confirm the state of road safety in South Africa. A situational analysis conducted at the start of 2015 indicated that the number of

registered vehicles had increased by a further 340 000 at the start of December 2015.
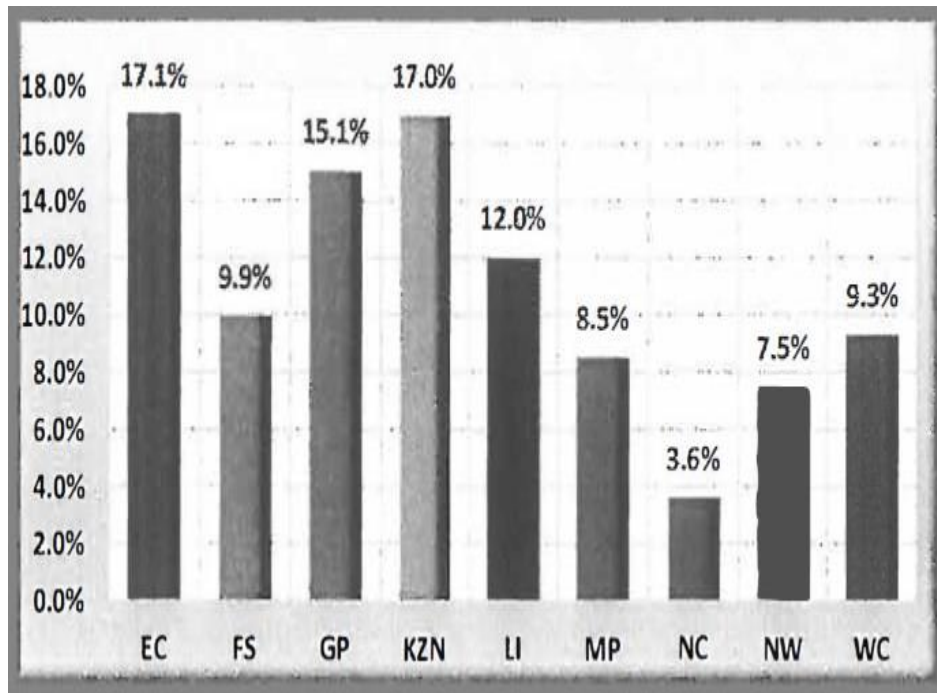
Figure 2.1: Percentage contribution of fatalities per province: 1 December 2015 – 11 January 2016 (Peters, 2016).

A new phenomenon has been observed this year, in which most crashes (51.4%) occur between 14h00 and 23h00. This might be attributed to the relentless implementation of round-the-clock law enforcement.

Human factors contributed the most to the crashes, with many collisions occurring as a result of jay-walking, speed that was too high for circumstances, overtaking in the face of oncoming traffic, hit-and-run, and driving under the influence of alcohol. The analysis further brought to the fore the very painful reality of the role played by un-roadworthy vehicles. Key to the vehicle factors that contributed to the crashes were tyre bursts, faulty brakes and smooth tyres, while environmental factors included sharp bends, wet surfaces and poor visibility.

In the period between 1 December 2015 and 11 January 2016, 1387 fatal crashes experienced on the roads represent an 11% increase in the number of crashes compared to the 2014 festive season, in which 1253 crashes were recorded. The situation could have been bleaker had law enforcers not intensified our interventions

and heightened visibility. In the period under review, 1.7 million vehicles were stopped and checked, and over 6000 motorists were arrested for drunken driving, 808 for excessive speeding and took off the road 5710 vehicles for being un-roadworthy.

The fatalities increased by 220 (14%) from 1535 over the same period in the previous year to 1755. KwaZulu Natal is the only province that recorded a decline (of 2%) in the number of fatal crashes. The Western Cape recorded the highest percentage increase, 33%, with the number of fatalities increasing from 122 to 162, followed by North West, where the fatalities increased by 26% from 108 to 136. Fatalities in the Eastern Cape increased by 22% from 227 to 278 (Peters, 2016).

> We are equally indebted to all our stakeholders for their collective effort and responsibility. We unequivocally commend the role played by police officers, the South African National Defence Force, national, provincial and local departments of transport, road safety activists and practitioners, emergency medical services and health practitioners, faith based organizations, taxi associations, NGOs, CBOs, youth formations and all transport stakeholders. The preliminary statistics released tell only a part of the story about road safety in our country. A situational analysis conducted at the start of the 2015 festive season indicated that the number of registered vehicles had increased by a further 340 000 at the start of December (Peters, 2016).

Figure 2.2: Percentage contribution of fatalities per age for drivers (Peters, 2016)
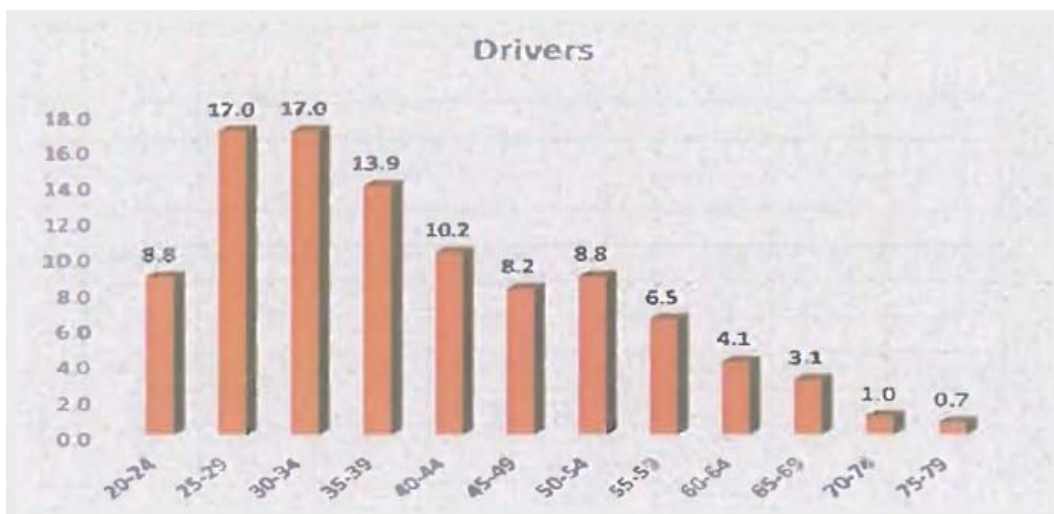
Figure 2.2: **Percentage contribution of fatalities per age for drivers (Peters, 2016)**

The total number of deaths (81.4%) was apportioned to black people and weekends continue unabated to pose a major challenge as demonstrated by the recent festive season reality. The highest numbers of fatal crashes were recorded at a percentage contribution of 22.2% of the total, followed by Fridays and Sundays with 18.8% and 16.9% respectively. It was therefore confirmed that in the period between 2005 and 2009 the country experienced a small 0.52% cumulative annual drop in the number of road fatalities (Peters, 2016).

In South Africa, the government supports the commitment to better health care. According to the Constitution of the Republic of South Africa, 1996, Section 27:(3), no-one may be refused emergency medical treatment, including at motor vehicle accident scenes (Cosser et al., 2007:42; Young et al., 2008:64). This contributes to a lot of stress amongst EMCPs.

2.8 Impact of EMS on EMCPs

Besides intense clinical conditions, administrative issues have been identified as critical stressors in EMS in a number of studies. These include long working hours, poor administrative support, negative attitudes of hospital personnel, low pay, inadequate equipment and limited career options (Cosser et al., 2007:42; Young et al., 2008:64).

Organizational and administrative issues, however, have been repeatedly identified as having more significance than clinical or interpersonal factors as sources of stress in EMS. A study by Grisby and McKnew (2006:72) applied the 'Staff Burnout Scale for Health Professionals' to EMS personnel. The researcher has reached the conclusion that burnout amongst EMS workers is most strongly associated with organizational and job characteristics, rather than individual attributes, as all members of the community are entitled to the EMCP's best efforts (Cosser et al., 2007:56).

2.8.1 Stress

A growing body of literature indicates that EMCPs may develop severe stress levels after attending emergency incidents. Not everyone is affected to the same degree and, even with very traumatic incidents, stress levels can vary from very low to very high (Gibbs, 2007:126) Raphael, Wilson, Meldrum & McFarlane, 2006:48; Alexander & Klien, 2007:198). Nelson and Quick (2008:214) assert that despite the

negative effects of stress, it can be a great asset in managing legitimate emergencies and achieving peak performance.

The nature of emergency service work can involve exposure to high-adrenaline life-threatening situations, interspersed with prolonged periods of relative calm and potential boredom. Organization-based stressors such as negative interpersonal relationships and work overload remain a significant source of stress in the emergency service (Hetherington, 2005:57). However, the nature of the traumatic incidents with which emergency personnel work on a daily basis can compound the work-related stress experienced. Threat of physical injury and exposure to life and death emergencies in often potentially hazardous public environments have been found to add significantly to the stress of the job.

Bohl (2005:95) states that when negative stress is continuously high, job satisfaction is low. Jobs are more stressful when they interfere with an employee's personal life and are a continuing source of worry or concern. The researcher is also in agreement that stress is an inevitable result of work. As a result, managers must learn how to create healthy stress for employees so as to facilitate performance and enhance well-being (Nelson & Quick, 2008:236). EMCPs suffer emotional trauma well beyond their initial devastation, confusion and frustration. Stress reactions common to rescue workers include psychic numbing, short-term memory impairment, decreased problem solving abilities and diminished communication (Young, Ford, Ruzek, Friedman & Gusman, 2008:96). For them concrete responses are more necessary than sympathetic statements expressing their endurance. Caring and focus offered from practitioners who themselves have been traumatized is a cause for concern. The far-reaching emotional trauma experienced by EMCPs harms them in different ways.

EMCPs are exposed to and affected by traumatic events such as the trauma of witnessing death or being exposed to the dead. The researcher's argument in this context is that the reaction to trauma is as universal as the exposure to it. Workers in emergency services organizations, such as ambulance services, fire brigades, and rescue squads, are not only exposed to everyday stressors common to many work environments, but they also face extreme stressors associated with emergency incidents such as traumatic accidents or disasters.

2.8.2   Disorganization and Disequilibrium

One of the most obvious aspects of crisis is the severe emotional upset, or disequilibrium, experienced by the individual. Miller (2007:90) describes the feelings of tension, being ineffectual, and helplessness of the persons in crisis. Crow (2007:99) states that it is not uncommon for clinicians to witness not only emotional reactions (crying, anger and remorse) but also somatic complaints (such as ulcers and stomach cramps) and behavioural disorders (interpersonal conflict and inability to sleep, perform sexually or carry on work activities).

Crow (2007:100) attempted to define crisis empirically by comparing the behaviour of people who were not experiencing crises to the behaviour of people who were. Persons in crisis experienced the following symptoms significantly more than those not in crisis:

- Feelings of tiredness and exhaustion
- Feelings of helplessness
- Feelings of inadequacy
- Feelings of confusion
- Feelings of anxiety
- Physical symptoms
- Disorganization of functioning in work relationships
- Disorganization of functioning in family relationships
- Disorganization of functioning in social relationships
- Disorganization in social activities.

This for the EMCP indicates that the disorganization, confusion and upset of the crisis state can affect several aspects of the person's life at one time, including feelings, thoughts, behaviour, social relationships and physical functioning.

2.8.3   Breakdown in coping

> Central to almost any definition of crisis is the idea that coping has broken down. The onset of crisis, whether the result of a major threatening event or a series of stressful events resulting in a burden too great to bear, calls into play whatever problem solving devices are available. Exercises that might have worked before, such as redefining the situation, ignoring it, talking to a friend, or taking a vacation are not adequate. The person in

crisis may feel trapped, or wholly incapable of dealing with a new circumstance (Caplan, 2007:19).

Caplan (2007:26) summarizes five characteristic of effective coping behaviour as follows:

- Actively invoking help from others.
- Breaking problems down into manageable bits and working them through one at a time.
- Being aware of fatigue and tendencies towards disorganization, while pacing efforts and maintaining control in as many areas of functioning as possible.
- Mastering feelings where possible (accepting them when necessary) being flexible and willing to change, and
- Trusting in oneself and others and having a basic optimism about the outcome.

This means that as EMCPs mature each develops various methods to deal with life's difficulties. As EMCPs actively explore reality issues and search for more information they are freely expressing both positive and negative feelings, which is effective coping behaviour.

2.8.4   Crisis

A crisis is a temporary state of upset and disorganization, characterized chiefly by an individual's inability to cope with a particular situation using customary methods of problem solving, and by the potential for a radically positive or negative outcome. Caplan's (2007:56) emphasis is on the emotional upset and disequilibrium, and also on the breakdown in problem solving or coping during the crisis state. Taplin (2007:78) emphasizes the cognitive component of the crisis state, namely the violation of the person's expectancies about life by some crisis event, or the inability of an individual's cognitive map to handle a new and dramatic situation.

Crisis has identifiable beginnings. Viney (2007:65) summarizes a number of studies that isolate specific life events having the potential for precipitating a life crisis: pregnancy and birth, unmarried motherhood, engagement and marriage, retirement, fatal accidents, bereavement, natural disasters and rapid social and technological change.

The researcher is of the opinion that some events are so universally devastating that they are almost always capable of precipitating a crisis, for example, a fatal motor vehicle accident that leads to the unexpected death of a loved one. Viney (2007:90) suggests that the impact of a particular life event depends upon its timing, intensity, duration, sequencing and the degree of interference with other developmental events.

Theoretically we can talk of three possible outcomes of crisis: change for the better, change for the worse and a return to the previous level of functioning. However, since crisis is so upsetting, the third category bears little meaning. Crisis is viewed as a critical turning point where danger and opportunity co-exist and where the stakes are high. This raises the question of how to define crisis resolution. Viney (2007:78) suggests that the concept includes, in addition to restoration of equilibrium, cognitive mastery of the situation and the development of new coping strategies, including changes in behaviour and the appropriate use of external resources. This builds on the idea that crisis resolution can be defined as working through the crisis event so that it becomes integrated into the fabric of life, leaving the person open instead of closed to the future.

2.8.4.1 Stages: From Impact to Resolution

The situation of crisis has been considered to progress through a series of relatively well-defined stages. Caplan (2007:89) describes the onset of crisis as follows:

- Initial rise of tension from the impact of an external event, which in turn initiates habitual problem-solving responses.
- Lack of success in these problem-solving responses, and the continued impact of the stimulus event, further increase tension, feelings of upset and being ineffectual.
- As the tension increases, other problem-solving resources are mobilized. At this point, the crisis can be averted by any of the following: reduction in the external threat, success of new coping strategies and redefinition of the problem or giving up tightly held goals that are unattainable.
- If none of these occurs, however, the tension mounts to a breaking point, resulting in severe emotional disorganization.

Caplan (2007:19) describes the reactions to severe stress (such as the unexpected death of a loved one) in order to provide further details of the stages of crisis. In this model, the first reaction to a threatening event is the outcry, an almost reflexive emotional reaction such as weeping, panic, screaming, fainting or moaning. The reaction may be quite obvious to others (a woman sobbing in anguish upon hearing that her husband has died in a fatal motor vehicle accident). Outcry refers to the initial reactions at the moment of impact of the event.

Outcry leads either to denial or to intrusiveness. Denial refers to a blocking of the impact. It can be accompanied by emotional numbing, not thinking of what has happened, or structuring activity as if the event had not occurred. Caplan (2007:97) notes that a widow may enter this stage at the time of the funeral, busying herself with activities to meet the needs of relatives, leading them to conclude that she is very strong or she is doing very well.

According to Caplan (2007:290) intrusiveness includes the involuntary flooding of ideas and pangs of feeling about the event, whether a loss or some other tragedy. Recurrent nightmares, or other daily images and preoccupations with what has happened, are characteristic of this phase. Similarly, the widow, for example, may experience this after the relatives have gone, and the full impact of the loss is felt. The flood of thoughts that accompany the intrusive phase may include statements, spoken or unspoken, about the loss and its impact. Some individuals skip the denial phase and move directly to an intrusive phase, while others vacillate back and forth between these two states. Working through is the process in which the thoughts, feelings and images of the crisis experience are expressed, identified and aired. Completion is the final phase of the crisis experience and refers to an integration of the crisis experience into the individual's life. The event has been faced, feelings and thoughts have been identified and expressed and reorganization has been either accomplished or begun.

In the researcher's opinion, some EMCPs progress and work through these feelings and experiences naturally, whereas others do so only with outside help. Working through involves assisting the person in exploring the crisis event and his/her

reaction to it. It assumes that an individual's reaction to a crisis event must be viewed as a complex process.

2.8.5 Trauma debriefing

According to the Bible Society of South Africa (2009:23), the English word 'trauma' is derived from the Greek term meaning 'wound'. This meaning provides a graphic image of what takes place in human trauma. Figley (2005:16) defines trauma as a sudden, unexpected, near to death-like experience. Schulz (2008:8) suggests that when a person encounters a traumatic experience, he or she becomes a wounded individual and, as with all wounds, there must be a time of healing.

Figley (2005:28) asserts that EMCPs absorb the traumatic stress of those they help. Herman (2009:18) states that the common denominator of trauma is a feeling of intense fear, helplessness, loss of control, threat and loss of freedom. The researcher agrees that trauma gives rise to a state of disequilibrium, resulting in an individual's inability to handle it, and breaks down in such a way that those affected can no longer function adequately.

Trauma is therefore an extraordinary event because it overwhelms the ordinary human adaptations to life. As clearly highlighted by Schulz, Van Wijk and Jones. (2006:90), trauma generally involves threats to life or bodily integrity or a close personal encounter with death or violence.

According to Stamm (2008:12), trauma debriefing is a session or meeting that includes the affected individuals and a trained debriefer who facilitates the session. Therefore, trauma debriefing is a process in which the victim of any traumatic incident ventilates their experiences in a safe environment. The symptoms and feelings the person experiences are normal reactions to an abnormal situation. French and Harris (2009:2) refer to trauma debriefing as a Traumatic Incident Reduction. The two authors view it as a powerful regressive, repetitive, desensitization procedure or effective tool for use in the rapid resolution of virtually all trauma-related conditions.

In recent years, there has been a greater focus on the effects of traumatic events on individuals who are victims of trauma than on the crisis workers themselves.

Often EMCPs have dramatic reactions to these extraordinary events that may leave them overwhelmed and upset. In most cases, when a significant crisis occurs, the EMCPs involved may benefit from an opportunity to talk about their encounters either as individuals or as a group. For that reason, trauma debriefing has been promoted as a method to help healing and resolution. In the researcher's experience trauma debriefing is a means of emotional unloading or ventilation of feelings in a controlled and safe environment.

The researcher's argument in this context is that the reaction to trauma is as universal as the exposure to it. The broad spectrum of trauma debriefers, emergency medical care practitioners, firefighters, police officers and counsellors are exposed to crisis, traumatized people and gruesome incidents on a daily basis and are affected by the circumstances in which they work. Trauma is not something to which one can grow accustomed; rather there is a need to develop ways of dealing with such experiences (Stamm, 2008:78).

A debriefer is a trained professional in the field of trauma or critical incident debriefing – a trained professional who takes the victims of trauma along the route of uploading or ventilation. Authors of works on trauma, such as Rozelle (2007:14) and Schauben and Frazier (2005:65), refer to a debriefer as a traumatologist.

According to Stamm (2008:65), debriefers are professional helpers directly involved with providing services to the client. They are actually helpers who address difficult traumatic life events. For the purpose of this study, a debriefer will be any first respondent or crisis worker who provides trauma management to people exposed to any traumatic event.

2.8.5.1 Trauma debriefing process

Schulz, Van Wijk & Jones (2006:165), assert that debriefing is the process of creating support mechanisms and procedures before, during and immediately after a traumatic incident, with the aim of providing a positive and supportive atmosphere. The need for debriefing develops as a result of trauma-related stressors such as death or injury, loss of individuality, national disasters, lack of effective support and threats to both physical and psychological health. When a combination of the above stressors is present in a person, a need for debriefing usually develops. The SAPS

Debriefing Manual (2008:59) lists the following goals of the trauma debriefing process.

- **Creation of a 'safe harbour'**

The aim is to provide a safe environment in which members of the service can be supported by trained debriefers in order to process the traumatic incident.

- **The normality principle**

Debriefing helps people to realize that they are still normal. The abnormalities of the traumatic events are often confused with the abnormality of the person. By means of the trauma debriefing process they realize that the symptoms which they are experiencing represent a normal reaction to an abnormal event. The traumatic event has tested their ability to adapt outside the limits of the normal boundaries, and this leads to a disruption of their functioning.

- **Regaining control**

Traumatic events often make one feel powerless and helpless. They remind one of the fact that one does not have total control over one's life. The trauma debriefing process helps people to feel that they can still regain control over themselves, even after their traumatic experiences.

2.8.5.2 Phases of a formal debriefing session

A formal debriefing session consists of the following phases:

Phase One: Establish common ground.
- Schulz et al., (2006:77), indicate that, during this phase, the debriefer introduces him/herself and explains the aims of the session and debriefing. The group is committed to a time-span of two to three hours for the debriefing session.
- Group members introduce themselves to one another.
- The rules of a crisis group are explained, with emphasis on confidentiality and honesty.
- The debriefer establishes a sense of calm and ease in the group and helps to convey a feeling of self-confidence to the group members.

- The debriefer may briefly share their previous experiences of group tasks with this new group.

Phase Two: Tell the story.
- According to Schulz et al. (2006:89), the debriefer's task in this phase is to invite the survivors to talk freely and to tell their stories as experienced.
- The debriefer needs to inform individuals that they will not be interrupted.
- The debriefer listens to facts, feelings and thoughts.
- The debriefer makes emphatic statements.

Phase Three: Find out how long the incident has lasted.
- Schulz et al., (2006:78), explain that this is the fact phase, which covers issues around what happened.
- It is the debriefer's tasks to ensure that the traumatic experience is retold in as much detail as possible.
  - Repeated causes of fear and horror that leads to the initial reaction of shock need to be diffused.
  - The debriefer also needs to emphasize the value of sharing facts, and the victim must see the situation cognitively and integrate their personal experiences.

Phase Four: The Thinking phase
- This is the most excruciating part of the process, in that debriefers must listen attentively to what is being said in order to identify themes that apply to the crisis group. Actually this is the time when the debriefer tries to 'get into' the psychology reality of what the victims were thinking about and how that has impacted on them during the specific period. The debriefers, too, can get swallowed up by the very same thoughts that the victims have experienced, and if they are fearful thoughts, debriefers may internalize them as well.
- The essence of this phase is that the debriefers gradually identify themselves with themes that apply to the group they are debriefing.

