THE UNIVERSITY of ADELAIDE

The influence of workplace culture on the continuing professional development of emergency medical services providers in Saudi Arabia: an ethnographic study

Submitted by

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A thesis submitted to fulfil the requirement of the Doctor of Philosophy degree

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The University of Adelaide

July 2020

"... وَمَا تَوْفِيقِيٓ إِلَّا بِٱللَّهِۚ عَلَيْهِ تَوَكَّلْتُ وَإِلَيْهِ أُنِيبُ ﴿٨٨﴾ (سورة هود ٨٨)

In the name of Allah, the Most Gracious the Most Merciful

"... and my success (for setting things right) can only come from Allah. In Him I trust, and unto Him I always return." Quran, surah Hud [11:88]

This thesis is dedicated

To my beloved dad, may Allah have mercy on him

Mohammed Jabbar Alshahrani (1925–2010)

For his sincere and lovely fathering and raising me well when he was alive

To my beloved mom, I wish her good health and well-being

Haya Abdullah Fawaz

For her continuous prayers for me and for her great patience when I was abroad and far from her

To my wife *Aysha***; and children** *Mohammed, Rola and Tameem*

For supporting and accompanying me anytime and anywhere I travelled to throughout the journey of this research

To my brother *Abdullah***; and sisters** *Fatimah, Muneerah, Muhrah, Nouf and Aysha***; and their children and grand children**

For their continuous verbal and emotional support until I completed this research and for taking care of my mom while I was abroad

Words are not enough to express my deepest gratitude towards you all for your encouragement, motivation and patience while I completed this research.

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Abstract

Emergency medical services (EMS) providers deliver critical pre-hospital clinical emergency and lifesaving practices. These providers need to engage in continuing professional development (CPD) activities to meet their registration requirements, and maintain and develop their knowledge, skills and professional competencies in order to provide competent and safe EMS practices. The literature has highlighted a number of significant impacts of workplace culture on CPD from the perspectives of a wide range of healthcare professionals. However, the influence of workplace culture on the CPD of EMS providers in Saudi Arabia, and the extent to which these providers value and engage in CPD are not well understood. The research question for this study on EMS in Saudi Arabia was: How does the workplace culture of emergency medical services providers influence their continuing professional development?

This study adopted a focused ethnography approach. Focused ethnography is concerned with studying narrowly determined cultures, such as a specific category of providers or a department in a healthcare facility. The theoretical framework developed by Spradley guided the research process.

The study was conducted in one of the main institutions that provides public EMS to the community in the Aseer region within Saudi Arabia. Three participant groups were included: (1) administrative leaders; (2) trainers; and (3) EMS providers. Ethics approval was obtained from the Human Research Ethics Committee at the University of Adelaide and from the participating institution. Data was collected from: 133 participants in an online survey; 5 focus groups with a total of 23 participants; 13 semi-structured individual interviews; 300 hours of field observations; and a review of a number of non-confidential workplace documents.

Abstract

The quantitative data from the online survey were analysed using descriptive statistics. The qualitative data were thematically analysed using the steps of analysing and interpreting ethnographic data developed by Holloway and Galvin.

The study found a number of aspects of workplace culture that discouraged formal CPD for EMS providers. These issues related to administrative systems; leadership profiles; EMS workloads; language barriers; and significant shortages of appropriate human, material and financial resources. However, some cultural factors supported informal CPD for EMS providers. All levels of participants were aware of and valued CPD. There was a culture of positive collegial relationships and personal friendships among EMS providers, which assisted them to support each other in engaging in some form of CPD.

The original contribution of this study to the body of knowledge is that, even though the value placed on CPD was high across the participating groups, support for CPD within the workplace culture was weak. This is due to the lack of integrated structures and systems that govern and promote such behaviours across the workplace. This resulted in an absence of sustainable, timely and high-quality formal CPD for EMS providers. To maintain the growth and evolution of the EMS profession and to deliver safe, contemporary EMS practices to patients then this approach to CPD needs to be modified and improved. Patient safety and the quality of EMS care in the participating region could be compromised.

Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint award of this degree.

I give permission for the digital version of my thesis to be made available on the web, via the University's digital research repository, the Library Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

Yousef Alshahrani

Date: Monday, 13 July 2020

Acknowledgments

First and foremost, praise be to Allah almighty. My ultimate thanks and gratitude are due to Him almighty for granting me the will and strength to complete this research. He accepted my prayers to facilitate the process of this research and enabled me to complete it.

Many people and organisations supported me to accomplish this research in different ways and I am grateful to them. It is difficult to list them all but here are the most significant supportive groups throughout my research journey.

I would like to start by expressing my great appreciation to my principal supervisor Associate Professor Lynette Cusack. Thank you Lynette, you have been a patient, supportive and influential supervisor. I have been inspired by, and gained much knowledge from, your critical evaluation of my work and your meticulous attention to detail. I am also very grateful to my co-supervisor Associate Professor Philippa Rasmussen. Thank you Philippa for your invaluable and significant contribution to this thesis. I acknowledge both of you, Lynette and Philippa, for carefully reviewing my thesis drafts and providing constructive feedback constantly. Your ideas and discussions helped to shape this thesis.

Special thanks to Dr Tim Schultz, the Higher Degree by Research coordinator for his continuous support to us higher degree students. Tim also assisted me to establish and finalise the online questionnaire. I would also like to thank the statistician at the University of Adelaide Ms Kelly Hall for the statistical support that she offered. I would like also to thank Dr Rick Wiechula for his valuable consultations.

I would like also to thank my employer, Umm Al-Qura University, for granting me a fully sponsored scholarship. My deepest acknowledgment is also to the Saudi Arabian Cultural Mission in Canberra for facilitating the entire journey of my study in Australia. I would like to

Acknowledgments

thank the University of Adelaide generally and the Adelaide Nursing School particularly for providing the education resources.

I am thankful to the Saudi Red Crescent Authority (SRCA) for granting approval for me to access their regional administration in Aseer to collect the data for my research. I am thankful to the director of the regional administration of SRCA in Aseer Mr Mohammed Alshehri for providing unconditional support and assistance to access and collect the required data for this research from any staff, centre, administration or department. I am highly grateful to my friend Mr Abdulrahman Abdullah Albukhodaah for facilitating a meeting and a connection with the director of the regional administration of SRCA in Aseer. I would like to extend my gratitude to the research coordinator Mr Ahmad Aseeri for facilitating the data collection journey.

My thanks go to all staff in the regional administration of the SRCA in Aseer, in the training centre and in all EMS centres. My special gratitude is to the participants in this study who have been generous and agreed to allow this research to take up part of their busy time. They were wonderful participants and engaged me with their social and work life.

Last but not least, my great appreciation is to the editor Ms Kate Leeson for editing and proofreading this thesis.

Glossary of terms

ACLS	Advanced Cardiac Life Support
BLS	Basic life support
CBAHI	Central Board for Accreditation of Healthcare Institutions
CINAHL	Cumulative Index to Nursing and Allied Health Literature
CME	Continuing medical education
CPD	Continuing professional development
EBP	Evidence-based practice
EMS	Emergency medical services
EMT	Emergency medical technician
ITLS	International Trauma Life Support
KFSH&RC	King Faisal Specialist Hospital & Research Centre
MOH	Ministry of Health
NPD	Nursing Professional Development
PHTLS	Pre-Hospital Trauma Life Support
SAEMS	Saudi Association of Emergency Medical Services
SCFHS	Saudi Commission for Health Specialties
SRCA	Saudi Red Crescent Authority

Chapter 1: Introduction

1.1. Introduction to emergency medical services

Emergency medical services (EMS) are an essential component of the healthcare system because this service provides life-saving pre-hospital medical emergency care to the community twenty-four hours a day (MacDonald et al. 2005; Williams & Sullivan 2013b). An EMS provider is a professional who has a critical role as the first responder to a wide range of emergency health needs by delivering out-of-hospital emergency medical care and lifesaving procedures to patients or victims suffering from various clinical emergency conditions such as cardiac arrest, fatal allergic reactions, life-threatening poisoning, critical injuries, accidents as well as deterioration from chronic health conditions (Alanazi 2012; Kupas & Wang 2014). Another critical task of an EMS provider is transporting patients and victims from the site of the emergency direct to healthcare facilities after delivering the essential EMS onsite (Alanazi 2012; Kupas & Wang 2014).

Globally, providing on-site emergency healthcare services to the community has a long history which commenced with the military. The first military army that used specialised and experienced medical staff to provide care for their injured was the Roman army (Goniewicz 2013). Roman physicians used to provide on-scene medical care, treatment and analgesia to sick and injured soldiers in the battlefield or in the military hospitals that were incorporated within the garrison of each battalion during the time of the Roman Empire. After the collapse of the Roman Empire emergency medical care did not reappear in the history books until the period of the Napoleonic battles (Goniewicz 2013).

The creation of a modern pre-hospital EMS system is credited to the surgeon Baron Dominique Jean Larrey (1766–1842), who was known for his skills in performing quick and proficient surgical procedures on wounded soldiers to save their lives (Goniewicz 2013). Larrey based his approach on triage and transport of wounded soldiers depending on the

severity of their injuries, which resulted in a significant decrease in the deathrate of injured soldiers in Napoleon's army (Goniewicz 2013).

The first civilian ambulance operations began in 1865 in the United States of America (USA) (Goniewicz 2013). Civilian patients were transported to healthcare centres by ambulances, which were wagons pulled by horses (Goniewicz 2013; Sullivan, Williams & Rhodes 2013). These wagons were used not only to transport patients, but also to carry medical supplies and doctors to the site of injured or ill patients (Sullivan, Williams & Rhodes 2013). During the 1950s and 60s, the EMS in many countries, including the USA and Australia, moved from simple first aid provided by laypeople/volunteers to more advanced and structured pre-hospital EMS delivered by specialised providers (Safar 2001; Shah 2006).

Transportation of severely ill patients is one of the fundamental responsibilities of EMS, because the level of emergency care required and the time it takes to get to healthcare facilities are critical to the patients' health status (Williams & Sullivan 2013a). There are now a wide range of methods of transporting critically ill patients, using either ground or air ambulances (Johnsen et al. 2017; Millin & Hawkins 2017; Williams & Sullivan 2013a). Helicopters are now one of the most important forms of ambulance transport. The advantage of utilising helicopters in EMS transportation is that helicopters facilitate a rapid transport of patients, EMS staff and equipment to and from places that are remote or difficult to approach, such as areas with challenging geographical terrain or roads 'jammed' by traffic (Johnsen et al. 2016).

Like any healthcare service, EMS are provided through a team of healthcare professionals who have different healthcare backgrounds. This team of healthcare professionals is configured according to the transportation model of that EMS system (Lin et al. 2017). There are two general transportation models of EMS, namely *patient to doctor* and *doctor to patient* (Lin et al. 2017). Patient to doctor means that the patients are loaded and

transported to hospitals by EMS providers under medical guidance, which is called the Anglo-American model (Al Mutairi et al. 2016). Doctor to patient implies that medical doctors from hospitals are transferred to patients, which is called the Franco-German model (Al Mutairi et al. 2016). Members of an EMS team can include paramedics, technicians, physicians and/or registered nurses who have additional training in providing pre-hospital emergency care (Alanazi 2012; Lin et al. 2017). Paramedics are healthcare providers who are trained and educated to be specialised and competent in responding immediately and providing emergency care to patients (Alanazi 2012).