Phase Five: The Feeling phase

- It is especially important that the debriefers reflect the essential conditions of sincerity and acceptance (Schulz et al., 2006:97). Debriefing must at all times point to the normality of the reactions and feelings as opposed to the abnormality of the situation. The process usually takes a long time and can be very taxing on the debriefers. This is the time when the steam continues to build up, and it can be used to encourage members to discharge their emotions.
- Stamm (2008:88) points out that the emotional reactions may be ones of sadness, fear, shock, anger towards oneself, aggression, feelings of guilt, vulnerability, helplessness, frustration and ambivalence, among others.

Hence, in the researcher's view, all these reactions may be internalized by debriefers and they, too, may feel exactly the same way; in so doing, they are vulnerable to secondary traumatization if they do not take care or distance themselves from the survivors' emotions.

Phase Six: Stress Reaction Phase
- According to Schulz et al., (2006:98), the focus in this phase is, in the first place, on the physical and psychological symptoms that members experience and, in the second place, on the passing on of information regarding stress reaction symptoms.
- The debriefers make use of their knowledge of typical symptoms to encourage members to share their own physical and emotional symptoms with the group. This could sharpen the members' feelings of normality and help them to accept their own reactions. The debriefers themselves, though, often have nowhere to ventilate their own stress reactions as a result of being secondarily exposed to the reactions of other people.

This, in the researcher's view, is when they might develop or start experiencing some noticeable personality changes, or when other people begin to see that there are noticeable personality changes and they attach their own meanings to what they are seeing.

Phase Seven: Go for Mastery
- According to Schulz et al., (2006:98), at the end of every debriefing session, any areas that have not been addressed must receive attention.

- Summarize and give feedback. This will give the debriefer and the EMCP the opportunity to recapitulate the important issues that were elicited during the process and members will be able to connect with their experiences. They will also give feedback regarding their coping mechanisms.
- Debriefers also give information on how individuals can identify whether they need further help, for example:
  - when symptoms do not decrease within the given period;
  - when members experience inability to function effectively at work or at home; or
  - when the members experience noticeable personality changes, or when other people comment on this.

As indicated by Schulz et al., (2006:100), it is important that members know where to get additional help before ending the session, and they must be aware of the list of service providers within their area in order to provide for the whole spectrum of their needs.

2.8.6 Burnout

Burnout involves feelings of depersonalization and a reduced sense of personal accomplishment, resulting in deterioration in job performance and job satisfaction (Bohl, 2005:99). It is during EMCPs' execution of tasks that they are directly or indirectly exposed to traumatic events that warrant the intervention of professional helpers such as social workers, chaplains and psychologists. Other stress reactions common to rescue workers include psychic numbing, short-term memory impairment, decreased problem solving abilities and diminished communication (Young, Ford, Ruzek, Friedman & Gusman, 2008:96). Over a sustained period, depression and/or anxiety may manifest itself and in turn may create or aggravate marital, vocational or substance abuse problems (Young et al., 2008:56).

2.8.6.1 Prevention of burnout

According to Bandura (2006:67), job burnout "has long been recognized as a problem that leaves once-enthusiastic professionals feeling drained, cynical, and ineffective." The author draws on the interaction between personal and situational factors in proposing two new approaches to the prevention of such burnout.

> The first approach focuses on the exact opposite of burnout: increasing engagement with work by creating a better 'fit' between the individual and the job. The second approach draws from the decision-making literature and reframes burnout in terms of how perceptions of the risk of burnout may lead to suboptimal choices that actually increase the likelihood of burning out. (Bandura, 2006:67).

These new approaches provide a more direct strategy for preventing burnout than typical one-dimensional 'stress' models, because they specify criteria for evaluating outcomes and focus attention on the relationship between the person and the situation, rather than on one or the other in isolation. The following are effective ways to prevent burnout (Bandura, 2006:189):

Job burnout has long been recognized as a problem that leaves once-enthusiastic professionals feeling drained, cynical, and ineffective. This article proposes two new approaches to the prevention of burnout that focus on the interaction between personal and situational factors. The first approach, based on the Maslach multidimensional model, focuses on the exact opposite of burnout: increasing engagement with work by creating a better "fit" between the individual and the job. The second approach draws from the decision-making literature and reframes burnout in terms of how perceptions of the risk of burnout may lead to suboptimal choices that actually increase the likelihood of burning out. These new approaches provide a more direct strategy for preventing burnout than typical unidimensional "stress" models because these new approaches (1) specify criteria for evaluating outcomes and (2) focus attention on the relationship between the person and the situation rather than one or the other in isolation. Job burnout has long been recognized as a problem that leaves once-enthusiastic professionals feeling drained, cynical, and ineffective. This article proposes two new approaches to the prevention of burnout that focus on the interaction between personal and situational factors. The first approach, based on the Maslach multidimensional model, focuses on the exact opposite of burnout: increasing engagement with work by creating a better "fit" between the individual and the job. The second approach draws from the decision-making literature and reframes burnout in terms of how perceptions of the risk of burnout may lead to suboptimal choices that actually increase the likelihood of burning out. These new approaches provide a more direct strategy for preventing burnout than typical unidimensional "stress" models because these new

approaches (1) specify criteria for evaluating outcomes and (2) focus attention on the relationship between the person and the situation rather than one or the other in isolation.

- **Increase your self-efficacy**

Self-efficacy is having the belief in your own ability to accomplish (and exercise control over) personally meaningful goals and tasks. People who have a stronger level of perceived self-efficacy experience less stress in challenging situations, and situations in turn become less stressful when people believe they can cope (Bandura, 2006:43).

- **Identify what you need from your work**

The most direct and effective way to enhance self-efficacy is through performance mastery experiences. Simply observing a friend or work colleague accomplish something meaningful is contagious and increases your ability to meet challenges head on (Bandura, 2006:65).

- **Have creative outlets**

Burnout interferes with your ability to perform well, increases rigid thinking, and decreases your ability to think accurately, flexibly, and creatively (Bandura, 2006:90). Even if you are not able to flex your creative muscles at work, having some type of creative outlet will keep you engaged and motivated.

- **Take care of yourself**

There is always something to do; our bodies are not machines (no matter how much caffeine and sugar you pump in). And really, whatever 'it' is (work, chores, homework) will still be there after you take a much-needed break (Bandura, 2006:65).

- **Get support where you can find it**

The number of people who say they have no-one with whom they can discuss important matters has nearly tripled in the past two and a half decades (McPherson 2006:76). The more people get burnout, the more they just want to avoid people, and that is exactly the opposite of what should happen. The researcher believes

that it takes time and effort to maintain social connections, but that supportive people are the best inoculation an EMCP can have against burnout.

- **Increase your 'diet' of positive emotions**

The author sees emotions as a kind of a 'diet." Studies show that increasing your 'diet' of positive emotion builds your resilience, creativity and ability to be solution-focused, things that are in short supply if you feel as though you are burning out (Frederickson, 2009:91). The researcher firmly believes that people need to start noticing when others have done things well and tell them so.

2.8.7 Post-Traumatic Stress Disorder (PTSD)

PTSD suggests a severe anxiety disorder which, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), involves persistent re-experiencing of the trauma, avoidance and hyper-arousal (Kaplan & Sadock, 2013:68). Repeated exposure to traumatic events is believed to result in the development of PTSD. Over a sustained period, depression and/or anxiety may manifest themselves, that in turn may aggravate or create marital, vocational or substance abuse problems (Young et al., 2008:76). Besides intense clinical conditions, administrative issues have also been identified as critical stressors in EMS. These include long working hours, poor administrative support, negative attitudes of hospital personnel and inadequate equipment (Cosser et al., 2007:187, Young et al., 2008:96).

2.8.7.1 Prevention of Post-Traumatic Stress Disorder (PTSD)

After surviving a traumatic event, many people have PTSD-like symptoms such as being unable to stop thinking about what happened. Fear, anxiety, anger, depression and guilt are some of the common reactions to trauma. Getting timely help and support may prevent normal stress reactions from getting worse and developing into PTSD.

According to Schulz et al., (2006:179), the trauma debriefing process is proactive and helps to counter the development of PTSD.

- **Cognitive structure**

The debriefing process helps EMCPs to achieve emotional release and in this way the experience is given a cognitive structure and a person can have a sense of achievement.

It can thus be deduced from the goals of debriefing that it is essential for the image of a mentally sound and prepared member to be maintained and promoted at all times. Hence, Schulz et al., (2006:67), identify the following benefits of debriefing:

- the reduction of any short or long term distressing after-effects;
- the reduction of incidence of sickness and absenteeism;
- the reduction of personal, mental and relationship problems;
- the reduction of work-related problems; and
- the reduction of anxieties about stress and traumatic reactions being thought of as a sign of weakness.

The researcher believes that EMCPs need to be continuously encouraged and also take comfort in the knowledge that fellow members care and can give support. This will reduce the anxiety of anyone who might feel threatened or embarrassed if they had to ask for help

2.9 Professional Support Services

The Health Professions Council of South Africa (HPCSA) regulates the health professions in the country in respect of registration, education, training, professional conduct and behaviour, ensuring continuing professional development and fostering compliance with healthcare standards.

In terms of the mandate to guide the professions and protect the public, the HPCSA is responsible for ensuring that our practitioners are fit to practice and are not impaired by any physical or mental ill health. The Health Committee is committed to the prevention, early identification, treatment and rehabilitation of impaired students and healthcare practitioners.

2.9.1 Supervision

EMCPs often find that they do not feel grounded and cannot maintain a sense of balance. Some shut down emotionally and feel numb, hard, distant or depersonalized. Stamm (2008:58) asserts that trauma professionals may lose touch

with their inner connection to significant others and become unable to hold their loved ones in their minds or know that they are being thought of lovingly.

Supervision given in the form of debriefings can have a profound effect on relationships. Our emotional brain, the limbic system, has been wired over millennia to respond to situations that are noxious, injurious or threatening. We have these emotional reactions because they prompt and prepare us to cope and to protect ourselves (Stamm, 2008:62).

The researcher believes that many professionals who have suffered from secondary traumatization do not want to feel anything. They have experienced intense and overwhelming feelings in their lines of duties and they have learned to dampen or entirely cut them off.

2.9.2 Employee Assistance Programmes (EAP)

Employee Assistance Programmes (EAPs) are employee benefit programmes offered by many employers. The purpose of the EAP is to assist employers and employees in the reduction of work-related injuries and illnesses. In addition to providing an enforceable set of safety and health standards, it is the intention of the department that the provisions of these working standards be used to assist both employers and employees to achieve the safest workplace reasonably attainable under the conditions to which employees are or will be exposed (Occupational Outlook Handbook, 2005:76). EAP generally includes short-term counselling and referral services for employees. It seems to the researcher that, even though the City of Tshwane: Corporate and Shared Services: Employee Wellness offers support services, the service remains underutilized by EMCPs in Tshwane, despite the fact that they work under stressful circumstances.

2.9.3 Continuous Professional Development

Torstad and Bjork (2007:818) describe continuous professional development as "a process by which health professionals keep updated to meet the needs of patients, the health service and their professional development."

According to Gordon (2003:78), EMCPs need to be continuously assessed throughout their training. She suggests that this be done by means of sustained personal and continuous professional development (CPD), whereby interaction with others may promote continuous commitment, cooperation, responsibility to the self and others, and organizational and management skills.

Continuous professional development has become an essential part of contemporary medical practices. CPD implies that EMCPs can never stop learning and as a result they must always be prepared to seek new challenges, reflect honestly upon their performance and experiences and adjust their practice in order to maintain effective and efficient service delivery. This may also help to promote a sense of empowerment and individual satisfaction for the EMCP.

In order to maintain clinical knowledge and skills, EMCPs engage in continuous professional development. Skill and knowledge preservation and development are necessary to ensure continued delivery of quality patient care. EMCPs must be willing to accept that the EMS environment is dynamic and practice must be evidence-based.

2.9.4   Quality Improvement

Quality is defined as "excellence; the highest or finest standard" (Encarta Webster's Dictionary of the English Language, 2003:89) and improvement is defined as "getting or making better; the process of making something better or of becoming better" (Encarta Webster's Dictionary of the English Language, 2003:90).

Quality improvement entails that knowledge should be generated for a specific practice setting in order to render satisfactory and economic care to consumers of healthcare (Kahn & Fuchs, 2007:710). Quality improvement in healthcare has developed dramatically over the past decade (Kahn & Fuchs 2007:709). Measuring quality and seeking improvement in practice forms part of the daily routine and has become an integral part of healthcare establishments (Kahn & Fuchs 2007:709). The reasons for quality improvement are found in the growing needs and rising expectations of healthcare consumers and in financial constraints (Blaise & Kegels 2004:337).

For the purpose of this study EMCPs must build on previous experiences and consult available resources to ensure that new ideas implemented in practice are meaningful and beneficial to consumers of healthcare.

2.9.5 Learning and Support

Learning entails the construction of knowledge that can be applied to learning new things (Eyler, 2009:520). Adults use a variety of learning strategies depending on their personal learning styles and the situation in which learning takes place.

Some adults learn to broadly understand the holistic picture while others favour a chronological course of action towards learning. The researcher believes that EMCPs should continuously be supported by management in their quest for learning, as this will improve the quality of care.

2.9.5.1 Open communication

It is vitally important for EMCPs to provide patients with a welcoming and non-threatening environment (Silow-Carroll, Alteras & Stepnick 2006:4) which encourages patients' physical and personal space because the initial impression of the patient should be perceived that they are being 'cared for'. This kind of care also requires that EMCPs provide appropriate explanations of the relevant disease and injuries and are sensitive to the patient's feelings, beliefs and expectations about their circumstances and conditions (Bauman et al., 2003:2). Bauman et al. (2003:2), also place strong emphasis on teamwork and management based on clear communication. The researcher believes that EMCPs need to act as advocates for the patient's interests when handling scenes of fatal motor vehicle accident scenes.

2.9.5.2 Partnership in care

The concept of partnership in care describes the way in which EMCPs should approach decision making when the decisions concerned directly affect the patient. Bauman et al. (2003:2), note that patients should be allowed to participate in making decisions that affect them as individuals and that they should be encouraged to become involved in the consequences of the decisions that determine their welfare. In terms of this paradigm, patients should be allowed to co-operate with EMCPs in a process of collaborative goal setting, and they should also be encouraged to

participate in planning and interventions (Institute for Healthcare Improvement, 2008:1). Patients should therefore be encouraged to share their observations, ideas and suggestions because it is by this means that a useful partnership can be promoted between patients and their EMCPs (Institute for Healthcare Improvement, 2008:30).

It is one of the purposes of partnerships in care to legitimate constructive dialogue and communication between EMCPs and patients. Those who find themselves in this milieu are given opportunities to voice their satisfaction or dissatisfaction with the care that they are receiving. The researcher agrees that in order to establish a partnership in care, it is essential to involve the patients themselves in the formulation and approval of policies and in the planning and evaluation of programmes for the institution or organization (Institute for Healthcare Improvement, 2008:30).

2.9.5.3   Respect and empowerment

Respect is a vital component of patient care. Respect for the patient requires EMCPs to be knowledgeable about the needs of their patients as well as their personal values and preferences and/or priorities about treatments and procedures (Silow-Carroll et al., 2006:4). Kirkland (2007:59) points out that every patient has unique needs and that it is only by means of dedicated communication that one shares the burden of responsibility for patients. If EMCPs value one another and the people they serve, they will be more willing to act as valued members of the team upon which the efficacy of such care depends.

2.9.5.4   Emotional Support

According to Schulz et al., (2006:98), emotional support to the victims entails the following:

- **Listening**

Listening to the victim enhances proper ventilation of emotions felt during the incident. As indicated by Egan (2008:46), active listening gives the victims an opportunity to explain what happened and the helper will be able to understand the client in a particular context.

- **Empathy**

Empathizing with the clients is a way of acknowledging how difficult the experience has been for them. Egan (2008:16) asserts that a helper cannot communicate an understanding of a client's world without getting into contact with that world. Thus empathy in this sense is primarily a mode of human contact that is being with and understanding the client with sensitivity.

The support of community representatives can be deeply reassuring to patients who are afflicted by anger, guilt and grief through no fault of their own (Silow-Carroll et al., 2006:5). Community representatives such as priests and others are usually trained in the demanding art of reassuring those who have survived traumatic experiences.

There are various obstacles that need to be overcome in order for the experiences of EMCPs during the fatal motor vehicle accident scenes to be understood. Silow-Carroll et al. (2006:7), mention the following challenges, barriers and difficulties that need to be considered by any organization that has the interests of its employees at heart.

- Suitably qualified personnel who have been educated and trained up to a certain level need to be employed.
- It is not always easy to retain highly qualified staff because they are entitled to demand higher remuneration packages because of their qualifications and experience.
- An institution that lacks proper equipment or tools of trade and which is unable to reward those of its personnel who demonstrate standards of outstanding performance will find itself in a difficult position.
- Lack of adequate finances will compromise the institution.

The EMCPs are some of the first responders who provide support immediately after an accident has occurred. It is they who determine the kind of emotional and physical support that the patient most urgently needs. Family involvement can be considered a vital factor in maximizing support and comfort (after the patient's preferences about family involvement have been reviewed).

52

2.9.6   Coping

In the face of so many stress-inducing elements, EMS personnel tend to employ a number of coping mechanisms. These include both positive and negative factors although, as Lazarus and Folkman and Thoits (cited in Young et al., 2005:86) point out, adaptive coping is situation-specific and depends on the appraisal of a situation by an individual. Palmer (2008:98) identified six main coping methods used in EMS, namely talking with family, chatting to friends, using humour, 'taking time out', socializing and recreation or hobbies.

As a coping technique, humour has probably been focused on most frequently. A study by Rosetenberg (cited in Cosser et al., 2007:44) found that EMS workers used humour to relieve the seriousness and stress of a call and to help them prepare for the next one. The use of humour as a means to create emotional distance from a situation functions as a defence mechanism, assisting in gaining objectivity and mastery over circumstances. The researcher is in agreement that humour is used extensively in the EMS subculture as a means of informal debriefing amongst co-workers.

Although formal debriefing strategies are being used more frequently than in the past by various organizations, the EMS subculture seems to place a stronger emphasis on debriefing within the group. Personnel tend to use black, cynical humour, their anecdotes often having morbid overtones. Tangherlini (2008:89) conducted a study on this method of debriefing amongst EMS personnel. He comments on the sardonic and self-deprecatory tone employed which serves to set up the storyteller as an anti-hero. His interpretation of this tactic is that it serves as resistance to other groups with whom they are forced to interact on a daily basis. These include managers, supervisors, hospital staff, firefighters and bystanders. For Tangherlini (2008:97), the act of storytelling serves a dual purpose of recreating and mastering events in the telling, while also serving to delineate power relationships within the EMS group and beyond. For example, power is represented by the ability to see it all without recoiling in disgust or terror. It seems to the researcher that this method of satirical storytelling also serves to define EMS

personnel as a self-contained subgroup. It thus speaks to the culture of this subgroup, and its need to segregate.

While humour and storytelling seem to be effective in their use in the EMS culture, some behaviours may be considered maladaptive. These include the acceptance of too much responsibility, confrontational coping and escape/avoidance in the form of substance abuse (Cosser et al., 2009:94). Maladaptive coping styles impact negatively on overall job performance and motivation as well as on the immune system and general well-being. The ability to work and cope effectively within the EMS environment in South Africa is thus a challenging task.

"Year in and year out, the majority among us are responsible for the ghastly motor vehicle accidents (MVA) which occur on our roads. The reduction of road deaths is no longer just desirable; it is an urgent non-negotiable" (Peters, 2016).

2.10 Job satisfaction

The more people receive outcomes that they value, the more satisfied they will be; when they receive fewer valued outcomes, they will be less satisfied. Value theory focuses on any outcomes that people value, regardless of what they are. The key to satisfaction in this approach is the discrepancy between those aspects of the job one has and those one wants. The greater the discrepancy, the less people are satisfied (Greenberg & Baron, 2005:17).

Thus, for the purpose of this study, the researcher will adopt the definition of job satisfaction as a positive attitude employees have about their jobs, as a result of their needs being satisfied within their jobs or workplaces (Saal & Knight, 2005:56). In the next section, factors that influence job satisfaction will be discussed.

- **Improving job satisfaction**

According to Spector (2007:9), an individual typically has different levels of satisfaction with various factors. Spector (2007:34) refers to the various aspects or factors of job satisfaction as the individual's attitude about their pay, the work itself – whether it is challenging, stimulating and attractive, and the supervisors – whether they possess the softer managerial skills as well as being competent in their jobs. One can go further and link each of the factors to the motivational theories.

2.11 Summary

This chapter provided a vital insight into factors affecting Emergency Medical Care Practitioners after exposure to fatal motor vehicle accidents. The nature of Emergency Medical Services, the EMCP and personality profile, EMS qualifications, EMS norms and standards, stress, breakdown in coping, crisis, burnout, PTSD, prevention of PTSD and coping were also addressed. Job satisfaction and factors that impact on job satisfaction, quality improvement and the process and phases of trauma debriefing, were also discussed. The chapter provided an in-depth discussion on debriefing as an infrastructure to deal with trauma-related incidents as experienced by EMCPs.

The following chapter will focus on the research methodology and the findings.

3. CHAPTER 3: RESEARCH METHODOLOGY AND FINDINGS

"If we knew what it was we were doing, it would not be called research, would it?"

(Albert Einstein)

3.1 Introduction

This chapter sets out the research methodology and research findings of the study. The findings are presented as a thematic analysis. The literature control demonstrates how the researcher has identified the most recent information that is available on the subject (Mouton, 2005:87).

3.2 Research approach

The researcher was interested in the quality of information from the participants' perspective and hence adopted the qualitative approach in the execution of this research process, as it provides comprehensive and rich data (Strydom, 2011:64).

Qualitative research is a field of enquiry in its own right. It is interpretative, holistic, naturalistic and not interested in correlations between variables (Strydom, 2011:65). Qualitative research methods aim to explore and describe a phenomenon as experienced by people who lived it (Burns & Grove, 2006:52; Polit & Beck, 2008:16). In this study, the experiences of EMCPs after exposure to fatal motor vehicle accident scenes were investigated. Researchers who use the qualitative approach attempt to go beyond the content of what was said in order to gain new insights into and understanding of the data and the phenomenon under study (Dew, 2007:436).

The qualitative approach elicits participants' account of meaning, experience or perceptions (Schurink, 2008:243). Qualitative research is sensitive to the human situation and thus involves an empathic dialogue with the subjects under study (Kvale, 2008:122). According to Burns and Grove (2006:52), qualitative research provides a means of exploring the depth, richness and complexity of inherent phenomena. Qualitative studies are further described by Brink (2006:113), as a method that is used to explore the meaning or describe and promote an understanding of human experiences such as pain and grief (to mention but two examples of human experience), as well as a variety of views and opinions about a specific phenomenon.

By using this approach, the researcher believed that she would be able to accumulate sufficient knowledge that could lead to an understanding of the subjects' experiences. The researcher anticipated exploring and describing the experiences of EMCPs at the scenes of fatal motor vehicle accidents from their own perspective, with a view to generating greater understanding of their constant exposure to trauma.

The researcher's purpose in carrying out this research was not to manipulate events or to influence and describe any variables or even to predict relationships as might have been the case if it had been quantitative rather than qualitative research (Burns & Grove 2006:23). Other authors, such as Henning (2005:3), for example, state that it is precisely this freedom and natural development of action and representation that one wishes to capture when a researcher undertakes qualitative research.

3.3   Type of research

Research is distinguished by the specific functions inherent in its findings (De Vos, Schurink and Strydom, 2008:8). Applied research aims at developing solutions for problems and applications in practice. Applied research is described as extending knowledge of human behaviour relating to human service intervention and aiming to make qualitative research more humanistic and relevant to the lives of the people (Fouché and De Vos, 2008:69).

In the context of this study, applied research was conducted with a view to putting into perspective the emotional experiences of EMCPs when exposed to a fatal accident scene. The researcher chose to conduct this type of research because of the possibility that its findings might contribute towards addressing the immediate challenges facing EMCPs in their experiences of fatal motor vehicle accident scenes.

3.4   Research design

A research design refers to "the structures within which the study is implemented" (Burns & Grove, 2006:211). Research design according to Polit and Beck (2008:59) is a "general plan for addressing research questions, including specifications for enhancing the study's integrity." Green and Thoroghood (2006:34) state that a

research design refers to the "what, how and why of data production" to answer the research question. Patton (2006:168) asserts that the chosen method will not only be critically influenced by the course of the research, but will also be determined by the aims of the research.

In this study, the researcher pursued a case study research design. This allowed the researcher to become immersed in the activities of a small number of people in order to achieve an intimate familiarity with their social worlds (Strydom, 2011:320). It also enabled the researcher to look for patterns in the participants' lives, words and actions in the context of the case as a whole, using collective case studies. Collective case study refers to research that involves a coordinated set of case studies, more commonly described as multiple case studies (Stake, 2010:66). There are potential advantages to studying more than one case. Cases can be studied comparatively in order to explore similarities and differences; if the purpose is to test a theory; having more cases provides a more convincing test than just one, and claims for generalizability can be made more convincingly by coordinating and aggregating evidence from a number of individual case studies (Johnson & Christensen, 2005:408). The study was aimed at exploring the experiences of EMCPs after being exposed to fatal motor vehicle accidents in the context of the Emergency Services of City of Tshwane Metropolitan Municipality.

3.5   Research methods

Research is a process that begins with a problem and ends when the problem has either been resolved or addressed in a satisfactory way (Brink, 2006:50). The research method includes the techniques that should be used to structure the study and the methods that should be used to gather and analyse the information that has been collected in a systematic and coherent fashion (Polit & Beck, 2008:765). All this is undertaken with the ultimate aim of answering the research question or addressing the problem in a satisfactory way.

3.5.1   Study population, sampling method and sample

The study population, the sampling method for selecting the participants and the sample itself are described below.

3.5.1.1　Study population

A population is defined as "a set of individuals having some common characteristics" (Polit & Beck, 2008:56). The population may also be defined as the entire set of objects and events, or the group of people, that is the object of research and about which the researcher wants to determine some characteristics (Bless & Higson-Smith, 2005:85).

The term 'population' sets a boundary and refers to individuals who possess specific characteristics. The unit of analysis in this study was all EMCPs in the field of Emergency Medical Care Services in the City of Tshwane Metropolitan Municipality. The sample for this study was selected from one of the sections, namely the office at the Wonderboom Fire and Ambulance Station. This was to prevent any researcher bias, as the researcher did not know the EMCP personnel at the Wonderboom office.

3.5.1.2　Sampling

Sampling is the process of selecting a research sample from a given population. Burns and Grove (2006:750) state that sampling entails the selection of groups of people with whom to conduct a study. A sample refers to a representative group from the population which the researcher plans to study, and its characteristics have to accurately reflect the population so that the researcher can generalize about the population studied (Wynsocki, 2004:155). Polit and Beck (2008:509) state that a sample is a subset of the population which is selected to participate in a study. The researcher sees the sample as a selected group of elements from a population and is used to understand the population that the researcher is studying. The selection of participants from the population for this study ensured that justifiable conclusions could be drawn from the data collected (Saks & Allsop, 2007:157).

In this study the research population was all EMCPs working for CoT, EMS. The region that was targeted was Wonderboom Emergency Station, as the researcher did not supervise them, work with them, or know them fully. On the basis of their availability as EMCPs, non-probability sampling procedures were used, so as not to make these employees feel coerced into participating in the study. In the non-probability sampling paradigm, each unit in a sampling frame does not have equal

chances of being selected, as the researcher does not know the population size or the members of the population (Grinnell, 2006:280). Volunteer sampling specifically was used in this study, which meant that participants could choose whether they wished to participate in the study or not, so that they did not feel obliged or coerced. Silverman (2010:159) states that volunteer sampling works well when the participants are known to one another, or are at least aware of one another and can encourage one another to become involved in the study. Volunteers may have a specific opinion about the issue being studied and may impress their views upon all concerned. Persons who come forward voluntarily may of course facilitate the task of the researcher and accelerate the process.

The researcher is aware that those who join the project of their own volition are normally more motivated, better trained and better skilled and possess more specific psychosocial characteristics than those who do not apply voluntarily. In this particular research, the researcher presented an introductory information session at Wonderboom Emergency Station, informing the EMCPs about the research. The researcher then left a box in the office of the Advanced Life Support Officer at Wonderboom Emergency Station in which those who wanted to participate in the study could provide their contact details. The researcher then contacted these volunteers, and a convenient date and the time for the interview were arranged.

In cases where volunteer sampling fails to yield the necessary results, the researcher will alternatively make use of purposive sampling. This technique is also referred to as selective or judgemental sampling and will be used as the method to select the required sample from the population (Rubin & Babbie, 2005:247). This type of sample is based entirely on the judgement of the researcher, in that a sample is composed of elements that contain the most characteristic, representative or typical attributes of the population that serve the purpose of the study best. (Grinnell & Unrau, 2008:153). For the purposes of this research, the researcher compiled selection criteria that included a list of characteristics that were essential for membership of or eligibility for the target population (Burns & Grove, 2006:342). The sampling criteria that made a participant eligible for inclusion in the study were the following qualifying factors:

Participants:

- had to be working for the Emergency Services Department: Emergency Medical Division and be in region 2: Wonderboom Station/area;

- could be from any racial group;

- could be either male or female in order to elicit different points of view;

- had to have completed a Basic Ambulance Course;

- had to be registered with the Health Professions Council of South Africa;

- had to have at least 12 months' working experience;

- had to have been exposed to a fatal motor vehicle accident scene as an EMCP;

- had to be conversant in English or Sepedi, so that they could be meaningfully interviewed by the researcher without the assistance and intervention of a translator; and

- had to be willing to give their informed consent to participate voluntarily in the study.

As this study deals with the personal experiences of EMCPs after exposure to fatal motor vehicle accident scenes, the researcher would pursue a rigorous process to gain access to the participants. The study would further benefit the participants, as it might increase their chances of having better support and wellness services.

In this study, the researcher presented an introductory information session at Wonderboom Emergency Station, informing the EMCPs about the research. The Station that was selected is involved in the day-to-day running of emergency services. The researcher left a box in the office of the Advanced Life Support Officer at this Station in which those who wanted to participate voluntarily could provide their contact details. This box was left at the office for two weeks, after which the researcher collected it and contacted those who had left their details. An appointment was made with each of them, until the first nine were selected. The letter of informed consent was then discussed with them and once they had agreed to participate, an interview was arranged at a suitable time for both parties.

3.5.1.3 Sample

There are rigorous instructions on sampling size in qualitative research literature (Newell & Burnard, 2006:60; Polit & Beck, 2008:273). Participants are selected for

their expertise and experience (Streubert-Speziale & Carpenter, 2007:29). Small sample sizes are used when the data collection method involves interviewing (Bowling, 2007:379). This is because the analysis of data via interviewing is a "complex, expensive and time consuming" process (Bowling, 2007:380). However, the sample must be able to provide rich perceptions of the phenomena under study (Bowling, 2007:380).

Sampling continues until data saturation is achieved (Polit & Beck, 2008:273). Data saturation implies that sampling takes place up to the point at which no new information is obtained (Polit & Beck, 2008:273). All the participants were interviewed even when data saturation was obtained with the sixth participant. The researcher hoped that new information will be sourced out from the participants.

Nine participants volunteered to participate in this study. Their ages ranged from 22 years to 45 years. Table 3.1 (below) summarizes the most important information about the participants. The literature control will demonstrate just how important it is to take aspects of this information into account. Table 3.1 (below) sets out details of the way in which the research methods in this study were utilized in order to fulfil the stated goal of the research.

Table 3.1:   **Participant information**

Client no	Job title and qualified as
1	EMCP - BAA
2	EMCP - AEA
3	EMCP - BAA
4	EMCP - BAA
5	EMCP - AEA
6	EMCP - AEA
7	EMCP - BAA
8	EMCP - AEA
9	EMCP - BAA

Finding nine suitable participants was not a difficult process, as the participants regarded the experience of participating as a positive one, and all of them were extremely helpful in the way that they made time for the interviews and shared valuable insights and information from their experiences.

Table 3.2:   Research method

Sampling plan	Data collection	Data Analysis	Trustworthiness
Population **Emergency Medical Care Practitioners**	One-on-one semi-structured interviews	The analysis of data was based on Cresswell's principles (2004:155)	Using Lincoln & Guba's model to determine trustworthiness by using the following 3 categories:
Sample **EMCPs stationed at: Wonderboom Emergency Station**			• Member checking • Peer debriefing • Audit trail

3.5.2   Methods of data collection

Data collection describes the process of gathering material to address the research problem (Polit & Beck, 2008:498). Fouché (2002:75) defines data collection for the case study as a method that entails detailed in-depth data collection methods, involving multiple sources that are rich in context. These can include interviews, documents, observations or archival records. The researcher used semi-structured one-on-one interviews which were audio taped and archived records in the form of photos to gain a detailed picture of a participant's beliefs about the experiences of EMCPs after exposure to fatal motor vehicle accident scenes.

Cresswell (2004:54) describes semi-structured one-on-one interviews as flexible, therefore allowing the researcher to modify the interview and pursue unexpected insights. Semi-structured one-on-one interviews allow the researcher to have a framework in which necessary open-ended questions are posed to encourage the participants to talk freely about their experiences (Polit & Beck, 2008:90). These kinds of interviews are beneficial when the researcher is interested in obtaining personal information from the respondent. Because of this, the researcher chose to use semi-structured one-on-one interviews with open-ended questions as the data collection method to explore the phenomenon under investigation.

Greeff (2011:352) states that with semi-structured one-on-one interviews, researchers have a set of predetermined questions on an interview schedule, but that the interview will be guided by the schedule rather than be dictated by it.

Questions are nearly always open-ended. As indicated by Greeff (2011:359), the researcher will sit down after the interview has taken place and jot down her impressions. These field notes will help her to remember and explore the process of the interview. Field and Morse (2007:79-82) indicate that field notes are a written account of the things the researcher hears, sees, experiences and thinks in the course of interviewing.

The researcher in this study was aware that each of the participants would be able to give specific information and make recommendations that would affect its findings, because each of them had witnessed traumatic scenes and had his or her own individual experience after exposure to fatal motor vehicle accident scenes. Because the researcher guaranteed that participation in this study would be totally confidential on account of the disturbing and sensitive nature of the topic, she has only offered a limited amount of the information that she collected from the participants.

The researcher interviewed participants on an individual basis. The EMCPs' work experiences were obtained, meaning that detailed accounts of their experiences were acquired in their own words by means of an audiotape. These interviews took place at a mutually agreed venue, where confidentiality was assured. The interviews took place in one of the offices around the station where it was private, quiet and comfortable. It was an environment where the participant had the freedom and confidence to share his or her experiences without intimidation or hindrance. The researcher first produced the informed consent form for obtaining informed written consent and explained the purpose thereof. Once the participant had given his or her written consent to participate by signing the form, the researcher asked for consent to audiotape the entire interview. Walker (2007:39) suggests that an audiotape offers a reliable medium for the accurate collection and verification of data. Once all these preliminaries had been accomplished, the actual interview then took place. Field notes were made after the interview to highlight the researcher's observations. The researcher ensured that after each interview a clean sheet of paper was used to write down field notes.

Data analysis in qualitative research is exciting, because the researcher discovers themes and concepts embedded throughout the interview (Chirban, 2010:15). In

this study, data analysis began while interviewing was still underway. During each interview, the researcher identified areas of the conversations that needed to be examined in detail. The interviews were conducted and analyses of themes were carried out using Cresswell's principles. Greeff (2011:360) mentions that, when qualitative analysis is employed, an attempt is made to capture the richness of themes emerging from the participant's talk rather than reducing the responses to qualitative categories.

Interviews were used as the method of choice for collecting the data. The interviewing of participants is regarded as "by far the most common method of qualitative data collection" (Donalek, 2005:124). Interviewing is used in qualitative research because, as Henning (2005:789), state, "in essence interviews are communicative events aimed at finding what participants think, know and feel." While interviews are useful to elicit the thoughts, perceptions and opinions of the participants, the process needs to be carefully controlled if the research goal is to be accomplished (Holloway and Wheeler, 2005:82). For this reason, the researcher believes that interviews are a valuable instrument for collecting data on sensitive topics.

Interviews are frequently used in exploratory and descriptive research, as they offer the most direct way of obtaining facts from participants (Brink, 2006:151). The researcher selected interviews for gathering information because she regarded this method as being the most suited to the nature of this study.

3.5.3   Methods of data analysis

The process in which the researcher immerses herself in the data and studies the identified themes or topics is referred to as data analysis. The researcher first conducted the one-on-one semi-structured interviews with the nine participants. The data from the nine interviews was transcribed by an independent person and checked by the researcher so as to ensure the accuracy and quality of the constructions. The sets of data that were obtained from each interview were subsequently analysed and reviewed by the researcher. This was done in order to identify the themes and sub-themes that the transcribed written data contained – a

procedure recommended by both Burns and Grove (2006:548) and Brink et al. (2006:184).

Data analysis denotes exploration of the meaning of data through processes of organization, reduction and transformation (Holloway & Wheeler, 2005:291). The data analysis was done in order to arrange the data collected in a meaningful way (De Vos et al., 2011:339). The data analysis required flexible and creative procedures to ensure that the essence of data was reflected (Holloway & Wheeler, 2005:292). The entire set of one-on-one semi-structured interviews was recorded and then transcribed verbatim (Pope & Mays, 2006:63) and typed by the independent source and verified by the researcher. The transcription represents precise details of what "was said and done" during the one-on-one semi-structured interview (Pope & Mays, 2006:63).

The specific technique that the researcher used to accomplish the purpose of her data analysis in this study is also referred to in the literature as the 'coding' of the data (Burns & Grove, 2006:548). Some sources refer to this process as 'open coding', which means that the researcher used an inductive approach for generating codes while reading through the series of transcribed interviews. These codes were selected by the researcher on the basis of what they meant to her (Henning, 2004:104) and also in accordance with Cresswell's principles.

The transcribed data comprised data collected from the one-on-one semi-structured interviews. The transcription included laughter and pauses (Taylor-Powell & Renner, 2003:6; Holloway & Wheeler, 2002:116). Coding of data implies that data is sorted into themes that emerge from the data during the analysis process. (Bowling, 2007:387).

The data was analysed using the steps set out by Creswell (2004:155). The steps are as follows:

- Getting a sense of the whole: this means reading carefully through the transcriptions, field notes and naïve sketches. This means that the researcher will read and re-read data and listen to recordings several times. This will allow her to become immersed in the data and sensitized to important issues

(Holloway & Wheeler, 2005:236; Pope & Mays, 2006:69). All the audiotapes were listened to and transcribed verbatim, typed by the independent source and verified by the researcher for correctness. The independent person who typed up the notes was made aware of the sensitivity of the interviews, in order to preserve the confidentiality of the content and the anonymity of the participants. The researcher checked the transcriptions by comparing the audiotaped information with the transcribed information. This was done in order to check and guarantee the accuracy of the transcribed interview data.

- The underlying meaning was sought, and the coder wrote her thoughts in the margin regarding the data received. During each interview, the researcher identified areas of the conversations that needed to be examined in detail.

- Lists of themes were drawn up and similar themes were clustered together to give direction and focus to the interviews. The researcher first perused all the field notes. After going through all the notes, they were added to the transcript and central themes were grouped together, described and discussed to make sensible information from the theme.

- The lists of themes and the original data were looked at. The themes were further divided in sub-themes and were written next to the appropriate segments of the text.

- The most descriptive wording for the themes was found, after which they were sorted into categories and themes.

- A final decision was made on the abbreviation for each category and sub category.

- The data materials belonging to each category were assembled in one place and a preliminary analysis was performed.

- The researcher coded the existing data. The researcher then analysed the data to draw the results.

- Literature control was conducted, based on the analysed data, to gain a comprehensive picture of the phenomenon being studied.

3.5.4   Trustworthiness

Trustworthiness refers to the degree of methodological accuracy inherent in any kind of qualitative research and includes "the means by which we show integrity and

competence" (Aron, 2009:250, cited in Holloway & Wheeler, 2005:251). Krefting (2006:216) also regards trustworthiness as a primary means of ensuring rigour in qualitative research without any concomitant sacrifice of relevance.

The aim of trustworthiness in qualitative research is to support the argument that the researcher's findings are worth paying attention to (Lincoln & Guba, 2005:290). Qualitative research may be characterized as trustworthy when it accurately represents the lived experiences of the participants. This will involve taking the analysis back to the EMCPs to ensure that it represents a reasonable account of their experiences (Parahoo, 2007:198), thus minimizing researcher bias and ensuring the trustworthiness of the data collected.

Bracketing, which is defined as a technique of suspending or laying aside what is known about the experience being studied, contributes to trustworthiness by helping researchers ensure that their experiences and beliefs do not influence the collection of the data and its analysis (Burns & Grove, 2006:729). In this way, biased results can be avoided and a reliable description of a given phenomenon provided (Beck, 2004:126).

In qualitative research, a member check, also known as informant feedback or respondent validation, is a technique used by researchers to help improve the accuracy, credibility, validity and transferability of a study (Burns & Grove, 2006:196). Member checking can be done during the interview process, at the conclusion of the study, or both, so as to increase the credibility and validity of a qualitative study. The researcher should strive to build rapport with the participants in order to obtain honest and open responses. Member checks completed after a study are completed by sharing all of the findings with the participants involved.
This allows participants to critically analyse the findings and comment on them. They either affirm that the summaries reflect their views, feelings and experiences, or indicate that they do not. If the participants affirm the accuracy and completeness, then the study is said to have credibility. These member checks are not without fault, but serve to reduce the incidence of incorrect data and the incorrect interpretation of data (Burns & Grove, 2006:198). The overall goal of this process is to provide findings that are authentic, original and reliable. The following constructs related to trustworthiness will also be discussed:

3.5.4.1   Credibility

Credibility is equivalent to truth-value. It is usually obtained from the discovery of human experiences as they are lived and perceived by informants (Krefting, 2005:215). According to Tobin and Begley (2004:391), credibility can be demonstrated by means of a number of strategies such as member checks, peer debriefing, prolonged engagement, persistent observation and audit trails. One strategy that will be used to maximize the trustworthiness of the findings is to undertake member checks by going to the participants once the data is transcribed and themes generated to check if that is what they shared in the interview (Lincoln & Guba, 2005:44).

Another method of ensuring credibility, which was also applied in this study, is to perform triangulation on the data. The triangulation of data refers to one of the multiple methods, albeit one of the most common used to collect and interpret data (Babbie & Mouton, 2005:275). The researcher performed the triangulation of the data by comparing the audiotaped transcribed interviews of different participants, the notes and observations that she had made during the interviews, and the notes had been compiled by an independent expert in qualitative research about themes that emerged as notably important (Burns & Grove, 2006:225). Burns and Grove (2006:539) note that the credibility of qualitative data analysis has been seriously questioned by some members of the scientific community. Burns and Grove (2006:539) counter this scepticism by suggesting that, in order to maximize credibility, the researcher should define the rules that were used to generate all the coded category identification during the data analysis process. They also suggest (Burns & Grove, 2006:539) that all raw data should also be securely locked away by the researcher in case another researcher wishes to use the same set of data to see whether it will generate the same set of findings.

In this research, the researcher acted as the verifier of the findings that were arrived at and conclusions that were drawn. In addition to this, the whole collection of information-rich and comprehensive interviews and field notes that the researcher had obtained was used in drawing conclusions.

3.5.4.2   Confirmability

Babbie and Mouton (2004:278) define confirmability as the degree to which the findings are the product of the focus of the inquiry and not of the biases of the researcher. Lincoln and Guba (2005) in Babbie and Mouton (2004:278) refer to a confirmability audit trail. An adequate trail should be left to enable the auditor to determine if the conclusions, interpretations and recommendations can be traced to their sources and if they are supported by the inquiry.

According to Babbie and Mouton (2004:278), conducting such a trail involves reviewing at least five important classes of data.

1. Raw data: recorded videotapes, written field notes, documents and survey results.
2. Data reduction and analysis products: write-ups of field notes, summaries and condensed notes, theoretical notes such as working hypotheses, concepts and hunches.
3. Data reconstruction and synthesis products: themes that were developed, findings, conclusions and final report.
4. Process notes: Methodological notes, trustworthiness notes and audit trail notes.
5. Material relating to intentions and dispositions: inquire proposal, personal note and expectations.

3.5.4.3 Transferability/Generalization

Transferability refers to the fittingness of data, and whether it id transferable to another context (Brink, 2006:118). This generalization extends the implications of findings from the studied sample to a larger population, and from the situation to a larger situation. According to Terreblanche and Durrheim (2002:67), generalizability is also called external validity and is the extent to which it is possible to generalize from the data and context of the research study to broader populations and settings. Terreblanche and Durrheim (2002:69) state that transferability is the degree to which findings can be applied in other contexts and settings.

Guba and Lincoln (2004) in Babbie and Mouton (2004:277) discuss importance of thick description for transferability. This entails similarities between sending and receiving contexts.

The inclusion of relevant participant quotes was used to enhance the thick description of the research findings. The researcher collected sufficiently detailed descriptions of data and reported them with sufficient detail and precision to allow judgements about transferability to be made by the reader.

3.5.5   Audit trail

The researcher kept an audit trail throughout the data analysis process that clearly described the steps she took. An audit trail is an important part of establishing rigour in qualitative research as it describes the research procedures (Johnson & Waterfield, 2004:90). An audit trail allows the researcher to follow his or her own research procedures consistently. An adequate trail should be left to enable the auditor to determine if the conclusions, interpretations and recommendations can be traced to their sources and if they are supported by the inquiry. The audit trails that were used by the researcher involve notes, audiotapes and photos that were used to compare with the data given by participants. It also enables a qualitative research project to be open to critique by the research community, as the research procedures are fully described. The audit trails allow for critical thinking to occur in qualitative inquiry (Johnson & Waterfield, 2004:91).