Different countries have a range of EMS professional levels based on training, education and registration. For instance, in Australia, the title ‘paramedic’ is restricted to practitioners who are registered with the Paramedicine Board of Australia (Paramedicine Board of Australia 2018b). There are four professional streams of paramedics in Australia: paramedic; intensive care paramedic; retrieval paramedic; and general care paramedic; however, they register only as a paramedic (Paramedics Australasia n.d.). Turning to Ireland, pre-hospital emergency care practitioners are required to be registered with the Pre-Hospital Emergency Care Council either as a paramedic, an advanced paramedic or an emergency medical technician (EMT) (Knox, Cullen & Dunne 2013). In the United Kingdom, an EMS practitioner must be registered with the Health Professions Council at one of four professional levels: (1) ambulance care assistant; (2) ambulance technician; (3) paramedic; and (4) emergency care practitioner (Cooper 2005; Whitmore & Furber 2006). In the United States, there are three levels of EMS providers, namely, EMT-Basic; EMT-Intermediate; and EMT-Paramedic (Lauro, Sullivan & Williams 2013). Providers at each level have a specific scope of practice (Lauro, Sullivan & Williams 2013). Similarly, there are three levels of EMS training in South Africa: basic ambulance assistant; ambulance emergency assistant; and critical care assistant, who are commonly known as paramedics (MacFarlane, Van Loggerenberg & Kloeck 2005).

Each professional level, as outlined above, reflects a specific scope of practice. This scope of practice ranges from basic and non-invasive procedures such as cardiopulmonary resuscitation to more advanced or invasive procedures such as performing cricothyrotomy or intra-osseous access; administering emergency cardiac medications; or providing advanced life support (Lauro, Sullivan & Williams 2013; MacFarlane, Van Loggerenberg & Kloeck 2005; Paramedics Australasia n.d.).

Providing safe EMS practice depends on the clinical proficiency of EMS providers, and on the structures within the health system that support them, including the availability of medical oversight and access to appropriate resources (Tavares & Boet 2015). The level of proficiency is the extent of an individual's ability to utilise their knowledge, skills, and judgement to accomplish their professional tasks effectively according to the scope of their professional practice (Kane 1992). An EMS provider has to practise these professional tasks within varying environmental contexts over which they have very little control.

In some countries the first step in preparing EMS providers is an undergraduate university qualification. Other healthcare professionals, such as nurses or physicians, may seek further education and training to advance their specialist knowledge and skills in the area of pre-hospital emergency medical care and to become registered as an EMS provider. When students or healthcare professionals are undertaking these education programs, they are exposed to contemporary knowledge and skills. After successfully completing all of the requirements of these programs, they become EMS providers, and the process of continually being exposed to formal education and training opportunities may be greatly reduced. However, EMS providers need to continue the process of learning to keep their knowledge and skills up to date to remain professionally competent. This is achieved through engaging in continuing professional development (or continuing medical education) activities.

1.2. Overview of the healthcare system in Saudi Arabia

Healthcare services in Saudi Arabia are provided by the Ministry of Health (MOH), other government departments, and the private sector. The MOH is the main institution that provides 60% of healthcare services in the Kingdom of Saudi Arabia through their primary healthcare centres distributed in all cities, towns and villages; and tertiary hospitals (Albejaidi 2010; Aldossary, While & Barriball 2008). The MOH in Saudi Arabia is funded mainly by the government (Aldossary, While & Barriball 2008), which constituted 6.2% of the total national budget in 2009 (Almalki, Fitzgerald & Clark 2011).

The other governmental institutions that are not under the management of the MOH and provide healthcare services in Saudi Arabia include referral hospitals such as King Faisal Specialist Hospital & Research Centre (KFSH&RC), Aramco hospitals, Royal Commission for Jubail and Yanbu health services, armed forces medical services, Ministry of Defence and Aviation, Ministry of Education, the Saudi Arabian National Guard, the Ministry of the Interior, the Saudi Red Crescent Authority (SRCA), and security forces medical services (Aldossary, While & Barriball 2008; Almalki, Fitzgerald & Clark 2011). The SRCA is the main institution that provides out-of-hospital EMS to all members of the public in Saudi Arabia (Almalki, Fitzgerald & Clark 2011). These ministries and institutions provide healthcare services to their particular employees and their family members, while the MOH provides free and accessible healthcare services to all Saudi citizens and non-Saudi residents employed by the public sector (Aldossary, While & Barriball 2008; Almalki, Fitzgerald & Clark 2011). In crises and emergences, all of these institutions, including MOH, provide healthcare services to all residents and expatriates (Almalki, Fitzgerald & Clark 2011).

Private healthcare services in Saudi Arabia are delivered through a number of private hospitals, dispensaries and clinics that are operated independently and monitored by the MOH

(Aldossary, While & Barriball 2008; Almalki, Fitzgerald & Clark 2011). As there are many expatriate visitors to Saudi Arabia for purposes such as performing Hajj or Umrah, all healthcare services, including emergency and ambulance, are provided free for these pilgrims (Ministry of Health 2016).

1.2.1. Overview of EMS in Saudi Arabia

EMS is part of the healthcare system in Saudi Arabia. After the establishment of the Saudi Arabian government in 1353 AH [April 1934 – April 1935], EMS was provided by an institution called the 'public health and ambulance association' (Saudi Red Crescent Authority 2016b). During that time, the ultimate aim of this association was delivering healthcare and emergency services to all pilgrims suffering from health issues during the Hajj and Umrah seasons regardless of their nationality (Saudi Red Crescent Authority 2016b). In 1383 AH [May 1963 – May 1964], the activities of this association were expanded to become the Saudi Red Crescent Society. This organisation, which is currently known as SRCA, now delivers EMS to all community members across the entire country via a number of centres and ambulance stations located in all cities, towns and villages (Saudi Red Crescent Authority 2016b, 2016c). The SRCA is funded mainly by the government of Saudi Arabia with some private contributions (Al Mutairi et al. 2016; Alamri 2016).

There are also a number of non-SRCA institutions providing EMS in Saudi Arabia, such as the 'medical cities' of the National Guard Health Affairs, King Faisal Specialist Hospital & Research Centre (KFSH&RC), and armed forces hospitals (King Fahd Armed Forces Hospital 2012; King Faisal Specialist Hospital and Research Centre 2016; Ministry of National Guard Health Affairs 2016). The EMS system in Saudi Arabia generally complies with the Anglo-American model in which trained EMS providers transport patients to healthcare facilities (Al Mutairi et al. 2016).

1.2.2. Roles of EMS providers in Saudi Arabia

The main roles of EMS providers in the Saudi Arabian context are assessment, stabilisation/treatment and transportation of patients to the appropriate healthcare facilities (Alanazi 2012). Different institutions that provide EMS in Saudi Arabia develop different roles for their EMS providers based on their institutional aims. For instance, the main role of EMS providers in the SRCA is to provide emergency disaster responses (Saudi Red Crescent Authority 2016a). As well as providing emergency responses in disasters, EMS providers also deliver immediate care to people who are injured in accidents, treat and transport sick and injured patients, contribute to the eradication of epidemics, deliver healthcare services to pilgrims, and provide humanitarian services (Saudi Red Crescent Authority 2016a).

The EMS services in KFSH&RC are provided through a multinational advanced care paramedic team (King Faisal Specialist Hospital and Research Centre 2016). The role of this team is national or global medical evacuation to and from the KFSH&RC via a Mobil Intensive Care Unit (King Faisal Specialist Hospital and Research Centre 2016).

EMS academic education has grown in Saudi Arabia in three stages (AlShammari, Jennings & Williams 2017). The first stage was between 1934 and 2005, when EMS education was workplace-based training aiming to provide healthcare professionals with qualifications in delivering first aid. The second stage was between 2005 and 2012, when some EMS diplomas were developed to train EMS technicians. The final stage was after 2007 when EMS academic education transitioned to a bachelor's degree producing graduate EMS specialists (AlShammari, Jennings & Williams 2017). In 2012, all diploma programs were replaced with bachelor's degrees based on recommendations from the World Health Organization (AlShammari, Jennings & Williams 2019a). EMS has now become a more sophisticated part of the healthcare system with an expansion of the roles and scope of practice for EMS

providers. Currently, there are more than ten EMS bachelor programs provided by universities or colleges in Saudi Arabia (AlShammari, Jennings & Williams 2019a).

While the EMS system is still in the process of development, many ongoing challenges remain (Alamri 2016). One of these challenges is to maintain the clinical competence of EMS staff once graduated to ensure that their practice remains up to date and in line with the standards of EMS providers internationally. To maintain a competent workforce requires the EMS authorities to deliver high-quality continuing training programs including basic life support (BLS) and advanced life support (Alanazi 2012). Continuing training opportunities are an important part of the development of this profession, as well as a requirement of the health professionals regulation body.

1.2.3. Regulation of EMS providers in Saudi Arabia

Healthcare professionals in Saudi Arabia, including EMS providers, are regulated by the Saudi Commission for Health Specialties (SCFHS). The SCFHS was established by a royal decree issued in 1403 AH [October 1982 – October 1983] to approve the establishment of regulatory bodies of healthcare specialities. Regulation is achieved through overseeing and appraising training programs and setting the standards for healthcare practice (Saudi Commission for Health Specialties 2013). The SCFHS is also responsible for establishing the criteria for classification, registration, re-registration, certificate verification and assessment of healthcare professionals in Saudi Arabia (Saudi Commission for Health Specialties 2014). Classification is the process of granting practitioners an appropriate professional level, such as consultant, specialist, technician or healthcare assistant (Saudi Commission for Health Specialties 2014). Registration is the process of building a record of professionals in the SCFHS database (Saudi Commission for Health Specialties 2014). Re-registration is the process of cyclical updates of

the professionals' data, which requires them to fulfil a continuing medical education (CME) requirement within the re-registration periods (Saudi Commission for Health Specialties 2014).

The periods for re-registration in the SCFHS are 1, 3 or 5 years (Saudi Commission for Health Specialties 2014). Attending a determined number of CME hours is a requirement for healthcare professionals in Saudi Arabia to renew their registration. The required number of CME hours is based on the professional classification and the requested period of re-registration (Saudi Commission for Health Specialties 2014). For example, the required CME hours to renew the registration of professionals who are classified as health assistants or technicians are 10 hours to renew for 1 year, 30 hours to renew for 3 years, or 50 hours to renew for 5 years (Saudi Commission for Health Specialties 2014). The required CME hours to renew the registration of professionals who are classified as specialists or higher are 20 hours to renew for 1 year, 60 hours to renew for 3 years, or 100 hours to renew for 5 years (Saudi Commission for Health Specialties 2014).