All the audiotapes were listened to and transcribed verbatim and typed by the independent source. The researcher checked the transcription by comparing the audiotaped information and the transcribed information (Pope & Mays, 2009:63). This was done in order to check with the participants and guarantee the accuracy of the transcribed interview data.

3.5.5.1   Researcher bias

Qualitative researchers try to acknowledge and take into account their own biases as a way of dealing with them. When the data must go through the researcher's mind before it is put down on paper, the concern about subjectivity arises.

Qualitative researchers have wrestled over the years with charges that it is too easy for the prejudices and attitudes of the researcher to bias the data (Bogdan & Biklen, 2003:97). Does the researcher record only what he or she wants to see rather than what is actually there? Critics of qualitative inquiry have charged that the approach is too subjective, largely part because the researcher is the instrument of both data

collection and data interpretation and because a qualitative strategy includes having personal contact with and getting close to the people and the situation under study (Patton, 2006:385).

The researcher approached the EMCPs in region 2: Wonderboom area with whom she does not have regular contact in order to try to remain objective. The researcher is the Director at the City of Tshwane Metropolitan Municipality: Emergency Services Department: Emergency Medical Services Division, and has been involved in the Department for thirteen years. She therefore understands the guidelines utilized in the Department, and is not linked to the area where the research was conducted. The researcher was careful to inform all the participants in this research about the aims and objectives of the study, as well as the methods that would be used to gather the necessary information. She also conducted the literature review after the data had been collected and analysed in order to prevent any preconceived ideas from contaminating the research findings. This was one of the measures the researcher adopted in order to avoid bias (Green & Thoroghood, 2008:238).

3.6   Pilot study

A pilot study is defined in the New Dictionary of Social Work (2005:45) as the process whereby the research design for a prospective survey is tested. Strydom (2011:211) indicates that a pilot study can be regarded as a small-scale trial run of all the aspects planned for use in the main inquiry and that, in order to undertake a scientific research on a specific problem, the researcher should have thorough background knowledge about the problem.

The researcher pre-tested the semi-structured one-on one interview schedule with two participants who did not form part of the main study. The researcher personally went to Region 1: Rosslyn Emergency Station to ask two participants who met the sampling criteria to participate in the pre-test. The participants were informed about the aim and objectives of the study and told that participation was strictly voluntary and also that the data collected would not form part of the main study. The pre-test enabled the researcher to check the relevancy of the questions on the interview schedule and to see if amendments had to be done. The audiotape was also tested.

3.7 Ethical Considerations

In research, there are moral principles governing the manner in which the research takes place. Research ethics refers to conforming to standardized conduct of a given profession (Babbie quoted by Herman, 2009:145). It is concerned with the responsibility of the researcher to be honest and respect individuals who may be affected by the research results. As stated by Strydom (2008:113), ethics is a set of moral principles suggested by an individual or group that is widely accepted and offers behavioural expectations about the correct and most acceptable conduct towards respondents, sponsors and students.

This study involved human subjects and the researcher accordingly aimed to protect the participants (Holloway & Wheeler, 2005:47). Ethical approval was obtained from the University of Pretoria and is cross referenced to Addendum 1.

The researcher found the following ethical issues relevant in this study:

- **No harm to participants**

This implies that a researcher has to avoid any kind of harm to participants. In practice, this meant that no information should be revealed that could embarrass the participants, including demeaning characteristics or even questions relating to deviant behaviour (Babbie, 2006:471). The researcher was aware of the fact that she had an ethical obligation to protect the participants from any form of discomfort when eliciting sensitive and personal information, unless such information was crucial for research goals. She explained the anticipated consequences of her research to the participants. Participants were sensitized of possible risks or harm that could emanate from participation in the research such as the renewed experience of emotions. The researcher dealt with this with great sensitivity during the debriefing after the interview, and the participant affected was referred to a social worker employed by the City of Tshwane: Corporate and Shared Services: Employee Wellness section although he did not show any interest to attend. Arrangements were made by the researcher to notify the social worker beforehand of the possible need for her services and no participant attended.

The researcher was careful to inform all the participants in this research about the aims and objectives of the study, as well as the methods that she would use to gather the necessary information. They were also told that no information would be collected without their consent and knowledge, and that the information collected would be dealt with confidentially.

The participants were informed that the study would make recommendations to the City of Tshwane: Emergency Services Department: Emergency Medical Services Division for further improvements regarding EAP services to EMCPs, and that the findings would be presented in a journal article once the study had been completed. Such article would not compromise their right to privacy because the identity of each participant would be carefully protected (Burns & Grove, 2006:747).

- **Informed consent/voluntary participation**

The researcher obtained goodwill consent from EMS: CoT and are cross referenced to addendum 2 – 4 and also obtained written, signed, informed consent from each participant. The participants had adequate information about the nature of the research and research procedures. It was important that the participants understood the purpose of the research and what their participation would entail, and that they made their informed decision voluntarily. Straightforward, easily comprehensible language was used to ensure that the participants understood that they were free to express their concerns. Mouton (2005:245) asserts that participants should be informed of their right to refuse to participate in a research study and also that they should be able to withdraw at any time as their participation is entirely voluntary. This right is referred to as "the right to self-determination" (Burns & Grove, 2006:751).

Furthermore, the participants were also informed that the interview would be voice recorded and that the data would be stored at the university for 15 years for further research or for archival purposes.

- **Confidentiality**

It is of cardinal importance to ensure respondents' right to privacy: that is, ensuring that any information they offer will only be used for research purposes and nothing else.

This meant that the researcher had to ensure that the research setting was a safe environment in which to meet the guidelines of confidentiality (Morris, 2011:246). She assured the participants that she would not disclose information, as she was aware of the importance of safeguarding their privacy and identity, and is a firm believer in the individual rights to self-determination regardless of age, culture or economic status. No identifying particulars were used and each participant was assigned a number at the interview.

- **Debriefing**

Managing traumatized individuals requires fundamental skills. These include the running of debriefing sessions, which are defined by Encarta Webster's Dictionary of the English Language (2008:19) as formal inquiring gatherings after an event has taken place. The discussion should take place as soon as possible after the event has taken place, because the activities that happened will be fresh in the minds of those who experienced them, without fabrications (Walker, 2007:28). In this study, the researcher did the debriefing.

Walker (2007:40) is of the opinion that participants should be assessed for signs of distress during research into sensitive topics, and that a strategy for minimizing distress that could be applied in case of need should be identified. If necessary, the participants in this study would be referred for counselling to a social worker in City of Tshwane: Corporate and Shared Services: Employee Wellness section; however, none of the participants was referred to her.

- **Release or publication of findings**

A further ethical issue discussed by that the release of the findings should occur in such a Strydom (2011:69), and one that the researcher took into account, is the correct reporting of the analysis of data and the results of the study. Strydom (2011:69) asserts manner that its utilization by others is encouraged. The findings of this study have been reported in a mini-dissertation which will be available in the

UP library and will also be made available to Tshwane Emergency Service Department. A manuscript will also be submitted for publication.

3.8   Research findings

The researcher identified themes, categories and sub-categories of the study with the help of a qualitative research expert, with whom she reached consensus about the codes that were selected to represent the data. By comparing the individual themes or topics and the codes (the categories), the researcher reduced the probability of including ambiguous, redundant and inadequately defined categories in this chapter. For the purpose of discussing and analysing the research findings, the following terms were used in this study: theme, category and sub-category.

3.8.1   The following six themes emerged from the study findings

THEME 1:   Communication
THEME 2:   Professional Counselling
THEME 3:   Training
THEME 4:   Quality Improvement: Resources
THEME 5:   Significant Others
THEME 6:   Stress

These themes were further subdivided into sub-themes as illustrated in Table 3.3. Each theme and sub-theme will be discussed systematically later in this chapter. The relevant data will also be analysed, and the results of the literature control relevant to each specific theme will be discussed.

Streubert-Speziale and Carpenter (2007:97) recommend that a review of literature should follow the data analysis in qualitative research. Their rationale is that, by so doing, a researcher is able to produce a pure description of the phenomenon under investigation. The researcher did not conduct the literature review prior to collecting data because she did not know at that stage which themes or topics would be most important to the EMCPs during the one-on-one semi-structured interviews. This procedure is therefore consistent with what is recommended by Streubert-Speziale and Carpenter (2007:97).

The researcher therefore conducted the literature review after the data had been collected and analysed in order to prevent any preconceived ideas from contaminating the research findings. This was one of the measures the researcher adopted to prevent bias (Green & Thoroghood, 2004:238). Once the data analysis had revealed the key themes, the researcher reviewed the literature to substantiate the discussion of the results. The data analysis will include verbatim transcripts supporting the discussion.

Table 3.3:   Summary of the themes and sub-themes

Themes	Sub-themes
1. Communication	Effective communication in the work environment
	Multi-disciplinary team
	Honesty
	Information
2. Professional Counselling	Counselling
	Referral
	Follow up care
	Debriefing
	Employee Wellness
3. Training	Educational level
	Skills
	CPD
	Reflection
4. Quality Improvement	Patient treatment
	Response Time
	Resources
	Attitudes of Management
	Attitudes of EMCPs
5. Family/Significant others	Support
	Value and importance of presence
6. Stress	Symptoms
	Coping

3.8.2   Theme 1: Communication

Communication is the transfer of information from a sender to the receiver. This implies that the information is received and understood by the receiver (Clemans & McFarlon, 2006:91). According to Marx (2004:257), communication is the transfer

of information by any means between two or more persons and it is concerned with the activities or the relationship between these people.

Communication is the means by which organized activities are coordinated and unified. It links people together in an organization to achieve a common, desired purpose.

> - *For you to be clear minded and just focus on what I am doing. I treat the patient accordingly, not get emotionally involved, make sure that the scene is safe and then also the people that you work with on the scene, whether it is other EMS services or the fire services, everybody must work together. You can't stand and fight on a scene. If I am busy with a patient and somebody comes and interferes with my patient, obviously there is going to be conflict. So on the scene we have to work together in order to perform our best.*
>
> - *Well as you already mentioned, we got some officers, I think as long as when we work with the officers and then interact and then work properly like when I tell the officer something that I need or something that I don't need and then they sit down with me and talk to me and understand my needs. I think that would be much better to me.*
>
> - *As earlier I already mentioned that now communication I think is the best one for me with my superiors, when we communicate. If we dedicate our time, most of the time, we are like family. So I spend more time at work, so I need the supervisors also that we engage each other and sharing ideas, each and every day.*

The participants identified communication as being of the utmost importance, as well as team work. They confirmed that the success of the team approach is based on the ability to communicate constructively and respectfully with all other members of the team.

3.8.2.1   Sub-theme 1.1: Effective communication in the work environment

Lay people may believe that communication is 'easy' because human beings do it all the time and every day. However, the participants in this study regarded the communication process to which they were subjected as inadequate, but they indicated that it is improving with time.

> - *No, it is unfortunate because at that time there were not these kinds of advices like now, because we all know there are some chaplains and there are standard operating procedures at work that can advise. But during those times my officer never said anything. I did not get the proper advice at that time, but now I am happy.*
>
> - *No remember as colleagues, we talk, we talk, you see. That is another way of normalizing.*
>
> - *It is just that for now, I think our services are very much improved because of, remember if it is a very fatal and strenuous accident, so they call the chaplains to come and counsel. Let's say someone passed away, the deceased family, so they take them, they bring them at work, and they counsel them there. I used to see them there, they come and they counsel the families. You see so it is much better, you see.*
>
> - *Yes, I think maybe for that, as I already earlier mentioned, the communication must be there. So whereby if you can provide us with the numbers, direct numbers to those people whereby if we come across such similar problems that we can phone them or maybe to arrange properly and then we meet with them.*

During the course of the interviews, the participants indicated that they urgently needed to be able to communicate effectively about a number of issues which included their preferences with regard to issues surrounding their daily activities, management interventions and the way they felt about counselling. For them, communication also includes simply being informed about why certain things are done or are not done. They confirmed that supervisors sometimes tend to forget that the information and routines with which they have become so familiar can become a source of confusion and anxiety to EMCPs in the lower ranks. They also confirmed that they needed to be provided with information such as contact numbers so that in case of need they can know what to do.

Littel (2008:4) emphasizes that communication and all the information given to the EMCP should be made as easy to understand as possible, to allow EMCPs the opportunity to review the information more than once if they need to do so. Ledray (2008:8) states that when the needs of EMCPs are addressed, it can provide a unique opportunity for improving the quality of service delivery.

3.8.2.2 Sub-theme 1.2: Multi-disciplinary team

The importance and value of utilizing a multi-disciplinary team approach in working with EMCPs is undeniable.

The police and the traffic officers are also part of the team to ensure that all relevant information is gathered regarding the accident scene, all other scenes and patients, and that no evidence is lost in the process, so that it can be made readily available should it be needed in future.

> - *At two o' clock in the morning if my family member would be dead or stuck underneath a truck inside a car, I would want to be notified as soon as possible. And usually at scenes like that the fire guys cut out the body, we remove the body after the photos have been taken, and then usually I will ask the police are you going to inform the family to come and identify the body, because if it was my family I would want to know as soon as possible. I wouldn't want to hear at 8 o'clock in the morning. So you usually think of the impact that it has on other families.*
>
> - *And then I must even have a back-up, really, the back-up is needed. Someone that is qualified and that can handle the scene, because as I am a basic life support, so the back-up is needed on the scene. And even the counselling, because remember we are talking about fatal trauma accidents here, you see, that is very much important. So you need someone, the social workers must be involved really in our department. Ja, they must be involved.*
>
> - *Because some of the SAPS, they put the patient on the recovery position.*

The participants indicated that the first point of contact at the accident scene is of critical importance. They emphasized the fact that the success of the team depends on the ability of all its members to communicate constructively and respectfully with one another. They confirmed that the value and importance of the multi-disciplinary team cannot be underestimated and indicated that it is always important for SAPS and social workers to attend scenes of fatal motor vehicle accidents, as well as people who are highly qualified, so that they can serve as back-up as and when they are needed.

Lawley and Bestly (2003:464) list the advantages of the multi-disciplinary team approach as providing additional quality and depth in the clinical discussions; greater job satisfaction for all concerned; and an overall improvement in the quality of service, while Lowe and O'Hara (2009:269) also describe the benefits of a multi-disciplinary team approach in the framework of client-focused service provision.

3.8.2.3 Sub-theme 1.3: Honesty

Honesty is a necessary precondition for all communication between the members of the EMS multi-disciplinary team and patients. EMCPs have a sense of vulnerability and fear that prevents them from openly discussing their actions in a critical manner (Platzer, 2000:1003).

- *To look out for my crew member, as the senior on the ambulance. I will tell him if the scene is not safe. If I am in an environment where the community speaks a language that my partner doesn't understand, I will warn him and tell him to get in the vehicle so we can leave. And also otherwise, if we go into the townships and I don't understand the language, my partner will advise me that it is not safe, let us go. So this is a kind of situation where you are really dependent on each other for support and for better working relations and good communication so that you can know what is happening and be aware of what is happening at that time.*

- *Ethics, care for the personnel on scene, scene safety, usual manners like greeting the patient and comforting, calming and reassuring the patient and then the basic treatment itself, so explaining the procedures before doing it, and doing the skills as you are supposed to, and knowing what exactly to do and to diagnose the patient and then start the relevant treatment for the diagnosis made.*

The participants indicated that it is vitally important for EMCPs to be honest and to respect one another, in order to demonstrate the value and importance of caring for one another as members of a team, and also because they sometimes find themselves working in dangerous situations. They also rely on each other in cases where there are language barriers.

Lilly (2008:214) advises EMCPs and members of the team to be absolutely honest with one another. Previous research has demonstrated that when EMCPs experience high levels of trust, mutuality and empathy in their relationships with

healthcare workers, they begin to show significant improvements in social skills, for example, cooperation. According to Pembroke and Pembroke (2008:321), honesty, respect, sensitivity and tact contribute significantly to the helpfulness in interactions.

3.8.2.4   Sub-theme 1.4: Information

Supervisors need to provide EMCPs with all the information they will need while supporting, reminding and helping them. The supervisors and EMCPs remain the central source of all information, and this should be taken into account in all situations.

Some of the following remarks demonstrate the EMCPs' need for information. They reflected as follows:

- *No, it is unfortunate because at that time we were not having these kinds of advices like now, because now we all know there are some chaplains, there are SOPs and SOGs at work that can advise. But during those times my officer never said anything. I did not get the proper advice at that time, but now I am happy.*

- *That is what I am going to do. If something like that, if I can come across it, then obviously I will request employee wellness so that I can go there and see them, since there is one in our organization. So I would like the supervisor also to contact those people to come and assist me if there is a need.*

Some participants indicated that the information that passes between supervisors and EMCPs is essential for their daily functioning. They confirmed that in the past they did not have information about a lot of things but now they have a lot of information and advice at their disposal from which they benefit. They acknowledged chaplains and the use of standard operating procedures and standard operating guidelines that are now at their disposal. The EMCPs indicated that they need to be allowed to exercise their own choices in as many matters as possible, especially whom they need to consult for their own wellness. The participants felt that it was a matter of the utmost importance for supervisors to ensure that the EMCPs receive information on issues affecting them, the processes and management interventions and decisions.

Kelly and Regan (2003:3) state that the way in which information is transmitted should be timely and tactful. EMCPs urgently needed to exchange information, and this should be beneficial and useful to all parties involved: the EMCP, the supervisor and the patient.

Summary of theme 1:

- Communication is very important in the daily life of an EMCP and the vital necessity of communicating effectively in the work context should be noted and encouraged.

- The way in which communication takes place determines the relationship between EMCPs' attitudes, personal morale and level of motivation.

- The EMCPs see communication as critical and driven by the team leader, who will work to bring the team together so that it can accomplish the set goals.

- When the team's communication is strong, it improves the chances that good ideas and best practices will be shared openly.

- Teams that can establish an open, positive and supportive environment among their members are in a better position to hear those good ideas and learn from the best practices of the group.

- The participants indicated that the first point of contact at the accident scenes is of critical importance. The value and importance of the multi-disciplinary team cannot be underestimated, and it is always important for SAPS and social workers to attend scenes of fatal motor vehicle accidents, as well as people who are highly qualified, so that they can serve as back-up as and when they are needed.

- The supervisors and EMCPs remain the central source of all information, and this should be taken into account in all situations.

- The participants felt that it was a matter of the utmost importance for supervisors to ensure that the EMCPs receive information on issues affecting them, the processes and management interventions and decisions.

- They also rely on each other in case where there are language barriers.

These points link up with the bio-psychosocial model, where communication is tied to the social component. Communication amongst EMCPs is seen as an important and critical skill for ensuring the success of the team. Strong team communication

skills based on the values of honesty and respect are encouraged amongst team members. The multi-disciplinary team helps build relationships and ensure the sharing of ideas and best practices.

3.8.3 Theme 2: Professional counselling

It is the task of the EMCPs to deliver an effective service and always to strive to maintain a safe environment. In the execution of their duties, EMCPs are always exposed to traumatic situations which overwhelm their ordinary adaptations to life. Research has shown that the common denominator for trauma is a feeling of intense fear, helplessness, threat, loss of control and freedom.

- *Yes, to forget. Really counselling is very much important. Really, it is very much important.*

- *So we want the people that can assist actually with the service, counselling and you see, because we don't have a counsellor in our department. So we need those people, ja, the social workers that are qualified and trained so that they can counsel our personnel you see, giving them emotional support and trauma counselling support. You see.*

- *I can say, what can I say, maybe if we can have enough resources since whereby we can have enough staff as well. But the real one is if someone has an accident, and has a similar kind of a problem then whereby we can phone and the supervisor also, and the supervisor can maybe be able to arrange the employee wellness on time to come and assist us.*

- *So, luckily, you know, we as Christians, at our churches we have got some counselling. Sundays we go to church, we sing and we praise God. So you get the spiritual support actually. So it is easier to cope.*

Most participants regarded counselling as very important, as it would help them to forget the gruesome incidents they come across on a daily basis. They also indicated that they felt it was necessary for the department to employ qualified counsellors and social workers who can be operational, so that they can intervene immediately when trauma is experienced. Some regarded their Christian life as vital

to their ability to cope with the level of stress they experienced on a daily basis, so they felt supported by their ministries.

Christofides, Muirhead, Jewkes, Penn-Kekana and Conco (2006:1), identified certain factors that were important in influencing EMCPs to seek professional care, such as the availability of professional counselling and the confidence that they would be treated by sensitive and sympathetic counsellors who were qualified to provide proper counselling.

3.8.3.1 Sub-theme 2.1: Counselling

Most EMCPs seek professional help after handling the scene of a fatal motor vehicle accident or any other scene which they regard as stressful. This is confirmed by the participants:

- *Ja, the people were scattered on the road. There were four who passed away there …. As we arrived there we found everyone already was scattered there and then some of them were having some broken limbs and serious injuries. Four of them were already dead automatically on the scene.*

- *I was scared a little bit, but now I am fine. I was just scared and then it goes away at that moment, and I started to adjust.*

- *Ja, sometimes you go to the fact that there are some people who have lost their life, there is that sense of humour whereby I will also feel little bit bad or, I don't know how to express it, but there is something which comes to my mind to say, "Eish, but this one scene is not nice," but otherwise, even if I can see that it is a little bit challenging, I have to act professionally. We are being brought in a way that the bystanders or whoever is at the scene must not see that I might be more affected by what we see more than them.*

- *Yes, as I said I felt a little bit nervous and stressed and then I started to think about the lives of the people who passed away. But because that was my first time when I saw this accident, because I never came across it since I started to work for the COT, which is City of Tshwane. I never experienced such things but I just knew that anything will happen as time was already going on.*

> - *It is disturbing. To see someone's intestines lying there and the head lying there and the families are there crying, you see. It is very, very disturbing, really.*

The participants regarded counselling as essential for their health and well-being. They described the disturbing nature of their work, having to deal with traumatic scenes on a daily basis, in which at times they have to witness mutilated bodies, such as internal organs that are exposed and other body parts that are dismembered in a motor vehicle accident or a fatal motor vehicle accident where people have lost their lives. This was an issue of enormous concern, and participants mentioned it repeatedly during the interview. Many of the participants agreed that they had experienced signs and symptoms of discomfort after attending a fatal motor vehicle accident scene but were sometimes reluctant to show their true emotions, as they were afraid of being thought less of by members of the public; they choose to be strong and strive to act professionally at all times, even when the scene is difficult for them to handle.

Studies have shown that Emergency Service Personnel work long hours, and at times have to sacrifice their free time to attend to incidents and accidents (Pike, 2003:77). In general, a well-managed scene of a fatal motor vehicle accident has the power to validate and address the concerns of both EMCPs and patients, in order to minimize the trauma that they have undergone and thus promote their healing and restoration and the ability to handle the next call (Lewis-O'Connor, Franz & Zuniga, 2008:269).

3.8.3.2   Sub-theme 2.2: Follow-up care

Boykins and Mynatt (2007:877) feel that follow-up care should be as important as crisis intervention. Ferguson (2006:488) is of the opinion that if follow-up visits are missed then EMCPs will also miss whatever treatment or psychological service opportunities they might have had in the aftermath of the incident.

Some of these sentiments are expressed in the words below:

> - *Yes, to forget. Really counselling is very much important. Really, it is very much important.*

- *I have never been to a psychiatrist or a psychologist in my life. Or even a social worker. Never. I usually get home and I talk to my horses and then I cry and then I feel better.*

- *Some people, I don't think want to go because they feel embarrassed, especially the men who have a big ego, you know, they can't be these cry-babies; they are supposed to be tough, strong men. We usually say that once we approach the scene, we listen to nice music and then once you stop on scene you switch off, there is like a switch in your brain. You switch off completely, you don't get emotional. It doesn't matter about the stuff you see on scene, whether it is graphic, patients with mortal disfigurements and stuff; it doesn't affect you at that moment because you switch off. But once you go back to the station and you start cleaning the ambulance and the adrenaline starts working out, you know, on scene you performed your duties as you are supposed to and as you start cleaning your uniform or whatever, then you might think of what that family is going through. Then there might be some underlying issues or emotional connection that you have not dealt with, but you don't notice it.*

- *So, the challenge is one thing. Remember after you attend that scene, so you can still picture it, you see, you can still picture that scene, you see. So it is not easy to forget that thing, you see.*
- *Yes, I still have flashbacks. Yes, we never went for counselling and even for that one, because I can still make a reference about those calls.*

The participants remarked on follow-up care as being crucial for helping them in their struggles to recover from traumatic experiences and the flashbacks that they have about certain incidents. While some participants had no wish to talk about these traumatic incidents, they indicated how they deal with what they have witnessed, such as seeking comfort from their pets and crying it out. Some indicated that they have never made use of professional counsellors and therefore felt that they would sometimes prefer to follow up with someone of their own choice. They indicated that it would serve better if the EMS had specialized people to do regular follow-ups on employees, in order to ensure that their well-being is effectively maintained. They felt that the benefit that flows from having a designated worker who coordinates the management of such victims cannot be underestimated, and it was pointed out that men feel embarrassed to reach out for help and most of the time suffer in silence.

The need for follow-up care should be clearly communicated and emphasized to all the EMCPs. This is supported by Ledray (2008:28), when she states that most EMCPs want to "go home and forget" about the experience. Unfortunately, there is no likelihood of this happening. Kelly and Regan (2003:14) state that when healthcare workers are highly skilled and dedicated, and when they are better situated to provide assistance, these factors increase the likelihood that service will be prompt and that the treatment of the EMCP will be better managed.

3.8.3.3 Sub-theme 2.3: Debriefing

Debriefings are necessary to reduce the incidence of physical, emotional, psychological and behavioural problems and to foster the optimal well-being of the EMCP.

The participants provided the following inputs:

- *Debriefing is always a mission whereby I saw that it helps. Like if ever we went to scenes, we will always see different cases, but if ever I see something and maybe felt somehow, then if we come back from the call and then we sit down to say "hey colleagues listen, I'm coming from the other call and there were these challenges which I met, I felt this way and this way," so someone might have seen that and maybe had a solution whereby sharing, it also improves how we feel and the standard.*

- *If we did get a scene which was brutal and stressful, we could have, like a scene debriefing, or the officer on our shift must get us all together and we must debrief and we must talk about it, and through that he will see who is not coping and who is coping. Ja, then he will send them for social wellness.*

- *It is difficult, and people don't usually want to come in on their off days because they need that 3 days off family time, because we are more at work than at home. So people don't want to spend their off days coming in, and on duty, it is difficult, because either the supervisor will be in a meeting or he will be busy with something or the personnel will be busy with calls. It will be better if there is like a social worker or you have your psychologists or whomever that is on duty, like a champion or someone just to come and talk to you and try to debrief and get if off your chest.*

- *Because we have never seen them, we never hear from them, so we don't even know that they exist. I don't know what they are doing. Maybe just sitting there and waiting for us, but we are not aware of them. So scene debriefing is a big thing and it is not only for us, it is for Fire as well, because Fire also cuts out dead people and they also see children. They see lots of stuff that we see.*

The participants view debriefing as an important part of their growth, as it involves facilitating experiences, reflecting on the event and its meaning to the person in crisis, and expressing feelings. They are convinced that through debriefing they will be better equipped to face the future.

It is very important that a manager should know his or her subordinates well enough to know what motivates them in order to apply the most appropriate methods to motivate them.

3.8.3.4   Sub theme 2.4: Employee Wellness

Employee wellness services need to be strengthened and optimally utilized, as the EMCPs underutilize the section in the belief that they will cope and come to terms with what happened. When asked whether they had requested a meeting with a professional from Employee Wellness, it was evident that the participants were not aware of the services provided by Employee Wellness section and the importance thereof.

The following remarks were made:

- *Well I think that one was a mistake that I have done, because I was supposed to but I just informed the supervisor about the accident, but I never informed him that I needed to see a professional because I thought I would adjust. I will adjust automatically without needing any Wellness, where somebody can come and assist me in terms of this fatal accident that happened. But I did inform the supervisor to talk about the scene, but I forgot to actually ask him to organize the employee wellness because I thought maybe it is something very small where it can just come and pass.*

- *So we want the people that can assist actually with the service, counselling and you see, because we don't have a counsellor in our department. So we need those people, ja the social workers that are qualified and trained so that they can counsel*

> *our personnel you see, giving them emotional support and trauma counselling*
> *support. You see.*

In general, most of the interviews confirmed that if counselling is offered continuously, it has the power to validate and address EMCPs' concerns and will minimize the trauma that they experience and also promote healing and restoration. It is for this reason that the participants repeatedly emphasized the need for professionals to be employed in the department. They also confirmed that it is of critical importance that employee wellness be prioritized and strengthened to accommodate all employees facing trauma in their daily functioning, as some remain silent in the hope that they will adjust automatically.

In a study conducted by Christofides et al., (2006:1), employee wellness was identified as an area of deficiency. These researchers studied the experiences of EMCPs and their preferences for particular services that they made use of after attending fatal motor vehicle accident scenes. The support of community representatives can be deeply reassuring to EMCPs who are afflicted by anger, guilt and grief through no fault of their own (Christofides et al., 2006:5). Community representatives such as priests and others are also usually trained in the demanding art of reassuring those who have survived traumatic experiences such as fatal motor vehicle accidents.

Summary of theme 2
- Most participants regarded counselling as very important, as it will help them to forget the gruesome incidents they come across on a daily basis.
- They confirmed their need for the department to employ qualified counsellors and social workers who can be operational, so that they can intervene immediately when trauma is experienced.
- Some regarded their spirituality as vital to their ability to cope with the level of stress they experience on a daily basis, so they felt supported by their ministries.
- Most EMCPs seek professional help after handling the scene of a fatal motor vehicle accident or any other scene which is seen to be stressful by the EMCP.

- The participants regarded counselling as essential for their health and well-being and described the disturbing nature of their work, having to deal with traumatic scenes on a daily basis.

- Many EMCPs agreed that they had experienced signs and symptoms of discomfort after attending a fatal motor vehicle accident scene and were reluctant to show their true emotions, as they were afraid of being looked down on by their peers or members of the public. They choose to be strong and strive to act professionally at all times, even when the scene is difficult for them to handle.

- They indicated that it would serve better if the EMS had specialized people to do regular follow ups on employees, in order to ensure that their well-being is effectively maintained. They felt that the benefit that flows from having a designated worker who coordinates the management of such victims cannot be underestimated, and it was pointed out that men feel embarrassed to reach out for help and suffer in silence most of the time.

- The participants regarded follow-up care as crucial for helping them in their struggles to recover from traumatic experiences and the flashbacks that they have about certain incidents.

- Emergency service personnel work long hours, and at times have to sacrifice their free time to attend to incidents and accidents.

- A well-managed scene of a fatal motor vehicle accident has the power to validate and address concerns of both EMCPs and patients, in order to minimize the trauma that they have undergone and thus to promote their healing and restoration and the ability to handle the next call.

- The participants view debriefing as an important part of their growth, as it involves facilitating experiences, reflecting on the event and its meaning to the person in crisis, and expressing feelings.

- Employee wellness services need to be strengthened and optimally utilized, as EMCPs underutilize the section in the belief that they will cope and come to terms with their experiences.

- They also confirmed that it is of critical importance that employee wellness be prioritized and strengthened to accommodate all employees facing trauma in their daily functioning.

These findings link up with the bio-psychosocial model, more specifically the psychological component, as counselling will enable the EMCP to explore the aspects of their lives and feelings by talking openly and freely. The EMCP gets an opportunity to express difficult feelings such as anger, guilt, and fear in a warm and supportive environment. Effective counselling allows the client to make effective decisions leading to positive changes in behaviour, namely the social component.

3.8.4 Theme 3: Training

It is important to mention training, because all of the participants referred to it. The EMCPs spoke highly of their competence and effective assistance during scene management, patient treatment and in ensuring the safe transportation of patients to the medical facilities. The participants mentioned, however, that sometimes they seemed to be unsure of their actions and did not always appear to understand how they should handle the situation. Fortunately, however, they would call for back-up and would be accompanied in these situations by someone who was more experienced than they were. This links up with the bio-psychosocial model, which takes into account the EMCPs' individual personalities. This reinforces the importance of training from the EMCPs' perspective in order to appropriately address their needs.

3.8.4.1 Sub-theme 3.1: Educational level

Most EMCPs were concerned about the level of their education and showed a lot of interest in wanting to further their studies. Most confirmed having a BAC qualification which is a basic prerequisite for employment in EMS. The practitioners were willing to undergo further training, as they believe it can provide a unique opportunity for improving the quality of service delivery. Sending more practitioners to further their training might be an option that is well worth considering.

> - *For someone to be well skilled in the emergency medical care, remember first of all, we have got the levels of qualification, you see. So the entry level is a first aid, which is level three. That person cannot say s/he is highly skilled because he is not even registered. Then the second level is the basic life support, the BLS. So that one is registered with the council, but it has got a limit of scope, you see. So they cannot administer drugs for a patient. AEA is the higher-level entry than the basic life support,*

> *because the scope of practice, so that qualification, or that personnel, at least that one is well trained because he can administer drugs. So it is lower than CCA, because we have got the critical care assistants. So that one is highly qualified because they can intubate, you see. So that one is highly qualified.*
>
> - *You know some other scenes, you arrive there, you are a lower qualification, you see. So there are some other protocols like you cannot put a drip, you understand. So you cannot do anything.*
>
> - *So the first one is the skills required. That is very much important, the skills required. The equipment that is going to be used at that scene is also very much important.*
>
> - *And then I must even have a back-up really, the back-up is needed. Someone that is qualified and can handle that scene, because I am a basic life supporter, so the back-up is needed on the scene.*

The participants mentioned that the work that they do requires certain skills and levels of qualification so that patient care and treatment can be discharged effectively and efficiently to the benefit of the patients they serve. They described the levels of qualification from entry level to the highest qualification currently available in the division. They indicated that they struggle to give better patient care, as their protocol restricts them from carrying out certain procedures, and as a result they have to wait for back-up.

Bloomfield, Harris and Hughes (2003:45) argue that the goals of learning and assessment need to be sufficiently aligned with academic aims in order to maintain focus and attain positive outcomes. EMCPs need to be properly equipped for EMS work in South Africa. These skills are honed during the compulsory practical component of the course, which requires that a certain number of hours be worked on the road with an ambulance crew, at emergency units and in labour wards (Castle, 2003:68). This provides them with the technical skills of a rescue operation, patient management, incident and command and control competencies (Castle 2003:69).

3.8.4.2   Sub-theme 3.2: Skills

It is important to mention skills because some of the participants referred to them. Some EMCPs seemed not to be confident of their actions and it was evident that

they were aware of how they handle the different scenes they encounter on a daily basis.

In terms of the need for training, these are their remarks:

- *Yes, the level of scope of practice. The most important thing is skills development training. That is what is needed. Remember 13 years permanent and three years working as a reservist but you are still at the lower entry level. It is disturbing.*

- *It is disturbing because even now, I want to further my studies, but there is nothing you … can do. Our qualifications are not offered at TUT or most higher learning institutions. It … is very much disturbing. I want to improve my skills.*

- *Mmmhh, I want to improve my skills. The challenge is that even the private colleges, they are very much expensive. Affordability, I won't afford it. It is more than R50 000 now, R52 000, so where am I going to get it? So it is very much disadvantaged.*

- *Yes, I am doing that. We apply, we write. Maybe we are 80 or 70 students. It is big. Out of that, they take any 4 people. So we keep on writing, keep on writing, keep on waiting, the years are going.*

- *And the painful moment is that it is one of the requirements for me to progress. Without that qualification I cannot progress. I am stuck. It is very much painful, you see. It is disturbing, really.*

The participants indicated their frustration, as most of them are still basic life supporters, who hold lower qualifications and have been in the service for a considerable number of years. They also indicated that it is a challenge, as most institutions of higher learning do not offer short courses in emergency care and they have to depend on private institutions which they find to be very expensive. They are also quite disturbed about the situation, as failure to improve their qualifications impacts negatively on them as they are stuck and are not able to progress. They are also unhappy and seem to be demotivated about the current system where they apply and, out of 70 to 80 people who write the entrance examinations, a maximum number of four people are selected to attend a course.

Elnour, Ellanham and Qassas (2007:182) specifically identify years of experience as a factor in how well EMCPs understand what they are doing, the quality of the service that they are able to render, and a reduction in the number of errors that are attributable to them. The competency level of staff and the ability to provide continuous in-house training to EMCPs is also of vital importance. Little (2008:6) supports the development of courses that will be able to improve the knowledge, skills and attitudes of EMCPs. Individual differences in abilities and accompanying skills are a central concern for both supervisors and employees, because nothing can be accomplished without appropriately skilled managers and EMCPs. Little (2008:68) further asserts that raising the confidence levels of the personnel who perform this kind of work will obviously reduce the severity of the problem that is being encountered in the present time. This implies that EMCPs require different skills in order to perform and achieve their goals and objectives.

3.8.4.3 Sub-theme 3.3: Continuous professional development

Continuous professional development is synonymous with lifelong learning. This is essential for the medical professions, which are in a state of constant change. Continuous professional development is also obviously relevant to the process and all kinds of refresher education.

> - *Yes, yes, it is important, because we need to follow some steps. Remember we have got some protocols that we are supposed to follow. When we turn the patients, we need to follow the steps according to our protocol, as already registered under HPCSA. Those are the people now monitoring us in terms of the protocols so that we can follow the steps, because by not following the steps, it will then be, what you call, if the steps are going to be left behind then it is not going to be fair to the patient if we treating the patient without the protocols. So we need to follow some steps accordingly, as we have been instructed to do.*
>
> - *And further studies are also important to revive your knowledge every few years or once a year at least.*

The participants focused on the aspects of lessons most useful to them in their work. They confirmed that education in the use and administration of medication is essential and believe that every reasonable means should be used to educate the

EMCPs effectively and also to practise within the prescripts of their protocol as guided by the HPCSA. They also confirmed that further studies in the form of continuous professional development are important to revise knowledge.

The participants were well aware of the fact that continuous professional development is important for clinical practice. These observations are in line with the assumptions of how adults learn (Knowles et al., 2008:64), as discussed in the literature review. Lieb (2008:1) summarizes the assumptions as follows:

- **Adults are autonomous, goal- and self-directed.**

Adults have accumulated a foundation of life experiences and knowledge that may include work related activities, family responsibilities and previous education.

3.8.4.4   Sub-theme 3.4: Reflection

Reflection connects theory and practice in such a way that clinical judgement is explicated. Because there is a deliberate use of theory in practice, quality service delivery is ensured. Johns (2005:44) advocates reflection as a holistic learning approach allowing the development of experts.

> - *So I have learned much better and also start to experience a little bit nervousness when I rewind or revise on what happened previously, and I was a little bit distant, according to the accident that I saw on that day, but I start to think, but knowing and also having the same experience of tomorrow or the next time, if I am approaching some similar scene, it must not be something new.*
>
> - *It was a terrible accident. I won't ever forget it. I won't forget it. It is still in my head. When I remember that accident. Eish, it was a painful moment.*

The participants mentioned that reflection can take place individually or as part of a team approach to learning. If reflection occurs within a team approach, the participants need to be mindful of each other and be able to learn from good practice and turn unacceptable practices and mistakes into learning opportunities.

Reflection is thought to be actions individuals embark on to examine their experiences with the intention of gaining new knowledge and understanding (Sutton & Dalley, 2008:64). Mc Brien (2007:129) argues that reflection is deliberate learning

and that the EMCP consciously considers an experience in order to acquire different perceptions, which in due course will augment professional practice. EMCPs will only be able to become experts if they engage in reflection, integrating thoughts, feelings, knowledge, skills and experiences together as a group, as supported by Gustafsson and Fagerberg (2004:272).

Summary of theme 3

- The participants spoke highly of their competence and effective assistance during scene management, patient treatment and in ensuring the safe transportation of patients to the medical facilities.

- The participants mentioned that they sometimes seemed to be unsure of their actions and did not always appear to understand how they should handle the situation. Fortunately, however, they would call for back-up and would be accompanied in these situations by someone who was more experienced than they were. This links up with the bio-psychosocial model, which takes into account the EMCPs' individual personalities. This reinforces the importance of training from the EMCPs' perspective in order to appropriately address their needs.

- Most participants were concerned about the level of their education and showed a lot of interest in wanting to further their studies. The EMCPs were willing to undergo further training, as they believed it could provide a unique opportunity for improving the quality of service delivery. Sending more practitioners to further their training might be an option that is well worth considering.

- The participants mentioned that the work that they do requires certain skills and levels of qualifications so that patient care and treatment can be discharged effectively and efficiently to the benefit of the patients they serve. They indicated that they struggle to give better patient care as their protocol restricts them from carrying out certain procedures and as a result they have to wait for back-up.

- Some participants seemed not to be confident of their actions although it was evident that they understand how they handle the different scenes they encounter on a daily basis.

- The participants indicated their frustration, as most of them are still basic life supporters, who hold lower qualifications and have been in the service for a considerable number of years.

- They also indicated that this is a challenge, as most institutions of higher learning do not offer short courses in emergency care and they have to depend on private institutions, which they find to be very expensive.
- They are also quite disturbed about the situation, as failure to improve their qualifications impacts negatively on them, as they are stuck and are not able to progress.
- They are also unhappy and seem to be demotivated by the current system, as they may apply for entrance into a course and 70 to 80 people write the entrance examinations but only four people are selected to attend.
- They also confirmed that further studies in the form of continuous professional development are important to revise knowledge.
- EMCPs will only be able to become experts if they engage in reflection, integrating thoughts, feelings, knowledge, skills and experience.

This links up with the bio-psychosocial model, in its psychological and social components, which focuses primarily on thoughts, emotions and behaviours. Training presents a prime opportunity to expand the knowledge base of employees. Providing the necessary training creates a generally knowledgeable staff, with employees who can work as teams or independently without constantly seeking back-up and supervision from others. Training will build EMCPs' confidence, as they will have a stronger understanding of the job, and it will keep them at the cutting edge of current developments.

3.8.5   Theme 4: Quality improvement

Quality improvement entails generating knowledge for a specific practice setting in order to render satisfactory and economical care to consumers of healthcare. This will ensure that the new ideas implemented are meaningful and beneficial to these healthcare consumers.

> - *You are highly qualified but if you don't have the passion then you are going to start neglecting the patients and to study and get a qualification and not treat patients the way that you signed off to the HPCSA for, then you are not trained enough. It doesn't matter if you are a doctor or a basic ambulance assistant, if you don't have passion,*

> *and treat your patients accordingly, then it is like patient neglect, and the patients do not deserve low quality treatment.*
>
> - *Come without their children. The relevant people must be on that scene. Like the Metro Police, the tow trucks can be there, but the tow truck with his driver or his assistant, but not his family and his wife and children and everybody. It is like they have this image thing that they want to show that they are at work, and they are special and they see stuff. But family members, usually you try to comfort and reassure them and then try to get medical advice for them. If there are chaplains available, then you get them out or you contact social services and the community will tell them to go to the nearest clinic in the morning to attend to a psychologist if they are emotional. And usually if they are traumatized we will advise them to drink black tea with lots of sugar in it, it helps to calm down the emotional state.*

The participants mentioned that measuring quality and seeking improvement in practice form part of the daily routine and have become an integral part of the healthcare establishment and emergency services. The participants have shown a lot of passion and interest in delivering quality patient care. They have also confirmed that ethics is very important to them as prescribed by the HPCSA, as they do not want patients to feel neglected. The participants felt that there would be tremendous improvement in quality if relevant members of the multi-disciplinary team were employed to deal with trauma at the initial stages for all those who were affected at a particular time. They also felt that improving quality, and the way in which it will influence decision making, are matters of the greatest urgency.

Curtis and White (2008:836) point out that deficiencies in this aspect of healthcare may constitute one of the most commonly missed opportunities for effecting improvements in emergency care.

3.8.5.1 Sub-theme 4.1: Response time

Shift work is common in many industries and is universal among those who operate around the clock. The main performance measure in this study is a process measure that is widely accepted in the EMS community, namely total out-of-hospital time, which is measured from the moment the ambulance crew is dispatched to a scene to the moment it arrives at the hospital (Carr et al., 2008:89). Shorter out-of-hospital time intervals are argued to be an important factor in survival.

EMS responses to trauma incidents are standardized to a much greater degree than in medical incidents. Paramedic training and certification dictates specific responses and interventions for cardiac events, for instance, whereas trauma incidents are much more unpredictable and less standardized. As a result, there is more room for paramedic discretion in treating trauma patients.

When asked if they live up to the expectation of the community, the participants made the following statements, in which their concerns are evident:

> - *They expect us to be on scene within a few minutes. If you are late, they usually shout and scream and say that you take a long time and it is affecting the patient. Even though we try to explain to them that I am coming from far or we are busy, sometimes they don't understand or they don't see from our point of view that we are busy and sometimes we are lacking resources.*
>
> - *The community expects us to, when they see something on TV and then expect us to perform the same thing. For instance, if we do CPR, they want to know why don't we defib the patients, and then we will explain to them that the patient doesn't or is not in a rhythm to defib. Or they will say that the patient has foam in their mouth and it is definitely epilepsy. So people try to make their own diagnosis because of the stuff that they see on TV which is the correct information most of the time.*

The participants confirmed that at times patients/callers experience prolonged waiting times, and that this is a major cause of concern. While nearly all the participants mentioned a time constraint, they were referring mainly to the waiting times before the ambulance can be dispatched to the scene and also arrive on the scene. The participants agree that if waiting times are minimized, this can reduce trauma, promote healing and help to address their immediate concerns. This is one aspect that, according to the participants, should be improved as a matter of urgency, as members of the community shout and scream at them if the response is delayed. They also put a lot of emphasis on the fact that the communities' expectations are high and that people often express their own diagnosis when the EMCPs have to perform patient treatment, as they expect them to do certain things that they have witnessed on television which may not be relevant at the time.