A minimum of 60% of these CME hours each year need to be fulfilled through CPD activities including 'conferences, symposia, workshops, specialized training courses, writing books, and publication of scientific papers' and the other 40% have to be 'internal CPD activities including, approved internet education activities, seminars and general workshops' (Saudi Commission for Health Specialties 2014, p. 16). The CME hours required of health professionals, including EMS providers, by the SCFHS once again highlights the importance placed on maintaining contemporary safe clinical practice in the interests of public safety.

1.3. Purpose of the study

As a healthcare professional providing an academic role in an EMS department at a Saudi Arabian university, the researcher is interested in contributing to improving EMS in Saudi Arabia. The researcher believes that EMS providers should participate in CPD activities not

only in order to meet their registration requirements but most importantly to maintain and develop their professional competencies and skills, either clinical or non-clinical, to improve patient outcomes (Hobgood et al. 2015; Martin 2006). The non-clinical skills include, but are not limited to, managerial, leadership and teamwork proficiencies, and the utilisation of current technology.

For the purpose of this study, CPD is defined as an ongoing process of learning and training through which health professionals improve their *knowledge, skills and attitudes* in their profession to ensure that they maintain their professional competencies in delivering effective and safe care within their legal scope of practice (Filipe et al. 2014). CPD is provided through a self-directed lifelong learning process (Drude, Maheu & Hilty 2019; Martin 2006; Yfantis, Tiniakou & Yfanti 2010). This implies that staff need to be actively involved in governing this process for themselves through monitoring and reflecting on their professional performance and learning needs on an ongoing basis (Drude, Maheu & Hilty 2019; Hobgood et al. 2015). This is because each individual healthcare professional has their own different needs and learning styles (Grant 2012). To avoid bias and subjectivity in such a self-guided process, staff need to seek feedback on their practice from patients and colleagues and discuss CPD plans with their supervisors (Drude, Maheu & Hilty 2019; Paramedicine Board of Australia 2018a). Therefore, CPD should not be provided through mandatory predetermined and ready-made programs and activities that are designed for all healthcare professionals. Though this process is self-directed, the requirements of employers and the profession as a whole should be considered (Yfantis, Tiniakou & Yfanti 2010).

The structural process of CPD involves identifying professional and learning needs, establishing learning goals, creating learning plans, undertaking learning activities, reflecting on what has been learned, evaluating the learning outcomes and applying what has been learned in practice (Drude, Maheu & Hilty 2019; Grant 2012; Martin 2006; Paramedicine Board of

Australia 2018a). Learning activities for CPD can be formal or informal. Formal CPD learning activities can include lectures, workshops or training sessions; while informal CPD approaches can include verbal discussions with colleagues, or informal feedback on one's performance (Moorley & Chinn 2015).

However, the influence of workplace culture on the CPD of EMS providers in Saudi Arabia, the extent to which these professionals value and engage in CPD, and their attitudes towards CPD are not well understood. This study is the first of its kind that explores deeply the culture of the EMS workplace and its influence on the CPD of EMS providers in the Saudi Arabian context.

The definition of workplace culture adopted in this study is 'the values, behaviours, goals, attitudes, practices and beliefs shared across an entire organisation' (Braithwaite et al. 2017, p. 2). The workplace culture is a subculture of a specific local workplace such as a unit or a department, or a group of professionals such as nurses, physicians or managers within an organisation (Braithwaite et al. 2017; Manley et al. 2011). So, workplace culture has a direct influence on both healthcare providers and recipients as it is encountered in their daily professional life (Manley et al. 2011). To make this research specific and focused, the aspects of workplace culture that will be stressed here are administrative systems as the main facet that influences the practices and processes of CPD, the leadership, staff attitudes and beliefs towards CPD, their goals for CPD and the resources dedicated for CPD.

1.4. Research aim

The overall aim of this study is to construct a deeper understanding of the influence of workplace culture on the CPD of EMS providers within a healthcare institution that provides EMS in Saudi Arabia. Three participant groups – administrative staff, trainers and EMS providers – were invited to participate in this study to achieve this aim.

1.5. Research question

The research was undertaken within the specific context of EMS within Saudi Arabia, asking the question: How does the workplace culture of emergency medical services providers influence their continuing professional development?

1.6. Research objectives

Five research objectives were developed to answer the research question. These objectives are:

- to identify the organisational structures that influence CPD for EMS providers within the participating healthcare institution;
- to identify the activities and resources that are available to support CPD for EMS providers within the participating healthcare institution;
- to identify and outline the roles and responsibilities relating to CPD of each of the three participant groups within the participating healthcare institution;
- to explore the attitudes of EMS providers on whether CPD makes a difference to their professional practice, self-confidence and job satisfaction;
- to identify and explore the attitudes of each of the three participant groups towards CPD within the participating healthcare institution.

1.7. The significance of the study

The significance of this study lies in providing the managers and the trainers in the EMS system insights about the influence of workplace culture on CPD and informing the development of strategies that could support the process of CPD for EMS providers. This, in turn, will enable the appropriate utilisation of resources to deliver robust and cost-effective CPD which then could lead to better patient outcomes.

1.8. Theoretical framework

This study adopts the framework of ethnographic *social situations* developed by Spradley (2016b). Spradley is considered to be one of the prominent authors in the field of ethnography. Spradley (2016b) explains that all ethnographic studies take place in *social situations* which are identified by nine major dimensions. These dimensions are 'spaces or places, actors, activities, objects, acts, events, time, goals and feelings' (Spradley 2016b, p. 78). All nine dimensions are interrelated and influence each other. However, it is not necessary for ethnographic research to involve all nine dimensions together in the *social situations* (Spradley 2016b); instead, researchers need to consider which dimensions fit and are significant to their studies. The dimensions that were applied in this study were the places, the actors, the activities, the objects, the time, the goals and the feelings.

Spradley (2016b) identifies the *place* as the physical location where the ethnographic studies take place, which should involve *actors* who perform *activities* using some *objects* within a certain *time* to achieve *goals*. The *actors*, within the ethnographic context, are the individuals who are observed in their 'natural settings' (Spradley 2016a). The *activities* are the course of behaviour and activities that *actors* perform in a patterned way (Spradley 2016b), such as conducting training activities or engaging in learning discussions. The *objects* are the physical materials available in a social situation that are used by the actors (Spradley 2016b).

1.9. Assumptions

Based on the ontological and epistemological position of the researcher, which is explained in Section 3.3, the researcher assumes that the workplace culture of EMS providers can have a great influence on their CPD. It can have either a positive or a negative effect on the delivery and uptake of CPD by EMS providers. If the workplace culture's support for CPD is poor, then

this can have serious consequences for the delivery of safe and quality care to the community and for the development of the profession.

1.10. Outline of the thesis structure

This thesis comprises seven chapters. The first chapter has introduced the study by including background about the researched phenomenon and the research question, aim and objectives, as well as the potential significance of the study. Chapter 2 provides a review of the literature that discusses the influence of workplace culture on CPD for a wide range of healthcare professionals. The search strategy and the identified literature are discussed in this chapter. Chapter 3 explains and justifies the methodology adopted in this study, which is *focused ethnography*. In this chapter, the ontology and the epistemology of the researcher as well as the philosophical underpinnings of ethnography are explained. Chapter 4 details the methods of this study including the research settings, and the data collection and analysis processes. The findings of the study are presented in Chapter 5. Chapter 6 discusses the significant findings of the study using Spradley's (2016b) framework. Finally, Chapter 7 provides an overall conclusion to the study and outlines some recommendations for practice and further research. This chapter also provides the researcher's reflections on the strengths of the adopted research paradigm and explains the limitations and challenges of this study.

1.11. Chapter summary

EMS are a healthcare profession that is pivotal in delivering pre-hospital emergency care to the community. This profession has an extended history, originating and developing in the military, which aimed to provide on-scene emergency care to injured soldiers. EMS is now a regulated profession in many countries, with registration guidelines and standards for practice. To meet the regulation requirements, EMS providers are required to maintain CPD by participating in ongoing training programs. CPD is essential for healthcare professionals not only to maintain

their professional registration, but also to deliver safe, competent and contemporary practices. Workplace cultures can influence the quality and accessibility of CPD for healthcare professionals. The next chapter presents a review of literature that is related to the influence of workplace culture on CPD for healthcare professionals.

Chapter 2: Literature review

2.1. Introduction

The previous chapter provided an introduction to the study. This chapter presents a review of the literature. The aim of this literature review is to discuss the influence of workplace culture on the CPD of healthcare professionals from all healthcare speciality backgrounds. This aim has been broadened to include all healthcare professionals because a preliminary search of the literature highlighted that only a small number of sources discuss the influence of workplace culture on CPD for EMS providers. This enables having a broad overview of this phenomenon in healthcare generally.

This chapter commences by explaining the strategy that was used to search for the literature. Then, it sets out the backgrounds and specialities of the identified healthcare providers and the types of literature reviewed. Next, the literature review themes are discussed under three major headings, namely, the influence of workplace culture on CPD, the influence of CPD on workplace culture, and the influence of CPD on healthcare professionals. To conclude this chapter, the discussion is narrowed down by focusing on EMS providers and identifying the gap in the literature.

2.2. Search strategy

The first step in the literature review was searching for papers that are related to the aim of this literature review. A logic grid for the search strategy was developed (see Tables 1, 2, 3 and 4). The literature search was conducted using four databases. These databases were Embase, PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Scopus. These four databases ensured a broad search to capture a variety of literature related to health care.

The preliminary aim of the literature review was to explore workplace culture and CPD for EMS providers. However, there was a dearth of literature on this topic. Therefore, the search was broadened to include all healthcare professionals, including EMS providers.

The keywords used to search these databases were ‘workplace culture’, ‘CPD’ and ‘healthcare professionals’. These keywords were converted into search terms relevant to the included databases. The search terms for each database are set out in Tables 1, 2, 3 and 4. The search in all involved databases extended to titles, abstracts and keywords, and was limited to the last ten years. Table 4 does not include the keyword ‘healthcare professionals’ because Scopus does not have medical subject headings or indexing terms. Therefore, and to provide an extensive search for healthcare professionals only, the field of ‘subject area’ was limited to medicine, nursing, health professions, dentistry, pharmacology and multidisciplinary to avoid searching non-healthcare professionals.