Milanian (2008:1) noted that the waiting times in most Emergency Call Centres varied from one to four hours, depending on factors such as the weather, influx of calls and the types of calls received in order of priority. Pitts (2008:1) notes that, although a waiting time of one hour, most commonly referred to as the 'golden hour', has come to be expected during the last few years, this may not be the typical experience of every patient. Cronin (2005:87) made a study of emergency assessment times and his conclusion was that a variety of improvements could result from more efficient teamwork and having a direct process in place for expediting incoming calls and call dispatch.

3.8.5.2   Sub-theme 4.2: Patient treatment

The timely management of patients after an accident scene is of the utmost importance. Management and coordination at the scene of an accident is time-consuming, stressful and exhausting. In EMS the scene is handled by the person with the highest qualification, and the examination and treatment is carried out in accordance with specific guidelines/protocol.

> - *And then I must even have back-up, really, the back-up is needed. Someone that is qualified and that can handle the scene, because as I am a basic life supporter, so the back-up is needed on the scene.*
>
> - *Ja, the people were scattered on the road. There were four who passed away there…. As we arrived there we found everyone already was scattered there and then some of them were having some broken and serious injuries. Four of them they were already dead automatically on the scene.*

The participant confirmed that they need to improve their basic training, as they struggle with patient care because there is protocol to be followed while awaiting back-up. They contend that their work environment is demanding, that they have to deal with complicated situations and that the importance of proper qualifications is of high priority in order to enhance patient care and treatment.

Garcia-Moreno (2002:1509) strongly supports the idea that patients' experiences should be taken into account in the design of the relevant health services. This is a clear example of respecting patient preference in practice. Curtis and White (2008:836) feel that it is a matter of the greatest urgency to conduct more research

into the issue of patient treatment and preferences and the way in which they influence medical decision making. They suggest that the directors and managers of emergency medical services should ensure that EMCPs with higher qualifications should be made available whenever possible.

3.8.5.3 Sub-theme 4.3: Resources

Financial concerns are a crucial concern for all forms of healthcare services including the Emergency Medical Services Division. Limited resources create obstacles for practitioners as they try to save lives. This was a concern that was shared by the participants, and it was further emphasized in the following remarks when they were asked how EMS can assist in optimizing their performance before, during and after they experience fatal motor vehicle accident scenes:

- *Before, just the relevant reflectors and safety equipment and proper equipment to perform my duties, but afterwards if there is like a fatal accident they can help us with debriefing on scenes. It is the best thing I think. I don't know if there is a division that does debriefing. If there is one, then I don't know about it.*

- *We need resources – vehicles. Most of our vehicles are break-downs. It takes a few months before we get them to operations and if we can have enough ambulances at the station. And then also like equipment like electro-cardio grams (ECGs). I would like an ECG if I declare the patient and print out a strip to attach to my declaration form to state that the patient is in asystole because I can't feel if the patient is in defibrillation. I can't feel that on a pulse and without an ECG it is difficult, and you will get some people that are still warm, it is not an obvious death. They say you must breathe for ten minutes and go. So he could be in defibrillation, but I don't have any proof and I can resuscitate but it is not going to be effective. But I would like an ECG to defibrillate the patient and diagnose the patient.*

- *… and then the suction units that are flat. We have suction units but most of the time they are flat, because we don't have cables to charge them. I don't know where the cables have gone to.*

- *Yes. So just more personnel and more resources will reduce the workload.*

The participants remarked that if there were enough resources, staff and the correct skill mix, then it would be easy for them to perform their duties. They are concerned

and put a lot of emphasis on the lack of resources and the circumstances under which they have to operate on a day-to-day basis. They recognize the provision of adequate resources as an important pillar of their job, as it is the way in which services can be delivered meaningfully. They confirmed that at times they have resources, but that these cannot be used as they have either been misplaced or lost. They feel that although management is trying to provide resources, these are not enough, as there are mechanical breakdowns and accidents. The participants feel that if they were provided with more resources and more personnel, their work load would be drastically reduced.

Management needs to be supportive and ensure that resources are made available (Mantzoukas & Jasper, 2004:926). The EMCPs should be granted the opportunity to discuss difficulties and concerns in a professional manner with little risk of being judged, as suggested by Johns (2005:40). In this way, problems and concerns are turned into new understandings to be taken into consideration for future practice (Johns, 2005:40).

3.8.5.4   Sub-theme 4.4: Attitudes of management

A safe environment is not enough and the relationships among all parties involved need to be in good order. The participants felt very strongly that good relationships are of the utmost importance in facilitating interpersonal relations.

The following comments regarding management were made during the interview:

> - *There should also be support from the management of the organization.*
>
> - *So they must just be helpful to what we are asking at that time.*

The participants without exception said that a positive attitude and support from management contribute to their overall success. They confirmed that they would appreciate it if their line function supervisors could be more helpful and attentive to their requests.

Yamawaki (2007:512) reports that high levels of support from line function supervisors encouraged EMCPs to seek the services of counsellors. EMCPs had the willingness to develop in their professional practice when supported by their

peers, their supervisors and their senior management, as indicated by Driscoll (2008:101).

3.8.5.5 Sub-theme 4.5: Attitudes of EMCPs

Counselling improves the EMCP's self-esteem and coping abilities and reduces the anxiety and other symptoms associated with PTSD. The acknowledgement of these painful emotional states by means of effective, tactful and focused communication might also make it easier for EMCPs to have a more positive attitude towards responding to other scenes where they may experience trauma. It is clear that EMCPs see themselves as immunized from reacting to their real feelings and want to constantly suppress them or even stay away from the job as a way of taking leave. This is evident in the following remarks:

- *It was very disturbing but it is just that as an EMCP, I am there to assist. So we are obliged] to attend any scene, because it is your line of duty.*

- *Yes, I was feeling like I can stay away from the job and sit at home or wherever. Or maybe I can get some kind of relief even if maybe it can be two days or three days where I can take leave and come back to work. But I did manage to take it. Let me be honest because I managed to take two days' leave/rest.*

- *Feeling something like victimization, other colleagues they have been treated like this. So they affect your life really, you see. Ja, because when you have got a problem, even my wife, your family, your children, they all get involved because you tell them that, you know what, I am going to work whilst I have got this and this and this challenge, you see. So they affect you, and honestly truly speaking even your life.*

- *We try to work with the community as easily as possible. Whatever they expect we will do it. We will give them what they want. We won't back chat or fight with them to avoid going to the newspapers or to court, so usually we just keep quiet and try to keep the peace until we have offloaded the patient at the hospital.*

Participants confirmed that, because of the stressful nature of their job, they sometimes want to stay away from the job and stay at home, resulting in their taking leave. They indicated that their attitudes, commitment, involvement and partici-pation in the operational management can impact positively or negatively on

productivity, because they ignore their feelings when at a particular scene, as they are obliged to attend any scene. They also confirmed that they make an effort to downplay and not react to complaints from the community in order to avoid negative publicity.

Rob-Byrne (2006:79) also notes that avoiding treatment and contact with other sources of support worsens the symptoms of PTSD and makes EMCPs even more reluctant to seek treatment. The expression of encouragement during the post-traumatic phase is essential to the well-being of the EMCP. This aspect is discussed in this study because some of the participants mentioned how the attitude of their supervisors, for example patting them on the shoulder for a job well done, is very important to them. In other words, that acknowledgement of what they do gives them courage and the will to do the right thing.

Summary of theme 4

- Quality improvement entails generating knowledge for a specific practice setting, in order to render satisfactory and economical care to consumers of healthcare. This will ensure that the new ideas implemented are meaningful and beneficial to the healthcare consumers.

- The participants mentioned that measuring quality and seeking improvement in practice form part of the daily routine and have become an integral part of the healthcare establishment and emergency services. They have shown a lot of passion and interest in delivering quality patient care. They have also confirmed that ethics is very important to them as prescribed by HPCSA, as they do not want patients to feel neglected. The participants felt that there would be tremendous improvement of quality if relevant members of the multi-disciplinary team were employed to deal with trauma at the initial stages for all those who are affected at a particular time. They also felt that improving quality is a matter of great urgency and will influence decision making.

- Shorter out-of-hospital time intervals are argued to be an important factor in survival.

- The participants confirmed that at times patients/callers experience prolonged waiting times and that this is a major cause for concern.

- The waiting times before the ambulance can be dispatched to the scene and also arrive on the scene were also issues of concern.
- The participants agreed that, if waiting times were minimized, this could reduce trauma, promote healing and help to address their immediate concerns.
- This is one aspect that, according to the participants, should be improved as a matter of urgency, as the members of the community shout and scream at them if the response time is delayed.

This links up with the bio-psychosocial model, more specifically the social component, as the healthcare establishments seek to improve and develop in order to meet the growing needs and rising expectations of healthcare consumers. Improving quality services is about making healthcare safe, effective, patient-centred, timely, efficient and equitable. These services aim to bring about measurable improvement by applying specific methods.

3.8.6 Theme 5: Family/Significant others

EMCPs are among the populations with the greatest need of support, and because the family members and the significant others are the ones who provide that support, they should always, wherever possible, be included in the management of EMCPs. The significant other is a person who provides the same degree of comfort and support that partners in a functional marriage or family relationship generally offer to one another. Their presence can be described as a vitally important element in a traumatic situation. Literature confirms that one of the key elements in positive outcomes is productive family involvement. This links up with the bio-psychosocial model, which sees the presence of family as more often than not having positive repercussions, both immediately and in the months subsequent to the incident witnessed by the EMCP. The family/significant others are seen as their main form of support.

3.8.6.1 Sub-theme 5.1: Support

After extensive analysis of the interviews, the researcher was able to determine that all the EMCPs who were interviewed confirmed that they received and welcomed support from their significant others. They also confirmed that just knowing that their family is there for them helps them to cope on a daily basis.

This is evident in the following remarks:

> - *Ja my family, they understand. Let me just say, actually I am very much lucky because my wife is a professional sister, so she understands the types of stress and the type of environment I am working in, you see. So actually at least I have got the support. But I am just worried for those people not having the support, you see. What will happen because they've got these challenges, emotional, those accidents that you have encountered? So I don't know, they can take that stress to their families so which is not good, you see.*
>
> - *Yes, they do and they support me with the long hours, and they support me when I need to sleep, and when I am emotional or if I had a bad shift, then they have some empathy with me. So Ja, they do understand.*
>
> - *Ja, I think they understand because my wife is also working with that. My wife is a nurse; she is a training nurse. She also works a similar job.*

All the participants in this study expressed positive feelings about and gratitude for the presence and involvement of their family or significant others. They confirmed that they are supported, and most of them were found to be in the same job as their partners or doing a similar kind of work.

Yamawaki (2007:512) also observes that most practitioners share their traumatic experiences with their families and most trusted friends. None of the participants experienced feelings of rejection from their families or significant others. Various kinds of support are essential if an EMCP is to survive a traumatic situation with minimum trauma and an absence of long-term consequences. It is therefore the researcher's opinion that as EMCPs are the one population that has the greatest need of support, and because the family or significant others are the ones to provide that support, they should always, wherever possible and with the permission of the EMCP, be included in the professional counselling sessions.

Mularski (2008:678) states that the optimization of care must involve the contribution that can be made by an EMCP's family or significant other, and that it requires a multi-disciplinary team to facilitate an effective family-centred style of

communication. The actual presence of a family member or the significant other demonstrates concrete, physical and emotional support to the EMCP.

3.8.6.2 Sub-theme 5.2: Value and importance of presence

It is a matter of intuitive belief that one of the key elements of positive outcomes is productive family involvement. An understanding of the depth of trauma sustained by the EMCP, and the mere presence of a family or a significant other, will always have many positive effects, both immediately and in the months after the incident witnessed by the EMCP.

- *Ja, my family, they understand. Let me just say, actually I am very much lucky because my wife is a professional sister, so she understands the type of stress and the type of working environment that I am working, you see. So actually at least I have got the support, but I am just worried for those people not having the support, you see. What will happen because they have got these challenges, emotional, those accidents that you have encountered? So I do not know, they can take that stress to their families so which is not good, you see.*

- *My partner is very understanding and supportive. Most of the time when I am working nightshifts he will call and ask me if I am safe the whole time. Because I am a woman it is dangerous in some communities, especially with your xenophobic attacks. For me to go in the squatter camps or wherever, it is dangerous. So now and then he will stay awake until the early hours of the morning, just to send me messages to ask me if I am okay and I am still safe. So I think from his side he is trying to be protective and he is concerned about my safety, but ja he is very understanding.*

- *Feeling something like victimization, other colleagues they have been treated like this. So they affect your life really, you see. Ja, because when you have got a problem, even my wife, your family, your children, they all get involved because you tell them, that you know what, I am going to work whilst I have got this and this and this challenge, you see. So they affect you, and honestly truly speaking even your life.*

The participants confirmed that the value and importance of the presence of family members or the significant other should never be underestimated. They confirmed that their significant others are understanding and supportive. They also confirmed

that when they feel victimized or unhappy at work, they are able to confide in their family/significant others about the incident and that they feel greatly supported.

While Mularski (2008:676) describes family communication as a complex intervention, she emphasizes that all recent and emerging data supports the inclusion of family or a significant other in the process of making acceptable decisions about patient care by the EMCP at the scene of a fatal motor vehicle accident. Eckle and MacLean (2008:238) mention that in light of the vital role that a family plays in the health and well-being of EMCPs, they fully support family-centred care. It is important to remember that members of the family or significant others are obviously secondary victims in the after-effects of a traumatic scene, and that they too might require counselling and assistance in order to cope with the situation.

Summary of theme 5

- All of the EMCPs who were interviewed confirmed that they received and welcomed support from their significant others. They also confirmed that just knowing that their family is there for them helps them to cope on a daily basis.

- Most practitioners share their traumatic experiences with their families and most trusted friends. None of them experienced feelings of rejection from their families or significant others.

- The mere presence of a family member or a significant other will always have many positive effects, both immediately and in the months after the incident witnessed by the EMCP.

- A vital role is played by family in the health and well-being of EMCPs, and they fully support family-centred care.

- Members of the family or significant others can be secondary victims in the after-effects of a traumatic scene, and they too may require counselling and assistance in order to cope with the situation.

This links up with the bio-psychosocial model, specifically the social and psychological components, which confirm that relationships are central to providing health-care. It is a way in which EMCPs can understand their own experiences and form therapeutic relationships with significant others.

3.8.7 Theme 6: Stress

The research shows that fatal motor vehicle accidents scenes are some of the most stressful and emotionally upsetting scenes for an EMCP to work at. EMCPs contend with a considerable amount of stress as a result of their responsibility for the life and safety of others. Some problems are easy to deal with, while others are life-threatening. The job of an EMCP is thus one of being constantly in motion and under pressure. EMCPs work long hours and are responsible for the lives and well-being of their patients.

- *When you stop the ambulance on scene and you find that there is a taxi that rolled and all fifteen patients are dead. Most of them had been ejected from the taxi, so they closed the whole highway because there were arms, legs, intestines and brains all over the scene, maybe four lanes for about 100m or 200m just body parts. You don't know whose brain belongs to which person and which arm belongs to which person. So ja when you step out of the ambulance on the road then you might slip on a liver or a kidney. You know it is some graphic scenes. The scenes that pathology must bring a broom or a shovel, which they can't really pick up the bodies because they're in pieces.*

- *For instance, last night being only a little people at work, we were only one ambulance in our station, we did 9 to 12 calls, somewhere there, and then this morning at five o' clock am on our way from a call, we had to pull over on the side of the road just to close our eyes because it is exhausting. We are tired and we don't want to risk making an accident. And then ja, when you get home, you are grumpy, you are tired, you don't want to spend time with your family. You still have to do laundry, clean the house, do the cooking, you have got your personal chores also to do, and then you must sleep also in between for the coming night shift.*

- *Eish, I remember in 2006, I was dispatched to a call. It was an 031, so 031 meaning that there were two vehicles that collided and there was an injured patient there. So it was there on the N1 direction north. So when I arrived there at that scene, eish, I cannot forget that because there were some heads lying in the road there. So you could not identify that this was a living patient because the head was there, and the body was there and the intestines were there. So it was a terrible, terrible, terrible thing.*

The participants confirmed that they have to work in potentially dangerous and awkward situations where they are at risk themselves. They remarked that the fatal motor vehicle accidents scenes that they attend to, leave mental images of the scenes that they have attended and, because of the gruesome nature of the way those accidents present themselves, they are not easily forgotten. They also confirmed that they are sometimes exhausted after attending various calls and that is mainly due to strained resources.

Other stress reactions common to rescue workers include psychic numbing, short-term memory impairment, decreased problem-solving abilities and diminished communication (Young et al., 2008:98). In EMS, EMCPs are often exposed to fear-inducing circumstances.

3.8.7.1   Sub-theme 6.1: Symptoms of stress

When asked about the symptoms they experienced when they felt stressed and emotionally strained, most participants confirmed that after experiencing fatal motor vehicle accident scenes they have headaches and loss of appetite, and just want to sleep.

One participant confirmed the following:

- *It made me feel sick. I had a severe headache whereby even my neck, face, they were like pulling. So when I explained that to my supervisor, they told me that I am stressing and that is where I started to explain what happened. And they said normally it happens and it is normal for you to have this kind of feeling, but you must manage it and have a way to solve it, but it was hard to forget them as quick as possible.*

- *Severe headaches, pains of the body, loss of appetite.*

- *We eat lots of chocolate. Usually after a big scene you eat junk food. You are hungry. You stop at the closest Sasol or Shell garage and then you get a pie or a chocolate or chips or whatever, any unhealthy food and you eat.*

- *Ja, there is a time whereby a little; I'd like to drink something sweet.*

- *I just want to sleep.*

> - *Yes, last year December, I did take two weeks, due to I do not know whether it was the after effects of the attempted hijacking or the stress of the work, but I did take two weeks' stress leave.*

The participants confirmed that at times they feel so stressed that they have severe headaches, general body pains, loss of appetite and sometimes feel as if they have pulled muscles. They resort to unhealthy eating habits such as the consumption of chocolates and fizzy drinks. EMCPs however do have their own personal stress and at times it becomes difficult to determine whether the stress incurred is personal or work-related.

EMCPs face daily forms of occupationally related hazards and much research has been aimed at stress levels and coping styles adopted within this field. It is well documented that repeated and continuous exposure to trauma may have secondary-traumatic effects (Carrington, 2006:90).

3.8.7.2   Sub-theme 6.2: Coping

Gutner (2006:813) explains that the various coping strategies that survivors use to deal with the effects of their trauma can be broadly categorized as cognitive (in which the EMCP attempts to change the way in which she thinks about reality) and behavioural (in which the EMCP attempts to reduce the impact of the stress and injury by engaging in withdrawal and avoidance, for example). Here is the extract from what one participant said:

> - *For me, when I am stressed like that, I just want to sleep, so I won't be having that time to stress, because the minute I get home, I bath and then sleep. I bath or I eat, if I want to eat by that time, then I go to bed.*
>
> - *The scenes that I attend do not stress me.*

Some participants indicated that they do find some of the incidents that they attend to stressful, while others confirmed that no matter what scene they attend to, they do not find anything stressful. They emphasized that coping is composed of a number of factors that for them include the need to eat, bath and then sleep.

Street, Gibson and Holohan (2005:245) confirm that avoidant coping is one of the symptoms of PTSD. The recognition and treatment of the emotions that survivors manifest should therefore be a matter of priority. Success in this area will increase the level of professional satisfaction felt by the EMCP.

Summary of theme 6

- The research shows that fatal motor vehicle accidents scenes are some of the most stressful and emotionally upsetting scenes for an EMCP to work at. The EMCPs contend with a considerable amount of stress as a result of their responsibility for the life and safety of others.

- The participants confirmed that they have to work in potentially dangerous and awkward situations where they are at risk themselves. They remarked that the fatal motor vehicle accidents scenes that they attend to, leave mental images of the scenes that they have attended, and because of the gruesome nature of the way these accidents present themselves, they are not easily forgotten. They also confirmed that they are sometimes exhausted after attending various calls and that is mainly due to strained resources.

- The participants confirmed that at times they feel so stressed that they have severe headaches, general body pains and loss of appetite, and sometimes feel as if they have pulled muscles. They resort to unhealthy eating habits such as the consumption of chocolates and fizzy drinks.

- EMCPs, however, do have their own personal stress and at times it becomes difficult to determine whether the stress incurred is personal or work related.

- Some participants indicated that they do find some of the incidents that they attend to stressful, while others confirmed that no matter what scene they attend to, they do not find anything stressful.

This links up with the bio-psychosocial model which links directly with psychological factors that include personality, stress management, life goals, perceptions and feelings, as well as the biological component involving health and sickness, because EMCPs continuously encounter incidents where there are severe injuries, contagious diseases and sometimes multiple injuries. They experience high volumes of stress and there is little effort made to relieve their suffering. Excessive

stress may result in poor physical (bio) and psychological health (psycho) and poor performance (social) and loss of job satisfaction.

3.9   Summary

This chapter described the research methodology applied in this study. The section on research methods briefly described the research methodology, which integrated the research design, the population, the sampling method used and the data collection instruments. The trustworthiness of the study was also a very important point in this chapter and various methods for improving and proving trustworthiness were discussed.

Data was obtained by means of one-on-one semi-structured interviews with the intention of investigating the experiences of Emergency Medical Care Practitioners after exposure to fatal motor vehicle accidents and to elicit responses relevant to the research problem from the participants.

The results obtained in the study were presented and discussed in this chapter. The themes generated from the interviews were communication, professional counselling, training, quality improvement, family/significant others and stress.

The findings were based on the factors that impact on the experiences of EMCP after exposure to fatal motor vehicle accidents within the CoT EMS. The researcher committed herself to data analysis. The participants were assigned numbers to ensure that confidentiality remained intact. The findings were accompanied by a thorough literature control that was used to validate, support and confirm the data that emerged from the study. The analysis and interpretation of the research results gathered will now be used in the subsequent chapter to draw conclusions and to make recommendations about ways of improving current practices so that they begin to approximate international standards of excellence in this field.

4. CHAPTER FOUR: CONCLUSIONS AND RECOMMEN-DATIONS

"It is never too late – in fiction or in life – to revise."