Table 1: The search terms in Embase

Workplace culture	Continuing professional development	Healthcare professionals
“organizational culture”/de OR “organization* culture*”:ti,ab OR “organisation* culture*”:ti,ab OR “workplace culture*”:ti,ab OR “fieldwork* culture*”:ti,ab OR “institution* culture*”:ti,ab	“continuing professional development”/de OR “continuing medical education”/de OR “professional development”/de OR “continu* professional development”:ti,ab OR “continu* medical education”:ti,ab OR “professional development”:ti,ab OR “continu* professional education*”:ti,ab OR “lifelong learning”:ti,ab OR CPD:ti,ab	“health care personnel”/exp OR “medical profession”/exp OR occupation/exp OR “health service”/exp OR “health care personnel”:ti,ab OR “healthcare personnel”:ti,ab OR “health personnel”:ti,ab OR “health care professional*”:ti,ab OR “healthcare professional*”:ti,ab OR “health professional*”:ti,ab

Table 2: The search terms in PubMed

Workplace culture	Continuing professional development	Healthcare professionals
Organizational culture[mh] OR workplace culture[tiab] OR fieldwork culture[tiab] OR organisations culture[tiab] OR organisational culture[tiab] OR organizations culture[tiab] OR organizational culture[tiab] OR institutions culture[tiab] OR institutional culture[tiab]	Education, continuing[mh] OR staff development[mh] OR continuous professional development*[tiab] OR continuing professional development*[tiab] OR professional development*[tiab] OR continuous medical education*[tiab] OR continuing medical education*[tiab] OR continuing professional education[tiab] OR continuous professional education[tiab] OR lifelong learning[tiab] OR CPD[tiab]	Health personnel[mh] OR health occupations[mh] OR health services[mh] OR health personnel[tiab] OR healthcare personnel[tiab] OR health care personnel[tiab] OR health professional*[tiab] OR healthcare professional*[tiab] OR health care professional*[tiab] OR health occupation*[tiab] OR health care occupation*[tiab] OR healthcare occupation*[tiab] OR health service*[tiab] OR health care service*[tiab] OR healthcare service*[tiab]

Table 3: The search terms in CINAHL

Workplace culture	Continuing professional development	Healthcare professionals
MH Organizational Culture+ OR TI "workplace cultur*" OR TI "fieldwork cultur*" OR TI "organisation* cultur*" OR TI "organization* cultur*" OR TI "institution* cultur*" OR OR AB "workplace cultur*" OR AB "fieldwork cultur*" OR AB "organisation* cultur*" OR AB "organization* cultur*" OR AB "institution* cultur*"	MH Education, Medical, Continuing+ OR MH Education, Continuing+ OR MH Education, Continuing (Credit)+ OR MH Education, Emergency Medical Services+ OR TI "continu* professional development*" OR AB "continu* professional development*" OR TI "professional development*" OR AB "professional development*" OR TI "continu* medical education*" OR AB "continu* medical education*" OR TI "continu* professional education*" OR AB "continu* professional education*" OR TI "lifelong learning" OR AB "lifelong learning" OR TI CPD OR AB CPD	MH Health Personnel+ OR MH Health Occupations+ OR MH Health Services+ OR TI "healthcare personnel" OR AB "healthcare personnel" OR TI "healthcare professional*" OR AB "healthcare professional*" OR TI "health care personnel" OR AB "health care personnel" OR TI "health care professional*" OR AB "health care professional*"

Table 4: The search terms in Scopus

Workplace culture	Continuing professional development
"workplace culture" OR "fieldwork culture*" OR "workplace environment*" OR "fieldwork environment*" OR "workplace context*" OR "fieldwork context*" OR "organization* culture" OR "organisation* culture" OR "institution* cultur*"	"continu* professional* develop*" OR "professional* develop*" OR "continu* medical education*" OR "continu* education*" OR "continu* professional education*" OR "lifelong learning" OR "CPD"

The above searching strategy yielded 54 papers in Embase, 356 in PubMed, 173 in CINAHL and 232 in Scopus. Some papers were found in only one database and some were duplicated in more than one database. The inclusion criteria of manuscripts in this literature review are: qualitative, quantitative or mixed-methods studies; systematic reviews; integrative reviews; literature reviews; discussion, policy or editorial papers; general articles that were published in peer-reviewed journals; and books that discuss workplace culture and CPD. The inclusion criteria of population in these sources are healthcare professionals from all healthcare fields. There was no specific country or context for the literature manuscripts or population. The identified manuscripts were critically appraised based on the inclusion criteria mentioned previously. Manuscripts that did not adhere to these criteria were excluded. The titles and the abstracts of all identified sources were reviewed to identify whether they were relevant to the literature review. Manuscripts that did not have abstracts, or whose abstracts were not clear, were skimmed entirely to determine their relevance to the literature review. The duplicated papers were reviewed from one database only. To identify additional papers significant to the literature review from other relevant sources, the references cited in the included sources were reviewed (Middlebrooks, Carter-Templeton & Mund 2016). This strategy yielded four additional relevant papers. The search strategy was repeated yearly during the candidature to ensure that the literature review was kept up to date. The total number of sources that were included in this literature review from all databases, including the additional four papers, was 96.

2.3. The big picture

The literature revealed that workplace culture has an influence on CPD for healthcare professionals from different speciality backgrounds. The healthcare professionals that were most frequently studied in the literature were nurses from diverse backgrounds and contexts including: medical-surgical (Atefi et al. 2014; Bjørk, Tøien & Sørensen 2013); critical care

(Atefi et al. 2014); intensive care (Strube et al. 2018); acute care (Asselin & Fain 2013; Coventry, Maslin-Prothero & Smith 2015; Jantzen 2008; Parker et al. 2016); perioperative (Leifso 2014; McNaron 2009; Tame 2011, 2012); cancer (Bakker et al. 2010; Black & Farmer 2013); neonatal intensive care units (Zimmerman & Pilcher 2008); occupational health nursing (Burgel et al. 2014); community and public health nursing (Asahara et al. 2012; Ellis & Chater 2012; Meagher-Stewart et al. 2010; Underwood et al. 2009); nurse anaesthetists (Meeusen et al. 2011); clinical nurses (Beal, Riley & Lancaster 2008; Govranos & Newton 2014; Malik, McKenna & Plummer 2016; Ramos-Morcillo et al. 2015; Walker, Fitzgerald & Duff 2014); nurse managers (AbuAlRub & Nasrallah 2017; Espinoza, Lopez-Saldana & Stonestreet 2009; Jukkala & Kirby 2009; Mokoka, Oosthuizen & Ehlers 2010); nursing professional development (NPD) practitioners (Harper, Aucoin & Warren 2016); and nurse educators (Draper, Clark & Rogers 2016; Malik, McKenna & Plummer 2016). These nurses were either registered nurses (Asselin & Fain 2013; Atefi et al. 2014; Cooper 2009; Coventry, Maslin-Prothero & Smith 2015; Davis, White & Stephenson 2016; Glembocki & Dunn 2010; Hess et al. 2011; Hinno, Partanen & Vehviläinen-Julkunen 2011; Katsikitis et al. 2013; Lasater et al. 2015; McColgan 2008; Raterink 2008, 2011; Trinchero, Brunetto & Borgonovi 2013) or enrolled nurses (Davis, White & Stephenson 2016; Katsikitis et al. 2013), ranging from new graduates (Dwyer & Hunter Revell 2016) to more experienced nurses. There were other sources that discussed nurses and CPD broadly without specifying any particular healthcare context (Altman 2011; Bertulis & Cheeseborough 2008; Bovino et al. 2017; Chiu & Tsai 2014; Dall'Oglio et al. 2018; Duff 2013; Eason 2010; Fleischman, Meyer & Watson 2011; Jenkins et al. 2015; Ma et al. 2018; Nawafleh 2014; Nevalainen, Lunkka & Suhonen 2018; Nowrouzi et al. 2016; Santos 2012; Schoonbeek & Henderson 2011; Vernon, Chiarella & Papps 2018; Williams 2010; Wilson et al. 2015).

The other healthcare professionals who were identified in the literature were healthcare social workers (Ming-sum et al. 2017; Petruik et al. 2017); EMS providers (Carhart 2014); medical radiation science practitioners, which includes radiation therapists and radiographers (Allen & Garg 2016; Lozano 2012; Sim & Radloff 2008, 2009); senior and junior physicians from different specialities such as surgeons and family physicians/general practitioners (Cleland, Burr & Johnston 2016; Gabel 2013; Griffen et al. 2008; Hawkinson 2016; Ipsen & Nohr 2009; Jenkins et al. 2015; Wente & Kleiber 2013); dentists (Barnes et al. 2012); midwives (Katsikitis et al. 2013; Vernon, Chiarella & Papps 2018); early career psychologists (Kolar, von Treuer & Koh 2017); and allied health professionals (Beardsmore & McSherry 2017; Dall'Oglio et al. 2018).

The identified literature included a book section (Dewing 2009) and different study designs such as systematic reviews (Davis, White & Stephenson 2016; Nevalainen, Lunkka & Suhonen 2018); integrative reviews (Coventry, Maslin-Prothero & Smith 2015; Santos 2012); literature reviews (Barnes et al. 2012; Dwyer & Hunter Revell 2016; Lozano 2012; McColgan 2008; Nowrouzi et al. 2016); critical reviews (Williams 2010); qualitative studies (Atefi et al. 2014; Beal, Riley & Lancaster 2008; Beardsmore & McSherry 2017; Clark, Draper & Rogers 2015; Cleland, Burr & Johnston 2016; Jantzen 2008; Kolar, von Treuer & Koh 2017; Ma et al. 2018; Meagher-Stewart et al. 2010; Mokoka, Oosthuizen & Ehlers 2010; Nawafleh 2014; Raterink 2008, 2011; Tame 2011); quantitative studies (AbuAlRub & Nasrallah 2017; Bertulis & Cheeseborough 2008; Burgel et al. 2014; Chiu & Tsai 2014; Hess et al. 2011; Hinno, Partanen & Vehviläinen-Julkunen 2011; Jukkala & Kirby 2009; Katsikitis et al. 2013; Meeusen et al. 2011; Walker, Fitzgerald & Duff 2014); mixed-methods studies (Asselin & Fain 2013; Underwood et al. 2009; Vernon, Chiarella & Papps 2018); case studies (Govranos & Newton 2014); action research (Bakker et al. 2010; Sim & Radloff 2008); cross-sectional studies (Asahara et al. 2012; Bovino et al. 2017; Dall'Oglio et al. 2018; Harper, Aucoin & Warren

2016; Wilson et al. 2015); conference papers (Jenkins et al. 2015); Delphi studies (Davis, Taylor & Reyes 2014); interventional studies such as pilot projects, educational interventions or quasi-experimental studies (Glembocki & Dunn 2010; Ipsen & Nohr 2009; Lasater et al. 2015; Leifso 2014; Ramos-Morcillo et al. 2015); and a field study (Bjørk, Tøien & Sørensen 2013).

2.4. The influence of workplace culture on the CPD of healthcare professionals

The literature revealed that workplace culture has a strong influence on the CPD of healthcare professionals. Davis, White and Stephenson (2016); and Nevalainen, Lunkka and Suhonen (2018) conducted systematic reviews and concluded that workplace environments have a major influence on nurses' work-based learning and education. This influence could be either a positive enabler or a negative barrier to CPD. Policy makers, administrators and leaders of healthcare organisations are crucial in influencing the facilitation of CPD for healthcare professionals (Chiu & Tsai 2014; Clark, Draper & Rogers 2015; Coventry, Maslin-Prothero & Smith 2015; Davis, White & Stephenson 2016; Draper, Clark & Rogers 2016; Katsikitis et al. 2013; Nevalainen, Lunkka & Suhonen 2018; Santos 2012; Silvestre, Bowers & Gaard 2015; Trinchero, Brunetto & Borgonovi 2013). Both workplace enablers of and barriers to CPD will now be discussed in more detail.

2.4.1. Workplace enablers of CPD

To enable CPD for healthcare professionals, their workplace cultures should recognise the value of CPD and support staff to participate in activities that promote lifelong learning (Beardsmore & McSherry 2017; Cameron, Rutherford & Mountain 2012; Chiu & Tsai 2014; Davis, White & Stephenson 2016; Engbers et al. 2017; Katsikitis et al. 2013; Ma et al. 2018; Manley et al. 2018; Nevalainen, Lunkka & Suhonen 2018; Santos 2012; Tame 2011). Therefore, support is deemed one of the essential characteristics of workplace cultures that

foster CPD for their staff. The literature reported that this support can be offered in a number of ways such as providing adequate resources for CPD (Beal, Riley & Lancaster 2008; Clark, Draper & Rogers 2015; Davis, White & Stephenson 2016), for example financial investment in CPD (Katsikitis et al. 2013); dedicating time for CPD (Cameron, Rutherford & Mountain 2012; Davis, White & Stephenson 2016; Jantzen 2008); supporting medical teaching staff (Engbers et al. 2017); consolidating peer support and mentoring (Eason 2010; Manley et al. 2018; Pollock et al. 2017); acknowledging and recognising the outstanding accomplishments of staff, which stimulates their 'sense of pride' and cultivates a learning culture among them (Carhart 2014); and staffing adequately, which enables the availability of replacement staff to cover the duties of those who are attending CPD (Davis, White & Stephenson 2016; Katsikitis et al. 2013; Raterink 2011). These supporting factors enable healthcare staff to have more opportunities to participate in CPD.

Organisational structures and cultures play a pivotal role in facilitating CPD for healthcare staff (Clark, Draper & Rogers 2015; Draper, Clark & Rogers 2016; McArthur & Thomson 2014; McColgan 2008; Ming-sum et al. 2017; Mugisha 2009; Raterink 2008). Organisational structures and cultures that enable CPD (Mugisha 2009) and support team work (Raterink 2008, 2011); portfolio building (McColgan 2008); mentoring and consulting (Ming-sum et al. 2017); learning from mistakes (Jantzen 2008); and adult learning which features deliberate, self-directed and autonomous seeking of knowledge (Carhart 2014) can foster critical thinking among healthcare staff (McArthur & Thomson 2014). Reflection and critical thinking are deemed to be important attributes for successful continuing professional education (Barnes et al. 2012; McArthur & Thomson 2014; Sim & Radloff 2008, 2009; Zimmerman & Pilcher 2008), allowing staff to 'learn how to learn' (Williams 2010). Through their literature review, Barnes et al. (2012) ascertained that, to achieve quality dental care, dentists should be encouraged to reflect on their learning alongside mandatory CPD programs. Therefore, these

attributes empower CPD among healthcare professionals. Structures of healthcare settings that allow broader partnerships and collaborations to be established with other organisations (Clark, Draper & Rogers 2015; Draper, Clark & Rogers 2016; Jukkala & Kirby 2009; Silvestre, Bowers & Gaard 2015), or between healthcare professionals from a blend of backgrounds within the same organisation (Cameron, Rutherford & Mountain 2012; Ipsen & Nohr 2009), enable healthcare professionals to network and share knowledge and learning. Ipsen and Nohr (2009) identified that the culture of annual three-hour educational meetings between the junior and senior physicians they studied had encouraged the educational relationship amongst them and increased the number of learning initiatives. Furthermore, the infrastructure, physical structures and layout of some units within healthcare organisations are conducive to informal learning among the healthcare staff from various contexts when particular spaces are dedicated for social interactions and knowledge exchange, which assists them to reflect on their practice (Bjørk, Tøien & Sørensen 2013; Coventry, Maslin-Prothero & Smith 2015; Davis, White & Stephenson 2016; Nevalainen, Lunkka & Suhonen 2018).

A culture that encourages journal clubs within a workplace promotes CPD. Journal clubs are meetings between groups of professionals convened for educational purposes to discuss and critically appraise published articles (Dall'Oglio et al. 2018; Whiteside et al. 2016). Interdisciplinary journal clubs within a workplace enable healthcare professionals to gather, brainstorm and learn (Dall'Oglio et al. 2018; Jukkala & Kirby 2009). Therefore, organisations that have journal clubs as part of their culture create useful opportunities for diverse healthcare professionals to share learning, which then reinforces their professional development.

Another component of workplace culture that enables CPD is the use of certification of healthcare professionals or institutions. Certification is the process of validating the qualifications of healthcare professionals to provide a defined area of practice based on the standards and the criteria of that practice (Altman 2011; Fleischman, Meyer & Watson 2011).

Certified healthcare professionals are committed to CPD, lifelong learning and clinical career advancement (Altman 2011; Fleischman, Meyer & Watson 2011; Wilson et al. 2015). This is because the certification standards require the healthcare professionals to acquire high levels of knowledge and skills and demonstrate excellence in practice (Altman 2011; Fleischman, Meyer & Watson 2011). Professional registration differs from certification in that it is based on the basic requirements of practice (Altman 2011), and it is a mandatory process, a prerequisite for each individual healthcare professional to practise. In contrast, certification implies a recognition of the achievement of advanced standards of practice and knowledge (Altman 2011). Both are provided by a third-party agency. Thus, healthcare practices that encourage healthcare professionals to be certified foster a positive culture of CPD.

'Magnet' is an example of a certifying healthcare program. Magnet is an international and formal credentialing program developed by the American Nurses Credentialing Center to recognise nursing excellence in healthcare organisations (Hess et al. 2011; Walker, Fitzgerald & Duff 2014). To achieve Magnet recognition, healthcare institutions need to meet rigorous criteria pertinent to excellence in nursing practice including 'transformational leadership', empowerment of nurses, outstanding nursing practice and a culture of innovation and seeking new knowledge (Hess et al. 2011; Murray et al. 2011; Walker, Fitzgerald & Duff 2014; Wilson et al. 2015). Magnet-awarded healthcare facilities are committed to providing access to professional development for their healthcare employees by reinforcing lifelong learning through offering employer-funded continuing education and embracing innovative knowledge and skills (Hess et al. 2011; Malloch 2009; Murray et al. 2011; Walker, Fitzgerald & Duff 2014; Wilson et al. 2015). As such, the culture of healthcare facilities that are Magnet designated is supportive of CPD for their nursing staff.

A further supportive workplace culture aspect is the organisations that appoint nursing professional development (NPD) specialists in which that they facilitate learning within their

organisations (Dwyer & Hunter Revell 2016; Harper, Aucoin & Warren 2016; Harper et al. 2017). NPD specialists are nurse educators who provide practice-based educational activities for nurses and other healthcare personnel in clinical settings (Harper, Aucoin & Warren 2016; Harper et al. 2017). As such, engaging NPD specialists enhances work-based learning for the healthcare professionals in that workplace.

2.4.2. Workplace barriers to CPD

By contrast, the literature reported some barriers to CPD within the workplace culture of healthcare professionals. That is, when there was limited or a lack of the previously detailed enablers, these enabling factors were turned into barriers. For instance, while support was reported as one of the major enablers of CPD for healthcare professionals, the lack of support either from healthcare institutions or leaders (Govranos & Newton 2014; Lozano 2012; Munro 2008; Nevalainen, Lunkka & Suhonen 2018; Santos 2012; Tame 2011) or from colleagues (Santos 2012; Tame 2011) can prevent healthcare professionals from participating in CPD.

Some structures and cultures of healthcare organisations hinder the CPD of healthcare professionals. That is, the hierarchical structures of organisations (Nevalainen, Lunkka & Suhonen 2018); or the task-oriented culture in which healthcare staff perform their duties without critical thinking (Nevalainen, Lunkka & Suhonen 2018) can constrain healthcare professionals from actively engaged in CPD. Furthermore, the nature of some healthcare professions jeopardises the creativity of their professionals by making them merely submissive instead of critical thinkers. One example is medical radiation science, which is characterised by limited autonomy and restricted roles in which professionals strictly adhere to the protocols of their profession (Lozano 2012; Sim & Radloff 2008, 2009), therefore they become less encouraged to be professionally developed.

Since the successful provision of CPD requires resources, the lack of CPD resources such as a financial budget (Cleland, Burr & Johnston 2016; Munro 2008; Santos 2012; Silvestre, Bowers & Gaard 2015); time to be released for CPD (Cleland, Burr & Johnston 2016; Galuska 2014; Govranos & Newton 2014; Katsikitis et al. 2013; Munro 2008; Santos 2012; Underwood et al. 2009); learning resources (Underwood et al. 2009); or staff shortages (Asahara et al. 2012; Katsikitis et al. 2013) can preclude healthcare staff from participating in CPD. Failure of healthcare institutions to provide healthcare professionals time to attend CPD during their working hours increases the burden on these professionals as they are required to attend these activities during their off-time, which can be difficult because CPD then interferes with their personal or family activities (Coventry, Maslin-Prothero & Smith 2015; Katsikitis et al. 2013; Santos 2012).

Another barrier is the inability of healthcare facilities to offer accessible CPD. For instance, some healthcare institutions only provide CPD activities in central locations, which are distant from staff who work in peripheral regions (Bertulis & Cheeseborough 2008; Nawafleh 2014; Santos 2012). As such, staff who are working in organisations that are located far away from the sites of CPD activities, alongside with not having time to attend, are not able to participate in these activities. Furthermore, the inability of healthcare organisations to provide their staff access to computers or the internet (Bertulis & Cheeseborough 2008) or staff lacking skills to work with computers or online materials (Santos 2012) limits their participation in CPD.

An additional obstacle is discrimination in nominating healthcare staff to attend CPD and training activities. For nursing, this discrimination may be based on the attitudes of nurse mangers who reject the idea of CPD (Tame 2012); nurses' managerial status or years of experience (Underwood et al. 2009); or the speciality levels of the attendees (Cleland, Burr & Johnston 2016). Cleland, Burr and Johnston (2016) found in their qualitative study that

consultants received priority to attend training activities over other staff. Similarly, from their mixed-methods study, Underwood et al. (2009) concluded that community nurses who occupy management positions or have more than 40 years of experience have more opportunities to access learning than community nurses who provide direct patient care or have less than 40 years of experience. As such, this unequal opportunity of healthcare professionals to attend training, learning or CPD activities is not based on their professional development needs, which impedes access to CPD.

Heavy workloads of healthcare professionals are another deterrent from participating in CPD. The literature identified that the 'busyness' culture of nurses in their workplaces hinders them from having time to engage in work-based educational activities (Govranos & Newton 2014; Nevalainen, Lunkka & Suhonen 2018). That is, such a culture increases the workload of healthcare providers, resulting in fewer opportunities to participate in CPD activities, and these activities become the first to be abandoned among these professionals (Atefi et al. 2014; Beardsmore & McSherry 2017; Coventry, Maslin-Prothero & Smith 2015; Galuska 2014). Similarly, healthcare social workers reported in the study of Petruik et al. (2017) that their work climate competed with their CPD opportunities due to their heavy work demands.

Having considered how workplace culture impacts on CPD for healthcare professionals, the influence of CPD on workplace culture is discussed next.