(Nancy Thayer)

4.1 Introduction

The previous chapter presented empirical research findings obtained by means of a qualitative approach. The aim of this chapter is to give a general summary of the research findings and to make conclusions and recommendations about the experiences of EMCPs after exposure to fatal motor vehicle accident scenes. In addition, the researcher will articulate to what extent the goal and objectives of the research study have been met. Conclusions emanating from the research will be made, and recommendations will be put forward for practice and future research on the basis of certain themes.

4.2 Summary

The objectives and goal of the study, and how they were met, will be discussed here. The purpose of this research was to explore the experiences of EMCPs after exposure to fatal motor vehicle accident scenes, and thereafter to make recommendations about how their day-to-day functioning in the emergency care environment may be improved. The empirical part of the study involved interviewing nine participants who were employees of the Emergency Medical Services Division and who had attended fatal motor vehicle accident scenes.

As was noted in the research findings, the experiences of EMCPs after exposure to fatal motor vehicle accident scenes have been presented in their own words as recorded during the one-on-one semi-structured interviews between the researcher and each of the participants, and subsequently discussed.

4.2.1 Objectives of the study

- To describe EMCPs' field of practice, their constant exposure to trauma and the phenomenon of fatal motor vehicle accident scenes.
- To explore EMCPs' experiences of fatal motor vehicle accident scenes.

- To assess EMCPs' experiences of their constant exposure to trauma and its effect on their daily functioning.
- To explore EMCPs' experiences and awareness of current EAP services.
- To formulate recommendations for EAP support services to EMCPs regarding their exposure to trauma, specifically to fatal motor vehicle accident scenes.

4.2.1.1 Objective 1: To describe EMCPs' field of practice, their constant exposure to trauma and the phenomenon of fatal motor vehicle accident scenes

This objective was achieved by means of an in-depth literature review and empirical research. The literature review revealed that some participants were informed about their field of practice and their constant exposure to trauma and the phenomenon of fatal motor vehicle accident scenes. The literature review in chapter 2 indicated that Emergency Service workers wishing to study in the field of Emergency Services can embark on one of the following courses: BAA, AEA, CCA, ECT, BTech and Bachelor's degree: EMC, as set out in chapter 2 on EMCP qualifications. The theoretical component of these courses is complemented by the compulsory practical component, which requires that a certain number of hours be worked on the road with an ambulance crew (Castle, 2003:50). EMCPs face extreme stressors such as traumatic accidents and disasters in their daily functioning, as described in chapter 2 on fatal motor vehicle accidents. Human factors contributed the most to the crashes, with many collisions occurring as a result of jay-walking, speed that was too high for circumstances, overtaking in the face of oncoming traffic, hit-and-run incidents and driving under the influence of alcohol. The analysis further exposed the painful reality of the role played by unroadworthy vehicles. Key to the vehicle factors that contributed to the crashes were tyre bursts, faulty brakes and smooth tyres, while environmental factors included sharp bends, wet surfaces and poor visibility. However, empirical evidence revealed that participants displayed relatively comprehensive knowledge about the conditions linked to the protocols attached to their qualifications and what they are constantly exposed to in the real world. The theme that was developed to support this objective is training. A commitment to patient care, professional integrity and lifelong learning is vital to success in this field. EMCPs need to be properly trained, and this is achieved by

exposing students to various academic courses as well as practical hands-on experience on the road.

4.2.1.2 Objective 2: To explore EMCPs' experiences of fatal motor vehicle accident scenes

This objective was achieved by means of empirical research. Empirical evidence revealed that participants were greatly concerned about the need for overall quality in their service, which could be achieved through relevant research, continuous analysis, communication and evaluation of the current processes and by reflecting on how improvements can be made. The theme of effective communication was found to be relevant in this regard.

4.2.1.3 Objective 3: To assess EMCPs' experiences of their constant exposure to trauma and its effect on their daily functioning

This objective was achieved by means of an in-depth literature review and empirical research. Literature indicates that EMCPs' constant exposure to trauma impacts on their daily functioning. EMCPs are exposed to and affected by traumatic events such as the trauma of witnessing death or being exposed to dead bodies. A growing body of literature indicates that the EMCP may develop severe stress levels after attending emergency incidents. Empirical research has shown that not everyone is affected to the same degree and, even with very traumatic incidents, stress levels may vary from very low to very high. EMCPs' constant exposure to trauma and the effect it has on their daily functioning was assessed in this study. EMCPs are likely to encounter several incidents daily of severe injuries, life-threatening illnesses, contagious diseases and sometimes multiple patient scenarios. Stress was therefore generated as the theme to back up the findings. On an emotional level, EMS work is stressful. According to Schulz (2008:137), the reaction to trauma is a complex process that affects every aspect of human existence to a certain degree. It is well documented that repeated and continual exposure to trauma may have secondary-traumatic effects on those exposed to it (Carrington, 2006:89). EMCPs also need to perform their duties within a multicultural society, where racial tensions and language barriers may hamper effective medical care (Louria, 2005:85). The cumulative stress and the trauma of the job can have damaging effects on their personal and professional lives, yet the unpredictability of the amount and type of work in the emergency service is also found to be an attractive feature of the job.

4.2.1.4 Objective 4: To explore EMCPs' experiences and awareness of current EAP services

This objective was achieved through an in-depth literature review and empirical research. It is during the EMCPs' execution of tasks that they are directly or indirectly exposed to trauma that warrants the intervention of professional helpers. EMCPs are constantly in motion and are under pressure on a daily basis (Hetherington, 2005:22). Empirical research among EMCPs indicated that some of them were aware of EAP services while others had no knowledge of them at all. In order to gain a fuller understanding and to be able to meet this particular objective, the theme of the importance of professional counselling was developed.

4.2.1.5 Objective 5: To formulate recommendations for EAP support services to EMCPs regarding their exposure to trauma and specifically to fatal motor vehicle accident scenes

This objective was also achieved through an in-depth literature review and empirical research. The literature identified the six main coping methods used in EMS, namely talking with family, chatting to friends, using humour, taking time out, socializing and recreation or hobbies. In order to have a fuller understanding and to be able to meet this particular objective, the theme of professional counselling was found to be of relevance in this particular instance. Given that EMS personnel face various occupationally related hazards daily, much research was directed at the coping styles adopted by EMCPs in this field (Carrington, 2006:90). EMCPs never become fully desensitized to trauma and may eventually suffer from burnout or PTSD. The use of counselling can improve communication, clarify understanding, challenge dysfunctional perceptions, promote empathy and offer emotional support to those in crisis. Organization-based stressors such as negative interpersonal relationships and work overload remain a significant source of stress in the emergency service (Hetherington, 2005:57). An in-depth literature review indicated that EMCPs experience headaches, feelings of sadness and lack of appetite when they are stressed. The recommendations will be discussed later in this research.

4.2.2 Goal of the study

The goal of the study was to explore the experiences of Emergency Medical Care Practitioners (EMCPs) after exposure to fatal motor vehicle accident scenes. This goal was achieved through the objectives.

This contributed to an in-depth understanding of the lived experiences of EMCPs and the care and support that they receive, not only in the emergency medical service, but more comprehensively in the City of Tshwane as well. By exploring the experiences of these EMCPs it is hoped that insight may be gained into factors that influence their experiences and behaviour and the attainment of successful working environments. The information gathered will then be incorporated into the writing of recommendations for Emergency Medical Services towards the improvement of the wellbeing of EMCPs.

4.2.3 Research question

In the context of this study, the following research question was asked:

What are the experiences of Emergency Medical Care Practitioners (EMCPs) after being exposed to a fatal motor vehicle accident scene?

The data collected from structured one-on-one interviews with the participants revealed themes and sub-themes relating to the experiences of EMCPs after exposure to fatal motor vehicle accident scenes. These themes are as follows: the significance of effective communication, training, the importance of professional counselling, the significance of quality improvement, the value of significant others and stress. The research question was divided into specific areas which correspond with the main themes of the study.

Table 4.1 provides an overview of the themes and sub-themes that emerged from the empirical results.

Table 4.1:   Themes and sub-themes

Themes	Sub-themes
The significance of effective communication	• Communication • Multi-disciplinary team • Honesty • Information

Themes	Sub-themes
Training	• Educational level • Competence • Skills • Confidence • Continuous professional development • Reflection
The importance of professional counselling	• Counselling • Referral • Debriefing • Employee wellness • Follow-up care
The significance of quality improvement	• Patient treatment • Response time • Resources
The value of significant others	• Presence
Stress	• Symptoms • Coping • Encouragement

4.3 Conclusions

In this section the conclusions from the research and the literature review will be discussed.

4.3.1 Conclusions from research

This study was qualitative in nature and this approach enabled the researcher to explore the experiences of EMCPs after exposure to fatal motor vehicle accident scenes. It also enabled the researcher to collect data in the natural setting of the EMCPs' environment. Applied research was the appropriate type, because it focused on a specific problem in practice, namely exploring the experiences of EMCPs after exposure to fatal motor vehicle accident scenes. The collective case study was the appropriate research design because the topic was of a sensitive nature. It also enabled the researcher to understand the phenomenon under study on the participants' own terms (what they experienced), in order to provide a

description of how they experienced it. Non-probability volunteer sampling was utilized to select the study participants. The researcher utilized unstructured one-on-one interviews because of the sensitive nature of the topic. This technique provided the researcher with an opportunity to collect firsthand information from participants. It also gave the researcher an opportunity to understand the experiences of participants and the meaning they make with regard to their experiences. Field notes and observations were also used. In addition, all interviews were captured using a digital voice recorder. All these made data collection manageable.

In addition, the recording of the interviews made the transcriptions easier. This helped the researcher to become familiar with the content of each interview and to generate themes from the data. The research findings will help the EMCPs and the employee wellness section and other relevant stakeholders to gain an in-depth understanding of the experiences of EMCPs after exposure to fatal motor vehicle accident scenes.

Data was thematically analyzed using Creswell's framework. Verbatim transcriptions were done for all nine interviews, which were conducted in a mixture of English and Sepedi and were transcribed in English. The researcher went through all the interview transcripts and made notes in the margins and added the field notes and observations where relevant. The categories that emerged were labelled accordingly and themes and sub-themes were derived. The researcher developed a preliminary table that sets up the main themes and sub-themes that were used during discussion and analysis. Credibility, transferability, dependability and confirmability as constructs were considered to establish trustworthiness of the data, and strategies such as member checking, peer debriefing and reflexivity were applied. Lastly, all ethical considerations were adhered to throughout the study. It may be concluded that the research approach, design, type, data collection techniques and data analysis framework used were indeed appropriate to produce these findings.

4.3.2   Conclusions from literature study

The appropriate theoretical framework to lead to understanding of the phenomenon under study was the bio-psychosocial approach, which proposes that a person with an illness may affect the different systems and sub-systems in the environment in which they function. It is an approach that views health and wellness as the result of the interaction of biological, psychological and social factors. Its focus is said to be the promotion and maintenance of health through socio-environmental and behavioural changes.

Being able to understand with some confidence an EMCP's experiences after exposure to fatal motor vehicle accidents is of concern to EMS institutions everywhere. Emergency Medical Services is a complex and extensive organization of people, equipment and facilities that come together specifically to respond to the emergency healthcare needs of the community. South Africa has a great need for dedicated, skilled people committed to the highest standards of emergency medical care. A commitment to patient care, professional integrity and lifelong learning is vital to success in this career.

Repeated exposure to traumatic events is believed to result in the development of PTSD. Over a sustained period, depression and/or anxiety may manifest. Continuous professional development has become an essential part of medical practice. EMCPs should never stop learning, and hence they must always be prepared to seek new challenges, reflect honestly upon their performance and experiences and adjust their practice in order to maintain effective and efficient service delivery. Quality improvement arises from the growing needs and rising expectations of healthcare consumers.

4.4   Key findings, conclusions and recommendations from the empirical study

The key findings, conclusions and recommendations from each theme in the thematic analysis will now be discussed. The recommendations will be made in the hope of enhancing support service practice in this area and improving employee wellness.

4.4.1 Theme 1: The significance of effective communication

This theme concentrated mainly on establishing the importance of effective communication among emergency medical care practitioners and all other stakeholders.

4.4.1.1 Key findings

It is very important that information is communicated frequently and effectively, in order to enhance the effectiveness of the functioning of EMCPs in an emergency care environment. The participants indicated that effective communication included multi-disciplinary teams and implied that teams must be honest with all the information at their disposal.

At the scene of a fatal motor vehicle accident, however, the number of team members who are actually present should be limited to those whose presence is needed, so as to optimize the success of the management of such a scene. The researcher nevertheless emphasizes the crucial importance of close collaboration with the police, because nurturing relationships of trust and respect will enable them to be more active in cases of acute need.

This links up with the bio-psychosocial model, in which communication is tied to the social component. Communication amongst EMCPs is seen as an important and critical skill for ensuring the success of the team. Strong team communication skills based on the values of honesty and respect are encouraged amongst team members. The multi-disciplinary team helps build relationships and ensure the sharing of ideas and best practices.

4.4.1.2 Conclusions

It was observed that communication is essential for the correct management of fatal motor vehicle accident scenes. The EMCPs, police, social workers and chaplains were regarded as an important part of the multi-disciplinary team. The researcher would therefore like to salute and thank all members of the multi-disciplinary team, who continue to have such a positive and helpful impact on the lives of these EMCPs with the compassion, kindness and sensitivity that they have demonstrated while working in such stressful environments. The line function managers are also

encouraged to continue with the sterling work they do and to always make an effort to open the lines of communication and listen to the needs and concerns of their subordinates.

Situations in which the EMCP has to wait for members of the multidisciplinary team should be avoided at all costs. The researcher gave examples earlier in chapter 3 of prolonged waiting times for back-up during the scene of a motor vehicle accident.

4.4.1.3   Recommendations

- EMCPs are determined to strive for excellence in everything they do and to provide professional and courteous service at all times. During this study, the participants repeatedly stressed the fact that they do not compromise on honesty, fairness or integrity. Unity and teamwork are emphasized as being very important for their success in handling major scenes and incidents. They are also very sensitive to the needs of the community and feel that they have a duty to make a success of every scene they attend.

- EMCPs should be congratulated and urged to continue to incorporate these crucial attitudes into their demanding work.

- The researcher nevertheless emphasizes the crucial importance of close collaboration with the local police and metro police, because the nurturing of relationships of trust and respect will enable them to be more responsive in cases of acute need.

- The EMCP who is most highly qualified handles the scene. Scene management by the most highly qualified personnel should be carried out in the least intimidating manner possible towards other colleagues. EMCPs should constantly reflect on their experiences, feelings and attitudes towards their colleagues by practising disciplined introspection on a regular basis.

4.4.2   Theme 2: The importance of professional counselling

This theme explored different strategies that can assist the EMCP to cope with their daily duties.

4.4.2.1 Key findings

The importance of counselling for EMCPs should be repeatedly emphasized. Initial and follow-up counselling preferences and benefits should be clearly communicated to all EMCPs. While some participants initially had no wish to talk, others felt that they would prefer to follow up with someone of their choice. Since counselling is regarded as an intensively intrusive process by some, it should be carried out with the utmost sensitivity and never enforced.

This links up with the bio-psychosocial model, more specifically the psychological component, as counselling will enable the EMCP to explore the aspects of their lives and feelings by talking openly and freely. The EMCP gets an opportunity to express difficult feelings such as anger, guilt and fear in a warm and supported environment. Effective counselling allows the client to make effective decisions leading to positive changes in behaviour, which ties in with the social component.

4.4.2.2 Conclusions

It has also been clear to the researcher on the basis of evidence and her own experience that not all EMCPs react in the same way to the same circumstances and the same level of trauma to which they have been subjected. Counsellors should therefore be sufficiently flexible to acknowledge the variability of such reactions, and should work with the EMCPs in order to identify better strategies that are optimal for their functioning.

It is also important to align and coordinate the various management processes so that all members can obtain the best possible outcome. Proper coordination and cooperation will also allow the team to be organized and, with the lessons learned, to be ready to handle other or similar incidents in future.

4.4.2.3 Recommendations

- Counsellors who are involved in the debriefing process should possess all the knowledge, tools and expertise that are needed for them to be effective during the treatment process. The researcher recommends that the reactions of

EMCPs should always be accepted and acknowledged as 'normal', which indeed they are under the circumstances.

- The supervisors in EMS currently handle all referral needs to Corporate and Shared Services. The researcher however recommends that the preference of EMCPs should be taken into account before the referral is made. If some EMCPs do not wish to see counsellors in the early post traumatic stage, then they should not be compelled to do so. Some might prefer to see their current psychologist or social worker before committing themselves to further contacts. And if the EMCP accepts the offer of counselling, then the counsellor should make himself or herself available to continue to counsel the EMCP.

- It is understandable that the issue of debriefing emerged as a matter of very great concern to the EMCPs. As one might expect, each person's response to fatal motor vehicle accident scenes or to trauma as a whole is unique, and EMCPs are no different in this regard. It is therefore essential that every possible measure be taken to ensure that the EMCPs are granted whatever level of support the employee wellness section is able to offer to make them feel most comfortable.

4.4.3   Theme 3: Training

This theme put into perspective the importance of training that an EMCP must have in order to be able to practice effectively.

4.4.3.1   Key findings

All EMCPs who are involved in patient/scene management should attend regular in-service programs and refresher courses to update their knowledge, stimulate their interest and dedication and also ensure that their skills and knowledge of the correct procedures to follow in patient/scene management compare with the best that are available in the world. The evidence that emerged from the study inevitably led the researcher to conclude that the professional competence and confidence of EMCPs could be improved by means of formal training programs in the form of continuous professional development. The move to measuring and improving quality in the form of response times has become a prominent aspect of healthcare over the last decade.

This links up with the bio-psychosocial model, primarily in respect of the psychological component, because the psychological component focuses primarily on thoughts, emotions and behaviors. Training presents a prime opportunity to expand the knowledge base of employees. Providing the necessary training creates a generally knowledgeable staff, with employees who can work as teams or independently without constantly seeking back-up and supervision from others. Training will build the EMCPs' confidence, as they will have a deeper understanding of the job, and will keep them at the cutting edge of the current developments.

4.4.3.2 Conclusions

- The researcher maintains that the ESD: EMS can develop, implement and maintain cost effective management systems by providing continuous training to employees and fostering a culture of multi-skilling.
- Continuous delays of proper management because of lower qualifications or training of team members at the primary or initial stage of an event are devastating and have far-reaching consequences.
- It is therefore important that managers have a capacity for constructive thinking, reasoning and problem-solving and are able to implement a strategy to continuously keep employees motivated when performing their daily activities.
- Coping techniques should be individualized to the clients, as they seem to be personal and unique from one individual to another.

4.4.3.3 Recommendations

- EMCPs who are willing to dedicate their professional lives to this rewarding work should be given an opportunity for further training at accredited institutions. Any training funds or bursaries that are invested in the training of EMCPs will benefit both the department and patients in future.
- All EMCPs involved in patient care should be given opportunities for continuous professional development as set out by HPCSA.
- The evidence that emerged from the study inevitably leads the researcher to conclude that the professional competence of EMCPs could be improved by means of formal training and programmes of in-service education/refresher courses.

- Specialized training will boost the confidence of all EMCPs who are involved in the day-to-day running of the primary duties of EMS.

- The researcher also strongly recommends that highly qualified personnel be hired in their numbers. This recommendation was not made by the participants specifically, but clinical experiences within the emergency environment allow the researcher to suggest this action. By doing so, the possibility of prolonged waiting periods and the further emotional upset to EMCPs will be minimized.

- It is particularly important to ensure that trained and skilled practitioners are on hand to assist when needed. The years of experience are also a factor in how well EMCPs understand what they are doing, the quality of the service that they are able to render, and a reduction in the number of errors that are attributable to them.

- The human resource component should be increased to avoid fatigue.

- More equipment should be procured to allow for effective and efficient service delivery.

4.4.4   Theme 4: The significance of quality improvement

This theme was related mainly to suggestions from participants on how the quality of services offered can be improved.

4.4.4.1   Key findings

The basic requirements for optimal patient treatment include the availability of both disposable and non-disposable medical equipment. The lack of appropriate equipment is one of the perennial problems that hamper thorough and efficient patient treatment. The availability of sufficient resources will lead to greater convenience and better outcomes. This will undoubtedly have a positive effect on the quality of patient treatment.

This links up with the bio-psychosocial model, more specifically the social component, as the healthcare establishments seek to improve and develop in order to meet the growing needs and rising expectations of healthcare consumers. Improving quality is about making healthcare safe, efficient, patient-centred, timely, efficient and equitable. These aim to bring about measurable improvement by applying specific methods.

4.4.4.2 Conclusions

It may be concluded that the time that elapses before EMCPs can turn out to calls and give proper care to patients at the scenes is, more often than not, too long and often unnecessary and avoidable. This is one aspect that the line function supervisors should improve as a matter of great urgency. Supervisors need to ensure that the tools of the trade are always available and in working order and should intervene wherever possible if they sense possible delay. Changing of shifts also delays response time.

Educating members of the public that emergency vehicles are meant for serious incidents and that they should refrain from using free emergency numbers carelessly could also bear productive results.

4.4.4.3 Recommendations

- Response times were a matter of great concern to both the EMCPs and the researcher, and it is confirmed that the amount of time that is taken to respond to calls and that EMCPs take to be able to locate calls should be substantially reduced.

- The researcher reached the conclusion on the basis of the findings and her personal observation that there were areas that could be significantly improved in order to better meet the needs and improve the service. Provision of sufficient resources would also improve the morale of EMCPs.

- It is very important that a manager should know his or her subordinates well enough to know what motivates them in order to apply the most appropriate ways of motivating them. This implies that managers are responsible for providing an environment conducive to performance. However, individuals are themselves responsible for self-motivation.

4.4.5 Theme 5: The value of significant others

This theme looked at the value of significant others in the total wellbeing of an EMCP.

4.4.5.1 Key findings

Members of a family or significant others usually have a positive attitude towards helping their relative or partner in all possible ways; however, there are always those members of a family or significant others who will react with hostility, blame and negativity. Because the existence of such people is a constant in the society, the researcher suggests that it is necessary for a counsellor to inquire into and evaluate the relationship that exists between the EMCP and her family or significant other, and that they should only be invited to be involved in the EMCP's treatment program if their attitude towards the EMCP is positive and helpful.

This links up with the bio-psychosocial model, specifically the social component, which confirms that relationships are central to providing health-care. It is a way in which EMCPs can understand their own experiences and form therapeutic relationships with significant others.

4.4.5.2   Conclusions

The researcher came to the conclusion on the basis of the findings that EMCPs' family members or significant others play a major role in supporting them. The role played by family members or significant others in the care of an EMCP after exposure to traumatic motor vehicle accident scenes is undeniable, and these important people can be a supportive and useful asset in the management of the EMCP.

The positive attitude and involvement on the part of family/significant other was deeply encouraging to the EMCP, and their potential for assisting the process of recovery and the EMCP's return to everyday life should not be underestimated.