2.5. The influence of CPD on workplace culture

While workplace culture has some influence on the CPD of healthcare professionals, the literature revealed that CPD has some influence on the workplace culture of healthcare organisations.

2.5.1. The influence of offering adequate CPD opportunities

Healthcare organisations that offer adequate CPD have a culture of facilitating the implementation of evidence-based practice (EBP) (Black & Farmer 2013; Bovino et al. 2017; Davis, White & Stephenson 2016; Harper et al. 2017; Malik, McKenna & Plummer 2016; Ramos-Morcillo et al. 2015; Wente & Kleiber 2013; Whiteside et al. 2016; Wilson et al. 2015). In a qualitative study on a wide spectrum of allied healthcare professionals including leaders and clinicians from the disciplines of physiotherapy, audiology and speech therapy (combined), and psychology, Whiteside et al. (2016) found that the presence of CPD activities is an integral attribute of organisations that enable EBP. CPD augments the knowledge and skills of healthcare professionals about research and tutors them on translating research into practice (Bovino et al. 2017; Malik, McKenna & Plummer 2016; Ramos-Morcillo et al. 2015; Wilson et al. 2015), which expands their readiness for EBP (Wilson et al. 2015) and ensures that their practice is evidence-based (Black & Farmer 2013; Wente & Kleiber 2013). That is, healthcare organisations that support CPD provide research support services and professional development meetings (Whiteside et al. 2016), and facilitate learning and scientific inquiry by creating positive learning attitudes among staff (Harper et al. 2017; Malik, McKenna & Plummer 2016). Thus, the culture of healthcare organisations that embrace CPD values EBP.

The level of the competency of healthcare professionals is another influence of CPD on workplace culture. Healthcare institutions that are adaptive and receptive to CPD, training and work-based learning are characterised by a high-performance culture through ensuring the professional competence of staff (Hawkinson 2016; Mugisha 2009; Nevalainen, Lunkka & Suhonen 2018). A high-performance culture is more likely to retain competent healthcare professionals and ensure quality of care (Hawkinson 2016; Manley et al. 2018; Trinchero, Brunetto & Borgonovi 2013). The high levels of competency of these professionals are maintained through active participation in quality CPD activities that are relevant to the area

of their practice on a continuing basis (Black & Farmer 2013; Duff 2013; McNaron 2009; Tsai 2014; Vernon, Chiarella & Papps 2018).

The competency of healthcare professionals is linked with improved patient care. A workplace culture that recognises the importance of effective training and CPD supports high-quality health care (Barnes et al. 2012; Cooper 2009; Hinno, Partanen & Vehviläinen-Julkunen 2011; Mokoka, Oosthuizen & Ehlers 2010; Raterink 2008; Silvestre, Bowers & Gaard 2015; Trinchero, Brunetto & Borgonovi 2013; Tsai 2014). Offering more opportunities for healthcare professionals to participate in CPD sustains competent healthcare professionals (McNaron 2009; Trinchero, Brunetto & Borgonovi 2013); increases their job satisfaction (Cooper 2009); supports critical thinking (Davis, Taylor & Reyes 2014; Raterink 2008); and encourages learning from mistakes (Jantzen 2008), all of which are essential to provide quality patient care.

Healthcare workplaces that are conducive to CPD have a culture of improved professional practices. To demonstrate, when collaborative, active and systematic learning evolves among healthcare professionals from diverse contexts (Cameron, Rutherford & Mountain 2012; Dewing 2009; Ipsen & Nohr 2009) it results in modifications to and development in the model of professional health practice (Cameron, Rutherford & Mountain 2012). For example, in their mixed-methods pre-post study of occupational therapists, Pollock et al. (2017) concluded that multi-component professional development programs that involve different modules including online learning, workshops, regular peer meetings and mentorship are essential for practice modification. Likewise, Meagher-Stewart et al. (2010) and Mokoka, Oosthuizen and Ehlers (2010) found in their qualitative studies that supporting lifelong learning and sharing of knowledge has an influence on optimising ‘public health nursing’ practices.

CPD has been reported to be central to producing safe, positive and effective healthcare outcomes (Coventry, Maslin-Prothero & Smith 2015; Duff 2013; Eason 2010; Jukkala & Kirby

2009; Leifso 2014; Manley et al. 2018; Slater et al. 2012). Safe patient outcomes can result from the utilisation of EBP (Davis, White & Stephenson 2016; Eason 2010; Leifso 2014) and the clinical competence of healthcare professionals (Duff 2013). There are different CPD approaches that contribute to safe patient outcomes, such as participation in inter-professional team-based education activities (Slater et al. 2012) and attendance at workshops by different professions to discuss aspects of patient safety (Leifso 2014).

2.5.2. The influence of inadequate CPD opportunities

Conversely, inadequate CPD has adverse consequences for workplace cultures. For instance, organisations which have limited CPD opportunities or discourage their staff from accessing CPD are neither able to successfully apply total quality management (Mosadeghrad 2014) strategies nor identify and respond to patient safety issues, which results in poor patient outcomes (Coventry, Maslin-Prothero & Smith 2015; Teunissen & Bok 2013). In addition, Griffen et al. (2008) explained that CPD modules for surgeons are mainly focused on the technical medical sciences and pass over the non-medical or behavioural aspects, which contributes to the deficiency in their communication, leadership, decision-making and teamwork skills. Furthermore, the lack of support and the unequal access to CPD, which was addressed in Section 2.4.2, results in the development of 'horizontal violence' in the workplace (Tame 2012) and subversive participation in professional education programs (Tame 2011) among perioperative nurses. That is, the development of this culture in the workplace encourages perioperative nurses to participate in professional education programs 'secretly' to avoid this bullying, either by managers or colleagues (Tame 2011, 2012).

To address such a culture, education programs that involve strategies to change culture need to be developed and implemented, targeting both staff and managers (Parker et al. 2016). According to Lasater et al. (2015), a tailored educational intervention that involved different

components such as presentations, discussions, role-play and simulation was effective in reducing incivility among nurses in their workplaces.

The third theme from the literature review explores the influence of CPD on healthcare professionals.

2.6. The influence of CPD on healthcare professionals

The literature revealed that healthcare milieus that are supportive of continuing education and CPD have an influence on healthcare professionals. For instance, workplaces that encourage professional development and ongoing education contribute to increased job satisfaction among their staff (Atefi et al. 2014; Bakker et al. 2010; Cooper 2009; Eason 2010; Gabel 2013; Meeusen et al. 2011; Mokoka, Oosthuizen & Ehlers 2010; Nowrouzi et al. 2016) and enhance their engagement with their profession (Trinchero, Brunetto & Borgonovi 2013). As a result, these employees intend to remain working in their profession (AbuAlRub & Nasrallah 2017; Bakker et al. 2010; Cooper 2009; Hinno, Partanen & Vehviläinen-Julkunen 2011; Jenkins et al. 2015); their professionalism and self-efficacy increase (Lasater et al. 2015; Shapiro, Whittemore & Tsen 2014); their professional hopelessness, stress and burnout are reduced (Dickinson & Wright 2008; Gabel 2013); and their quality of work life and emotional well-being improves (Nowrouzi et al. 2016; Strube et al. 2018). In their qualitative study, Kolar, von Treuer and Koh (2017) declared that the resilience of early-career psychologists is promoted by CPD, as these psychologists tend to read the latest evidence-based journals or attend courses to reflect on their practice and socialise with other colleagues. Also, CPD plays an important role in enabling successful transition experience of nurses between different work contexts such as acute to community nursing practice (Ellis & Chater 2012).

In addition, CPD enhances critical and reflective thinking skills among nurses (Asselin & Fain 2013; McNaron 2009; Williams 2010). Critical reflection skills enable nurses to utilise

their experiences as a basis for their learning. This can be achieved through being reflective by questioning their practice to identify assumptions and modify their care (Davis, Taylor & Reyes 2014; McNaron 2009; Williams 2010).

CPD has an influence on the attitudes and behaviours of healthcare professionals. That is, nurses' perceptions about practice have been influenced by education activities and organisations that have a positive climate of online continuing learning (Chiu & Tsai 2014; Glembocki & Dunn 2010). To clarify, in an interventional study on registered nurses, Glembocki and Dunn (2010) identified that a three-day educational program which focused on nurses' relationship with self, colleagues and patients improved the nurses' caring behaviour. In addition, Chiu and Tsai (2014) reported that nurses' attitudes are improved by organisations that have a positive climate of online continuing learning. Above all, healthcare professionals have positive attitudes and are attentive about the value and the importance of CPD in achieving effective practice (Petruik et al. 2017; Underwood et al. 2009). However, preventing nurses from applying the acquired knowledge into practice results in negative attitudes towards CPD (Santos 2012).

CPD has been reported to improve the leadership skills of healthcare professionals. The incorporation of leadership content into CPD activities and training programs increases the leadership skills and competencies of nurse leaders (AbuAlRub & Nasrallah 2017; Galuska 2014). Equally, a commitment to CPD and lifelong learning is instilled in nurses who occupy leadership roles (Espinoza, Lopez-Saldana & Stonestreet 2009). Thus, CPD and lifelong learning are considered to be integral components of leadership.

2.7. EMS providers, workplace culture and CPD

EMS providers require continuing professional education, training and development opportunities as they provide critical roles within the healthcare system by responding to and

attending the pre-hospital emergency needs of critically ill or injured patients. Carhart (2014) provided four recommendations to augment the engagement of EMS providers in lifelong education activities and create a workplace learning culture. These recommendations are recognising and acknowledging outstanding performance, promoting independent learning, applying adult learning theories and encouraging curiosity among the EMS providers (Carhart 2014). However, this article did not discuss or explore extensively and comprehensively the influence of workplace culture on the CPD of EMS providers. Furthermore, Carhart (2014) declared that these recommendations did not serve as EBP for continuing learning, education or teaching in the context of EMS as there is a dearth of literature related to this issue.

2.8. The gap

The literature review has highlighted a number of significant impacts of CPD on workplace culture and of workplace culture on CPD from the perspectives of a wide range of healthcare professionals. However, there is a gap in the literature, as there are no studies that focus on how the workplace culture of EMS providers influences their continuing professional development. This highlights the importance of this research.

2.9. Chapter summary

The literature review identified that there are influences in all directions, both positive or negative, between workplace culture, CPD and healthcare professionals. Good access to CPD has a positive influence on workplace culture and on the quality of care provided by healthcare professionals. Healthcare professionals who actively engage in CPD have high levels of job satisfaction, and improved critical thinking and leadership skills. After presenting a review of the literature relating to the researched phenomenon, the following chapter explains the methodology that underpins this research.

Chapter 3: Methodology

3.1. Introduction

Chapters 1 and 2 have set the scene for this research, providing information and background on the health service and professional context for this study as well as introducing the topic of the influence of workplace culture on CPD through a thorough review of the relevant literature. This chapter discusses the chosen methodology which provides the framework for this investigation of workplace culture and how it influences the CPD of EMS providers at one of the main institutions that provides EMS to a specific geographical community in Saudi Arabia.

In the first part of this chapter, the choice of qualitative methodological approaches is described. Next, the researcher's ontological and epistemological positions are explained to enable the reader to understand the relationship between the researcher and the researched topic. Subsequently, the philosophical underpinnings and justifications of ethnography are detailed, providing a background to ethnography, including a clarification of the term 'culture' from an ethnographic perspective.

3.2. Choice of methodology

Qualitative research is designed to assist researchers to deeply understand social phenomena that occurs in the natural context by exploring the behaviours, meanings, principles, experiences and perceptions of individuals who are experiencing these phenomena (Curry, Nembhard & Bradley 2009; Whitehead 2013). Qualitative studies rely on substantial interaction with research participants, and often this type of research enables researchers to reveal unforeseen or unexpected facts, which cannot be achieved by quantitative studies alone (Wong 2008). Qualitative researchers do not aim to generalise their findings to a larger population size or different sites; rather, they provide an in-depth understanding of a specific

phenomenon by focusing on a smaller number of participants who experience this phenomenon (Creswell 2014; Thomas & Magilvy 2011).

Qualitative studies can deepen the understandings of healthcare researchers about phenomena that have not been addressed previously. These understandings then assist to address gaps, obtain a further perspective about researched events, and achieve answers to *why* and *how* research questions by providing extensive rich descriptions (Jack 2006). Different aspects of the researched phenomena in qualitative studies are captured from the perspective of participants (Curry, Nembhard & Bradley 2009). This type of research can then inform healthcare policy makers and managers as they reform healthcare systems and services.

Qualitative researchers often adopt specific methodologies to guide their studies. Methodologies provide particular philosophical and ethical principles, conventions and frameworks that define and guide the researcher in conducting qualitative research to create and build knowledge, based on the nature of the phenomenon that the research aims to address (Nicholls 2017). The methodology utilised in qualitative research has to be aligned with the purposes and the philosophical orientations of the study; the methods of data collection and analysis; and the way of discussing findings (Willgens et al. 2016). Willgens et al. (2016) report that coherence between all these elements is essential in appraising qualitative research, and is called ‘methodological congruence’.

There are a range of methodologies that can be applied to conduct qualitative research; however, the most commonly utilised methodologies in social and health sciences studies include phenomenology, narrative research, case study, grounded theory and ethnography (Creswell 2013, 2014). Having considered the range of methodologies and their strengths and weaknesses, ethnography, specifically *focused ethnography*, was considered appropriate for

this study based on the research aim, question, objectives and the ontological and epistemological position of the researcher.

3.3. Ontological and epistemological position of the researcher

The term ontology refers to the study of the nature of reality and knowledge about the world (Grix 2002; Ormston et al. 2014). Epistemology is the individual's process and ways of gathering this knowledge to learn about this reality (Grix 2002; Ormston et al. 2014). Therefore, researchers' epistemologies influence their way of phrasing their research questions and conducting their studies, which then guides them to select appropriate research methodologies and methods (Duffy & Bowe 2014). Duffy and Bowe (2014) believe that the starting point for any research study, even before conceiving the research question, is to have a defined position regarding what can be known about the researched phenomenon. So, both terms are crucial in social and human research studies to understand the research process (Grix 2002). Ontology and epistemology, along with the methodology, are the components of what is called a paradigm, which is a combination of the beliefs that elucidate how people identify the reality of the world (Houghton, Hunter & Meskell 2012). As mentioned above, the research aims, paradigms and methods need to be integrated to achieve philosophical congruity of the research (Houghton, Hunter & Meskell 2012).

The phenomenon to be investigated in this project is workplace culture and how it influences the CPD of EMS providers at one of the main institutions that provides EMS to a specific geographical community in Saudi Arabia. Experiencing different healthcare roles throughout the researcher's professional experience has informed his knowledge about this phenomenon. These roles included clinical, training, administrative and academic roles.

After 18 months of working as a healthcare technician in an extremely busy and understaffed healthcare institution, the researcher was supported by the administration to

pursue an academic education and obtain a bachelor's degree at a university in Saudi Arabia. After obtaining the bachelor's degree, the researcher was assigned a training role in the institution where he had previously worked. The responsibilities of this role included providing continuing medical education (CME) programs to healthcare professionals inside the institution, assisting staff to attend CME programs outside the institution, and supervising students in their clinical placement or internship. There were, however, limited facilities and resources for the delivery of CPD programs for staff inside the hospital. The hospital programs were not accredited by the SCFHS, and so no CME hours could be counted for staff attending these programs.

Following this experience, the researcher commenced an administrative role as a deputy nursing director. One of the main responsibilities of the nursing administration in the district was applying the MOH's policies and procedures and supervising the compliance of nursing staff in government hospitals and primary healthcare centres with these policies and procedures. The first manual for nursing standards, policies and procedures was published in 2008 by the General Directorate of Nursing in the MOH (Al-Osimy 2008). This manual included education and CPD programs for nursing staff such as compulsory orientation programs for newly employed nurses. The nursing administration in the district established criteria to ensure that the specific CME program was valuable for the attendants. This experience highlighted to the researcher the importance of CPD being formally sanctioned through policy and embedded within a nursing workplace culture.

The researcher's most recent role was as an academic teaching assistant in an EMS department at a Saudi Arabian university. The researcher had a number of responsibilities in this academic role including training undergraduate students in EMS clinical skills and supervising these students in their clinical placements. When supervising students during their clinical placements, there were often discussions with EMS providers about their need for

further educational experiences. Some EMS providers complained about long working hours, which often prevented them from attending CPD programs in their workplace. In addition, when supervising students on clinical placement, the researcher observed that some EMS providers lacked contemporary clinical skills when treating patients.

These experiences have informed the researcher's ontological and epistemological position and the choice of research methodology to answer the research question. The following section explains the adopted methodology, which is focused ethnography.

3.4. Philosophical underpinnings of ethnography

3.4.1. Background to ethnography

The word 'ethnography' stems from the combination of the Greek word *ethnos*, which means culture or group of people, and the Latin word *graphia*, which means writing or describing (Ladner 2014; Liamputtong 2013; Whitehead 2013). So, ethnography is a social research approach that involves describing the culture, practices, customs or beliefs of a specific group (Draper 2015; Hammersley & Atkinson 2007; Holloway & Galvin 2015; Ladner 2014; Spradley 2016b; Whitehead 2013). Ethnography goes beyond merely observing and describing 'details' to provide explanations, by understanding the meaning of those details (Ladner 2014).

Ethnography is located within the qualitative interpretative paradigm (Draper 2015; Hammersley & Atkinson 2007; Whitehead 2013). The essence of the interpretative paradigm is that reality or truth is not singular or objective; instead, there are multiple realities because humans and their experiences are diverse (Draper 2015). Interpretivism considers the *cultural contexts* of people as fundamental aspects that must be considered in the research process (Draper 2015). Unlike positivism, interpretivism requires a deeper understanding of the contexts and the experiences of individuals in their natural settings without modifying these

settings to suit specific research purposes, such as performing experiments. Instead, the researched settings and participants need to be studied as they are.

Ethnography is distinguished from other types of qualitative research by focusing mainly on producing descriptions about the habitual activities and customs of a group of people in their own cultural contexts or environments (Broussard 2006; Holloway & Galvin 2015) with the aim of understanding their behaviours (Whitehead 2013). So, ethnography follows a cyclic sequential pattern to describe cultural features of the researched group rather than a linear design trying to 'find something' (Spradley 2016b).

Another fundamental feature that underpins ethnography is the consideration of the 'emic' as well as 'etic' positions (Draper 2015; Green & Thorogood 2018; Holloway & Galvin 2015; Polit & Beck 2010). The 'emic' position refers to the perspectives or the inside knowledge of the members of the researched group or culture, which is called the insider or the native perspective (Draper 2015; Fetterman 2010; Green & Thorogood 2018; Holloway & Galvin 2015; McFarland & Wehbe-Alamah 2015). On the other hand, the 'etic' position indicates the standpoint of the larger society who are outside the culture or the members being researched, while they represent the societal or the outsider picture of the researched phenomenon (Draper 2015; Fetterman 2010; Holloway & Galvin 2015). Researchers' professional knowledge or perspective about the researched phenomenon is deemed 'etic' as they are outsiders (Green & Thorogood 2018; McFarland & Wehbe-Alamah 2015). According to Draper (2015) and Holloway and Galvin (2015), ethnographers need to consider both concepts interchangeably as they influence and are influenced by each other. That is, the native members have a particular knowledge about their culture, which explains to researchers why they do what they are doing (Fetterman 2010; Holloway & Galvin 2015). The 'etic' view is necessary to shape the collected data into an ethnographic template, while retaining its social

roots by understanding the collective meanings of the researched group (Draper 2015; Holloway & Galvin 2015).

Ethnography is grouped into two general categories (Polit & Beck 2008, 2010). The first category is ‘macro-ethnography’, which relates to studying determined cultures more broadly (Polit & Beck 2008, 2010). The second category is ‘micro-ethnography’, also called ‘focused ethnography’ (Polit & Beck 2008, 2010). Focused ethnography is concerned with studying narrowly determined cultures, such as a specific category of professionals or a department in a healthcare facility (Polit & Beck 2008, 2010). As such, researchers who utilise focused ethnography focus on understanding cultural aspects of groups through a narrower scope of inquiry rather than studying their culture comprehensively (Chesnay 2015). Therefore, focused ethnography is characterised by shorter periods of time in the field of the study for data collection and a narrower scope of research questions (Chesnay 2015), while still applying the philosophical underpinnings of ethnography.

A number of challenges confront ethnographic research. These include conducting the research with people in their natural contexts without introducing any changes caused by the researcher; collecting data from a wide range of sources in unstructured ways; and analysing data by interpreting and explaining the meanings of peoples’ functions (Hammersley & Atkinson 2007). Researchers adopting such a methodology need to be able to be accepted to engage in participants’ everyday routines covertly and overtly for a period of time, observing their actions; listening to their discussions; asking them formal and informal questions to learn from them instead of studying them; and gathering artefacts and documents (Broussard 2006; Hammersley & Atkinson 2007; Polit & Beck 2010) that could shed light onto the researched phenomenon (Hammersley & Atkinson 2007).

Ethnography, as a research methodology, has some limitations. As mentioned above, the fieldwork and participant observations can be very time consuming (Creswell 2013; Goodson & Vassar 2011; Green & Thorogood 2018; Savage 2000). This includes the process and time required to obtain approvals to gain access to the study population and perform the ethnographic work (Goodson & Vassar 2011; Green & Thorogood 2018). In addition, the findings of ethnographic studies are not generalisable because studies tend to address a particular group or setting (Goodson & Vassar 2011). The researcher was mindful of these challenges and limitations, and pre-planned to avoid their consequences on his research. That is, the researcher had collegial relationships with staff who could facilitate access to their field to conduct his ethnographic research. This process will be detailed in the next chapter.