4.4.5.3   Recommendations

- All the participants in this study viewed the presence of their family/significant other as supportive and indicated that they demonstrated concern for their health and wellbeing.
- The researcher recommends that the family/significant other of the EMCP should also be given all the necessary information about any recommendations made by the counsellors. Apart from this, the role of the family or significant

other in the provision of care, comfort and encouragement in the daily life of the EMCP should be accepted and acknowledged.

- The involvement of the EMCP's family or significant other makes many aspects of care easier. The EMCP will receive more comfort and support than the counsellors are able to give. The family/significant other will feel valued because they will feel that they are playing an important role in the treatment of their relative, and they might feel that they themselves, as a relative to the EMCP, are being supported as well through their interactions with the counsellor. There are so many potential benefits that flow from the involvement of an EMCP's family/significant other that the researcher believes that they should actually be recognized and accepted as a part of the management team during the treatment of an EMCP.

- The EMCP's family/significant other be included in every possible and practical way so that the restoration of the EMCP to a state of normality can be expedited.

- All EMCPs confirmed family involvement as a vital factor in maximizing support and comfort. Community representatives such as priest or pastor are also usually trained in the demanding art of reassuring those who have survived traumatic experiences.

4.4.6 Theme 6: Stress relating to EMCPs' reaction to incidents

This theme looked at various factors that impacted on the overall functioning and wellbeing of the EMCP.

4.4.6.1 Key findings

The actual interview process brought home the truly stressful nature of this job, and prolonged reflection enabled the researcher to realize that there were definitely a number of areas in which the EMCP, Management of the EMSD and the community as a whole could make valuable contributions to improving the day-to-day functioning of those who attend various scenes.

This links directly with psychological factors of the bio-psychosocial model, which include personality, stress management, life goals, perceptions and feelings, as well as the biological factors of the model, with EMCPs' fear for their own health and sickness, because EMCPs often encounter incidents where there are contagious

diseases, severe injuries and mutilation and sometimes multiple injuries, which again links to the psychological component. They experience high volumes of stress, and little effort is made to relieve their suffering. Excessive stress may result in poor physical health (biological component) and psychological health (psychological component) and loss of job performance (social component) and satisfaction.

4.4.6.2 Conclusions

A lot of stress, guilt, grief and anger emerge after an EMCP has been exposed to fatal motor vehicle accident scenes. EMCPs have confirmed that stress is an inevitable result of their work. Besides intense clinical conditions, administrative issues have also been identified as critical stressors in EMS. These include long working hours, poor administrative support, negative attitudes of hospital personnel and inadequate equipment.

4.4.6.3 Recommendations

The researcher came to the conclusion on the basis of the evidence and her own experience that not all EMCPs react in the same way to all incidents at the scene of a fatal motor vehicle accident. Counsellors should therefore be sufficiently flexible to acknowledge the variability of such reactions.

- As one might expect, each person's response to trauma is unique and EMCPs are no different in this regard.
- The researcher recommends that the reactions of EMCPs should always be accepted and acknowledged as normal (which indeed they are under the circumstances) and that support should be given as per need.

4.5 Recommendations for EAP

- Trauma debriefing has been promoted as a way of promoting healing. A controlled and safe environment should be provided to allow EMCP's the necessary space to emotional unload or ventilate their emotions or feelings.

- In the researcher's opinion, various kinds of support are essential if an EMCP is to survive a traumatic fatal motor vehicle accident scene with minimum stress and an absence of long-term consequences.
- The use of Employee Wellness services by EMCPs will boost their confidence. While the researcher concludes that the presence of counsellors will be beneficial in the process, more effort should be invested in ensuring that the EMCPs are aware of the services they provide.
- The follow-up process should be streamlined and communication about the follow-up procedure and process should be made known to EMCPs. The researcher's experience and observations lead her to suggest that social workers, chaplains or any other qualified counsellors be present in stations to continuously support the EMCPs, because properly trained and skilled personnel will be able to give them a timely, efficient, accurate and comprehensive service.
- The human resource component should be strengthened to avoid fatigue.

4.6 Recommendations for future research

The EMCPs were concerned about the underutilization of the services; this has been faithfully recorded and discussed in the text. The actual feelings and emotions that EMCPs experience when the counsellors are not available to perform first-hand counselling have not yet been fully explored and described in this study, and future research might make a valuable contribution in this field to the improvement and relief of all these experiences that EMCPs have in their day-to-day functioning.

The EMCPs also expressed their concern about deficiencies in the services offered to them during and after patient management and expressed their belief that these needs should be urgently addressed.

It was also important for the researcher to note that many EMCPs are unaware of the services that are offered by the City of Tshwane: Corporate and Shared Services in order to enhance their wellbeing at the work place. There is a need to create awareness among EMCPs so that they will access Support Programmes as widely as possible and a need to maximize awareness efforts in various stations.

4.7 Limitations of this study

It is not possible to generalize the findings of qualitative research because each research project is unique to the population that it studies and all research populations are different. This limitation is of course applicable to this study, but the findings can be applied to similar populations.

It was not much of a struggle to get the volunteers to participate in the research study, though conducting the interviews with the participants proved to be a time-consuming task, as they were either working day/night shifts or they were off. This phase of the research generated a great deal of frustration, but all the EMCPs who actually agreed to take part in the study were very helpful. None of the participants who had agreed to cooperate at the initial stage subsequently revoked their consent.

One participant broke down during the interview and the interview had to be terminated. The researcher recommended that he be referred to Employee Wellness yet he did not show interest.

4.8 Benefits of the study: personal reflection from the researcher

While the researcher was engaged in the past as an EMCP, and although she now works in a supervisory capacity, she thought she had always been alert to the needs and concerns of the EMCPs in her care. She never imagined that their needs would cover such a broad spectrum of concerns.

By reflecting on her past experience and the data that emerged from this study, the researcher came to the realization that EMCPs are really hurting inside and there is much more that the EMSD can do to help EMCPs cope with the stressful job that they do from day to day.

The researcher was also aware that open lines of communication and some degree of honesty could sometimes make all the difference to what the EMCPs go through in their day-to-day functioning. This realization served as an eye-opener to the researcher as an Operational Director, and it put her in a position to make a valuable contribution to the experiences and needs of EMCPs and also to the establishment of a far more comprehensive and well-oiled Emergency Medical Service Division.

As a first-time researcher, a great deal of guidance was needed from her supervisor in order to develop a suitable and effective research methodology. The researcher realized right from the beginning that the ethical aspects of conducting research into such a sensitive topic as this would be a matter of concern to the participants; even so, she underestimated the time that would actually be needed to combine the necessary explanations with meeting the requirements for the confidentiality and protection of their identities that are essential aspects of this study. Completing the letter of informed consent thus took more time than was planned.

The interviews proved to be useful, as the researcher could associate with what was alluded to by the participants, and also because they directed her attention to those specific aspects where EMCPs proved to be less than satisfactory and which were identified as gaps for improvement in the future. These areas include problems connected with accessibility of support services in the Emergency stations and the comprehensiveness of the care that is given to the EMCP before, during and after exposure to fatal motor vehicle accident scenes and any other scenes that an EMCP may refer and relate to as stressful. EMCPs are also unique individuals and have to be treated as such, and hence what may be a stressful incident to one might be 'just another incident' to another.

The participants offered valuable information in the context of the interviews, and the researcher is grateful to them all for their unselfish input and their willingness to relive the memories of their traumatic experiences in the interest of improving conditions in the EMS environment. The participants were given a comfortable space and ambience in which to recount these stories, and these interviews gave the researcher many useful opportunities to find out more about the gruesome realities of fatal motor vehicle accident scenes as experienced by EMCPs.

The researcher was surprised by the volume of recent data, protocols and guidelines in the field of Emergency Services. Interestingly enough, websites and Emergency advocacy literature from abroad were found to be very much in line with what we as healthcare professionals are doing here in the RSA to manage fatal MVAs. This in itself was a source of great satisfaction, because the emphasis in most of these documents and websites was on the quality of the patient care

provided by EMCPs during fatal motor vehicle accident scenes and their experiences in their day-to-day functioning. All that now remains is for us as EMCPs in SA to collectively agree on the need for improvement in the standards of delivering effective and efficient services throughout the country.

The researcher was also gratified to realize that some of the aspects of the management process that she had intuitively regarded as deficient in clinical practice situations were confirmed by the data as being in need of improvement. The aspects of management that she knew needed to be improved upon included: issues of response time, modernized equipment, team work and continuous professional development and training opportunities for both EMCPs and communities.

For the first time the researcher now feels a sense of satisfaction at having completed this study. She also feels that if she ever embarks on research of this magnitude again, she will be able to do so with greater awareness. This study has served to heighten her knowledge, awareness and appreciation of the experiences and dilemmas that EMCPs face on a daily basis in the emergency care environment and, in spite of its limitations, the researcher is confident that this research will make a useful contribution to the existing body of knowledge in the Emergency Services.

4.9 Concluding remarks

This chapter focused on the conclusions that the researcher reached on the basis of the research findings both in her own experience in clinical practice and in the interviews with participants. It has also offered a variety of recommendations for effecting improvements to both the EMCP and the EMS Divisions. It is the researcher's hope that this research study will contribute substantially to the understanding of the experiences that EMCPs have to go though in the emergency care environment and that the findings and recommendations that have been made will serve as a basis for improving the quality of life of EMCPs.

The position of EMCP is seen by the public as one of the most ethical and honourable positions a person can hold. EMCPs are perceived as most trustworthy in the eyes of the public. To be able to go into unsafe situations in order to rescue complete strangers, EMCPs have to be a very motivated group of people with a

sense of organizational commitment and team work. It is also important for them to be treated with utmost respect and should be provided with the support and training that they deserve.

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6. Addendums

6.7 Addendum 1: Ethics approval UP

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Research Ethics Committee

23 July 2015

Dear Prof Lombard

Project:	**The experience of emergency medical care practitioners (EMCP) after exposure to fatal motor vehicle accident scenes**
Researcher:	**RPS Ramahuta**
Supervisor:	**Dr C Carbonatto**
Department:	**Social Work and Criminology**
Reference numbers:	**11324407 (GW20150513HS)**

Thank you for your response to the Committee's correspondence of 4 June 2015.

I have pleasure in informing you that the Research Ethics Committee formally **approved** the above study at an *ad hoc* meeting held on 23 July 2015. Data collection may therefore commence.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should your actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

The Committee requests you to convey this approval to the researcher.

We wish you success with the project.

Sincerely

Prof. Karen Harris
Acting Chair: Research Ethics Committee
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: karen.harris@up.ac.za

Kindly note that your original signed approval certificate will be sent to your supervisor via the Head of Department. Please liaise with your supervisor.

Research Ethics Committee Members: Prof KL Harris(Acting Chair); Dr L Blokland; Prof M-H Coetzee; Dr JEH Grobler; Prof B Hogmeyr; Ms H Klopper; Dr C Panebianco-Warrens; Dr C Puttergill; Prof GM Spies; Dr Y Spies; Prof E Taljard; Dr P Wood

6.8 Addendum 2: Permission letter EMS

Emergency Services Department

Pieter Delport Centre | 133 Beckett Street | Arcadia | 0083 | PO Box 440 | Pretoria | 0001
Tel: 012 358 2136 | Fax: 012 358 2303
Email: JoanDB@tshwane.gov.za | www.tshwane.gov.za | www.facebook.com/City of Tshwane

CITY OF TSHWANE
IGNITING EXCELLENCE

My ref:
Your ref:
Contact Person: Joan de Beer

Section/Unit: EMS

20 March 2013

Attention: Refilwe Sebela

42 Hillview Flat
Lievaart Street
Proclamation Hill
0183

Madam

RE: REQUEST FOR PERMISSION TO PERFORM RESEARCH

Your letter dated 16 March 2013 regarding the above mentioned request refers,

I hereby grant permission to Ms RPS Sebela to perform research and use data gained at the City of Tshwane Metropolitan Municipality: Emergency Services Department in the Emergency Medical Service Division: Region 2: Wonderboom area as detailed in your letter.

Yours Sincerely

JOAN K. DE BEER
CHIEF OF EMERGENCY SERVICE

DATE: 26/03/2013....

On request, this document can be provided in another official language.

Kgoro ya Ditirelo tša Tšhoganyetšo • Departement Nooddienste • Lefapha la Ditirelo tsa Tshoganyetso
Ndzawulo ya Vukorhokeri bya Xilamulelamhangu • UMnyango Wezemisebenzi Ephuthumayo • UmNyango weSizo eliRhabako
Emergency Services Department

6.9 Addendum 3:   Permission Letter Research and Innovation Unit

Office of the Executive Mayor
Research and Innovation Unit

Innovation Hub| Mark Shuttleworth Street | Sappi Technology Centre | Lynwood | 0087
PO Box 440 | Pretoria | 0001
Tel: 012 358 2000 | Fax: 012 358 4464
Email: Zukiswanc@tshwane.gov.za | www.tshwane.gov.za | www.facebook.com/CityOf Tshwane

My ref:	Research Permission	Tel:	012 358 2000
Your ref:		Fax:	012 358 4464
Contact person:	Zukiswa Ncunyana	Email:	Zukiswanc@tshwane.gov.za
Section/Unit:	Research and Innovation		

TO: **Ms Refilwe Sebela**   **DATE: 20 July 2015**
        94 Mimosa Avenue
        Proclamation Hill
        0183

Dear Ms Sebela,

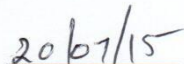**Approval To Conduct Research Within The City Of Tshwane Metropolitan Municipality**

I have the pleasure to inform you that your request to conduct research on the topic *"The Experiences of Emergency Medical Care Practitioners (EMCP) after Exposure to Fatal Motor Vehicle Accidents"* has been reviewed and permission is hereby granted for you to conduct research in the City of Tshwane Metropolitan Municipality.

It is noted that your research seeks to explore and contribute knowledge on factors releted to daily work exposures of Emergency Medical Care Practitioners in relation to fatal motor vehicle accidents. The City of Tshwane further notes that all ethical aspects of your research study will be covered within the provisions of the University of Pretoria's Research Ethics Policy. In addition, as a researcher you are required to sign the Confidentiality Agreement Form with the City of Tshwane prior to conducting the research.

Research and Innovation Unit will be facilitating the process; therefore all correspondence should be directed through the unit. Upon completion of your research, you are reguired to present and submit final report on the findings to the City of Tshwane Metropolitan Municipality

Yours faithfully

Dorah Nteq (Ms)
Acting Chief of Staff
Office of the Executive Mayor

20/07/15
Date

C40 CITIES
CLIMATE LEADERSHIP GROUP

Kgoro ya Dinyakišišo le Mphafatšo Umnyango ✦ Wezokucwaninga Nezobuchule ✦ Departement Navorsing en Innovering ✦
Lefapha la Tlhotlhomiso le Boitlhamedi ✦ UmNyango wezokuTlama nokuRhubhulula ✦
Research and Innovation Department

6.10   Addendum 4: Letter of informed consent

<div align="right">

Faculty of Humanities

Department of Social Work & Criminology

</div>

<div align="center">

LETTER OF INFORMED CONSENT

Section A: Research information for adult participants

</div>

Researcher: Refilwe Sebela
Contact Numbers: 082 291 5678
Email: refilwese@tshwane.gov.za

An invitation to participate in a study
You are kindly invited to take part in a study being conducted by Refilwe Sebela, a postgraduate student in the Department of Social Work and Criminology at the University of Pretoria. This study is being conducted in partial fulfillment of the requirements for the degree MSW (Health Care).

Title of the Study
The experiences of Emergency Medical Care Practitioners (EMCP) after exposure to fatal motor vehicle accident scenes.

Purpose of the Study
This study investigates the experiences of EMCP currently working in the Emergency Services Department: Emergency Medical Service Division in order to understand their personal experiences after exposure to fatal motor vehicle accidents. EMCP's contend with considerable stress as a result of their responsibilities for the lives and safety of others. To use the phenomenon of fatal motor vehicle accident scenes as the backdrop of the study will help to determine how EMCP's experience such extremely stressful situations and give an indication of what can be done to improve support services through referral to Employee Assistance Programmes (EAP) at Corporate and Shared Services: Wellness Section in the City of Tshwane. These services remain underutilized despite EMCP's working under stressful circumstances. Through this study it is hoped that the experiences of EMCP's will be better understood, which could help enhance the ability to recognize EMCP's experiencing stress, burnout and Post Traumatic Stress Disorder (PTSD) and that more referrals will be made to EAP in the future.

Procedures
Should you agree to participate in the study, you will be asked to take part in a semi-structured one-on-one interview. These interviews will take place at a mutually agreed upon venue, where confidentiality will be assured. The interviews will take place in one of the offices at the station where it is private, quiet and comfortable. It will be an environment where you will have the freedom and confidence to share your experiences without intimidation or hindrance and the interview will not exceed one hour. A voice recorder will be used during the interview with your permission and the data will be used strictly for research purposes only.

Potential Risks
The researcher is aware that lived experiences may be recalled to memory during this specific investigation and could be the beginning of renewed emotional trauma. Possible risk of harm that could emanate from participation in the research will be

dealt with great sensitivity. The necessary debriefing will be conducted by the researcher and if any emotional harm is experienced, a referral will be made to Employee Wellness Services: Corporate and Shared Services Department. Please be advised that you may stop the interview or withdraw from the study at any time, without any negative consequences. You are free to ask any questions, phone the researcher at any time or cancel your agreement to partake in the study..

Potential Benefits

You will not be compensated for your participation in this study. You will not benefit directly from the study. Participation in the study will give you the opportunity to share your views, knowledge and experiences.

Your Rights

The researcher will do her utmost to ensure that your rights are upheld and respected. Your participation in this study is voluntary. You may refuse to answer any questions or withdraw from the study at any time for any reason without incurring any negative consequences. You also have a right to ask any questions, voice any problems or issues at any time, either during the interview or telephonically.

Confidentiality

All the information that you provide will be treated in a confidential manner. Your identity will be protected and you will be assigned a pseudonym or number so that you cannot be linked to any of the data or in the final research report. The records and data derived from the study will be handled by the main researcher only and will also be safeguarded in a secure place for 15 years at the University of Pretoria as is required. The data you have shared will be destroyed should you choose to withdraw from the study. This informed consent letter once signed by you as a participant, gives your permission for this information to be used for research purposes.

Access to the Researcher

If you have any questions, queries or concerns or anything else relating to the study, please do not hesitate to contact the researcher. A copy of this letter will be given to you for your safekeeping.

Researcher: Refilwe Sebela
Contact Numbers: 082 291 5678

Thank you for your cooperation. Please sign the consent form on the next page to indicate that you have read and understood the information provided above and that you have voluntarily agreed to participate in the study.

Kind Regards

_____
Ms Refilwe Sebela
Researcher

Section B: Consent Form for Adult Participants

I_____ (Full names and Surname of Participant) hereby freely give my permission to take part in the study voluntarily as explained in Section A. I have read the contents of Section A of this letter and understand the purpose of the study and my potential role in it. I have been given an opportunity to ask questions on anything I am unsure of.

Participant:
Signed: **Date:**
Name in Print:
Contact Number:

I have explained the study to the participant, and provided her with a copy of the participant information sheet.

Researcher
Signed: **Date:**
Name in Print:
Contact Number:

6.11   Addendum 5:   Interview Schedule

SEMI STRUCTURED INTERVIEW SCHEDULE

MSW (HEALTH CARE) RESEARCH

RESEARCHER: RPS SEBELA

We are aware of the sensitivity of the questions in this section. The information will allow us to understand the experiences of Emergency Medical Care Practitioners after exposure to fatal motor vehicle accident scenes. Research Ethics will be observed as well as compliance to the Research Code of Ethics. Your responses will remain anonymous and confidential. Your co-operation is appreciated.

THEME 1: WORK EXPERIENCE
How long have you been working for the City of Tshwane as an Emergency Medical Care Practitioner?
What training have you had as an EMCP?
Tell me what you would see as important for someone to be considered a well-trained EMCP?
Tell me what you would expect from a well-skilled EMCP?

THEME 2: EXPERIENCES OF EXPOSURE TO STRESSFUL SCENES AT WORK
What would you consider as the most stressful type of scene to attend to as EMCP?
Have you ever attended to a fatal motor vehicle accident scene?
What were your reactions and experiences of dealing with a fatal motor vehicle accident scene?
Can you remember the physical, emotional or cognitive effect these exposures have on you?
Tell me about the nature of your work that specifically creates feelings of emotional strain
Does the stress you are exposed to in your work ever make you feel you need to seek professional help?
Tell me about the symptoms you have experienced when you feel stressed or emotionally strained
Have you ever felt a need to take sick leave as a result of the stress you are experiencing? Motivate

THEME 3: WORKPLACE SUPPORT
Do you receive any supervision sessions at work and have you attended any?
Tell me how it has helped you?
Would you make use of Employee Wellness Services: Corporate and Shared Services Department or EAP? Motivate
Do you think an employee who is referred will go and if not why?
Have you ever felt a need or sought professional help for emotional or psychological issues resulting from your work such as to a pastor, psychiatrist, social worker or psychologist? Specify
Tell me about the nature of support or debriefing you received from your employee after these exposures? Specify
How did this help you?

When you feel emotionally that you are not coping, would you opt for a debriefing session from your employer, referral to Employee Wellness Services: Corporate and Shared Services Department or EAP or go to see a professional not linked to your workplace?

How can the Emergency Medical Services Division assist you in coping on a day to day basis with the stress you experience from your work exposures?

THEME 4: FAMILY SUPPORT/COPING MECHANISMS

Do you feel your family/significant other understand the effect your nature of your work has on you?

How do you react towards your family members when you arrived home after a shift which was stressful?

Do they offer support and in what way?

Has your nature of your work experiences affected your relationships in any way? Please specify.

What do you do after attending a fatal motor vehicle accident scene in order to normalise your emotions/feel normal again?

Do you practice any hobbie and what?

What do you do in your spare time?

THEME 5: COMMUNITY REACTIONS AND EXPECTATIONS

What is society's expectation of you as an EMCP?

Do you feel you live up to this expectation?

What are peoples' reactions at the scene of a fatal motor vehicle accident scene and how does it impact on you?

What would you recommend people must do at an accident scene?

THEME 6: FACTORS AFFECTING YOUR PERFORMANCE

What do you think is important for your optimal performance at a fatal motor vehicle accident scene?

What according to you can affect your performance at the scene of a fatal motor vehicle accident?

What according to you can help enhance performing of your task at the scene of a fatal motor vehicle accident?

Tell me how you think the EMSD can assist you in your performance levels?

How can they assist you before, during and after attending scenes of fatal motor vehicle accidents?

THEME 7: RECOMMENDATIONS

Any recommendations to improve reduction of stress?

Any recommendations to improve support services?

Any in service training suggestions or needs?