3.4.2. Culture

Culture is the core concept of ethnographic studies (Whitehead 2013). Culture is not a definite or determined entity; instead, it is a context or a milieu that surrounds the complexities of daily life (Draper 2015). Therefore, culture, from an ethnographic perspective, is a broad concept that involves the learned and reinforced patterns of life that are shared among a group, such as their relationships, behaviours, communications, beliefs, arts, concepts, rules, languages and their way of life by being exposed to each other (Draper 2015; Holtz 2015; O'Neill, Wolfe & Holley 2015). These aspects of culture contain clear guidelines for the members of that society, which steer each member in perceiving their experiences (Holtz 2015). Holtz (2015) adds that there are three levels of culture for a certain social group based on the ability of outsiders to perceive that culture. These levels are: (1) the tertiary level, which appears to outsiders; (2) the secondary level, which includes features that are recognised by members, but rarely shown to outsiders; (3) the primary level, which is the most profound level that is hidden from outsiders but perceived and instilled in each individual member, and strongly resists change (Holtz 2015).

Culture is a complex concept that can be defined in various ways (Holtz 2015; O'Neill, Wolfe & Holley 2015; Saldaña 2011). Fetterman (2010) explains that definitions of culture adopt two perspectives: 'ideational' or 'materialist'. Both perspectives explore the ways in which groups of individuals behave and think in their natural contexts, which in turn assists ethnographic researchers to search for logical, ritualistic and cohesive patterns of ideas and behaviours that distinguish that group (Fetterman 2010). Spradley (2016b) and Polit and Beck (2008) also identified that ethnographers study three aspects of cultures: peoples' behaviour, which is *what they do*; knowledge, which is *what they know*; and artefacts, which is *what they use*.

Workplace culture is an aspect of culture that is researched by ethnographic studies. The definition of workplace culture was presented in Section 1.3. The literature often uses the term workplace culture interchangeably with organisational or corporate culture (Cole, Oliver & Blaviesciunaite 2014). To maintain consistency, the term workplace culture will be used throughout this thesis. Grant et al. (2014, p. 21) found that the workplace culture of primary healthcare organisations was distinguished by four main dimensions: 'responsiveness, team hierarchy, care philosophy and communication'. Some characteristics of workplace culture can strengthen or weaken that culture. That is, strength in a workplace culture lies in the values that govern behaviour that are shared across the group to a great extent (O'Neill, Wolfe & Holley 2015). A workplace culture is described as weak when various 'pockets of difference' occur within the group or subgroup (O'Neill, Wolfe & Holley 2015, p. 7).

Manley et al. (2011) identified a set of core values that distinguish an effective workplace culture. These values include: enabling continuing learning, being supportive of staff, developing leadership skills, engaging staff in decision-making processes, utilising evidence-based practice, encouraging open communication between staff and adopting teamwork (Manley et al. 2011). Workplace stress, workload and job satisfaction are also

considered to be influenced by the quality of a workplace culture (Hahtela et al. 2015). This means that the leadership styles adopted in a workplace, the attitudes of staff and their leaders, the administrative systems, structures and resources determine the workplace culture of an institution.

3.5. Appropriateness of the utilised research methodology

Ethnography is considered appropriate methodology because its philosophical underpinnings are aligned well with the research question of this study. The research question seeks to understand the phenomenon of workplace culture of EMS providers in relation to CPD in a specific context in Saudi Arabia as explained in Section 1.5. Ethnography is deemed as the proper methodology to study organisations (Bruni 2006), particularly if the study focuses on culture (Whitehead 2013). Liamputtong (2013) explained that ethnography is utilised widely in healthcare research to convey the comprehensive story that underpins the behaviours and attitudes of the researched group altogether by taking every aspect into account. Green and Thorogood (2018) added that ethnography is the research design of choice when researchers aim to achieve a holistic understanding of a particular healthcare setting, because this research design requires observations that incorporate both ‘emic’ and ‘etic’ views. Ethnography can assist healthcare professionals and policymakers in solving issues through in-depth study of these issues within the natural contexts they occur by understanding the worlds of leaders, clinicians and patients (Savage 2000). Moreover, Chesnay (2015) advised that the useful research methodology to understand workplace cultures is the ‘focused ethnography’. While this research is a PhD project which has a limited timeframe, and ‘focused ethnography’ has been described to require shorter data collection period and narrower and specific research scope (Chesnay 2015), so it has been adopted in this study to enable the researcher complete all project requirements within the timeframe.

Healthcare organisations are cultural contexts in their own, where each healthcare organisation has a unique community of staff and patients who have their exclusive behaviour and belief systems (Goodson & Vassar 2011). Ethnography has been adopted to enlighten the management process of healthcare institutions and assist on the creation of organisational structures by providing an in-depth understanding of the community within these organisations (Savage 2000). There were various aspects related to the management process of healthcare organisations, and quality and safety as core parts of these aspects. Healthcare researchers, managers, policy-makers and practitioners adopted ethnography, either as a sole research methodology or as supplementary to others, to identify safety and quality issues where the causes were embedded within the organisational dynamics, staff performance and their interactions with technology (Savage 2006). So, ethnography played a major role in informing and improving the management process of healthcare institutions and practice.

3.6. Chapter summary

This chapter has discussed the methodological framework, focused ethnography, for this study and explained its appropriateness and how it fits within an interpretive paradigm. The researcher has been open about his assumptions (Section 1.9) and experiences (Section 3.3), and the researcher is aware that he has to guard against bias and therefore limit his approach to the ethnographic observations and analysis of the research undertaken. The next chapter discusses the research design for this study, which takes account of the paradigm discussed in this chapter.

Chapter 4: Methods

4.1. Introduction

Following on from Chapter 3 on the methodology of this study, this chapter provides detailed information about the methods used to conduct this study. Comprehensive information regarding study design and settings, participants, ethics, data collection and analysis, and issues of trustworthiness and the quality of the findings is provided.

4.2. Study design

This study adopted the methodology of focused ethnography. This study design focuses mainly on studying cultures and cultural contexts, and its essence lies in researchers living with participants in their contexts (Broussard 2006; Hammersley & Atkinson 2007; Polit & Beck 2010). Therefore, the fundamental data collection methods in focused ethnography are fieldwork and observations of participants in their contexts (Broussard 2006; Hammersley & Atkinson 2007; Polit & Beck 2010).

The adoption of this study design was guided by the aim and objectives of this research. The aim was to understand how workplace culture influences the CPD of EMS providers within a healthcare institution that provides EMS in Saudi Arabia. The objectives to achieve this aim were:

- to identify the organisational structures that influence CPD for EMS providers;
- to identify the activities and resources that are available to support CPD for EMS providers;
- to identify and outline the roles and responsibilities of each participant group;
- to explore the attitudes of EMS providers on whether CPD makes a difference to their professional practice, self-confidence and job satisfaction; and
- to identify and explore the attitudes of each participant group towards CPD.

This study was conducted in four stages:

1) Preparation to enter the field;
2) Phase 1: online survey;
3) Phase 2: focus groups and semi-structured individual interviews; and
4) Phase 3: observations and document collection.

Figure 1 summarises these stages.

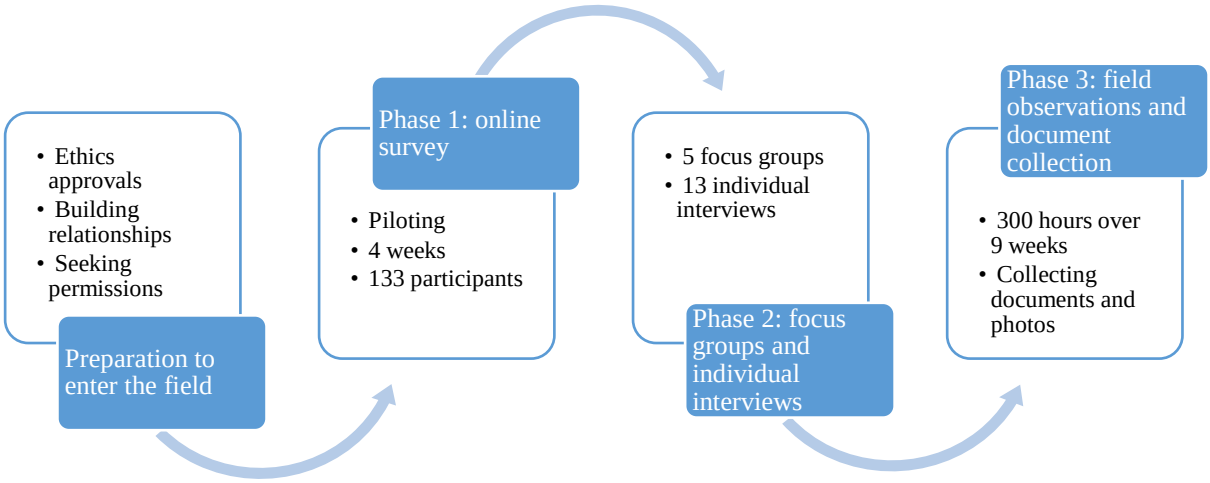

Figure 1: Research stages

4.2.1. Preparation to enter the field

The preparation stage involved obtaining the necessary ethics approvals and seeking permission to access the research sites. Achieving full and successful access to an ethnographic research field requires not only gaining permission from formal leaders and managers, but also finding an informal intermediary from the group who can facilitate introducing the researcher to the group in a positive way (Fetterman 2010; Green & Thorogood 2018). Gaining permission to access the intended research site and group was one of the most challenging phases in this study. Ethnographic studies do not have clear-cut guidelines; rather, this phase depends mainly on the researchers' negotiation skills and ability to establish relationships (Creswell 2013; Gobo & Molle 2017; Roper & Shapira 2000). However, obtaining permission does not guarantee the researcher will achieve the group's cooperation (Liamputtong 2013). Once

researchers access their intended sites, they need to gain participants' trust and convince participants that their presence is not threatening, to achieve positive and effective cooperation with the study (Gobo & Molle 2017; Liamputtong 2013).

4.2.1.1. Gatekeeping

After obtaining the required approvals to conduct this study, the researcher contacted some colleagues in the region. The aim of this process was to find a potential 'gatekeeper' between the researcher and leaders in the regional administration. One of the researcher's colleagues had access to the regional director, so he facilitated the communication process. Another 'gatekeeper' was the coordinator who was formally assigned to the researcher, as one condition of conducting the study, who happened to be a former colleague of the researcher. This chain of collegial relationships enabled positive negotiations and connections. The regional director assisted and provided support for this research because he believed that his workplace would benefit from the findings of this study. This assistance and support was provided via granting the researcher smooth and unrestricted access to any required facilities, departments or data and advised all leaders in the regional administration to support this research. This was achieved through selecting and accessing the appropriate key 'gatekeepers' within the participating institution who enabled persuasive communications with the regional director. Having gained access to the participating study setting, data collection commenced. Data collection formed the remaining three phases of the study, which will be explained later in this chapter.

4.3. Study setting

The study was conducted in one of the main institutions that provides public EMS to the community in the Aseer region within Saudi Arabia (Figure 2). The central administration of this institution is located in Riyadh, the capital of Saudi Arabia, and there are 13 subordinate

regional administrations distributed across Saudi Arabia. These regional administrations report to the central administration. Each regional administration has an administrative department which manages all administrative, technical, professional and clinical aspects of EMS in their region. Also, the regional administrations oversee a number of EMS centres distributed across all areas of the regions to provide clinical EMS to their community.

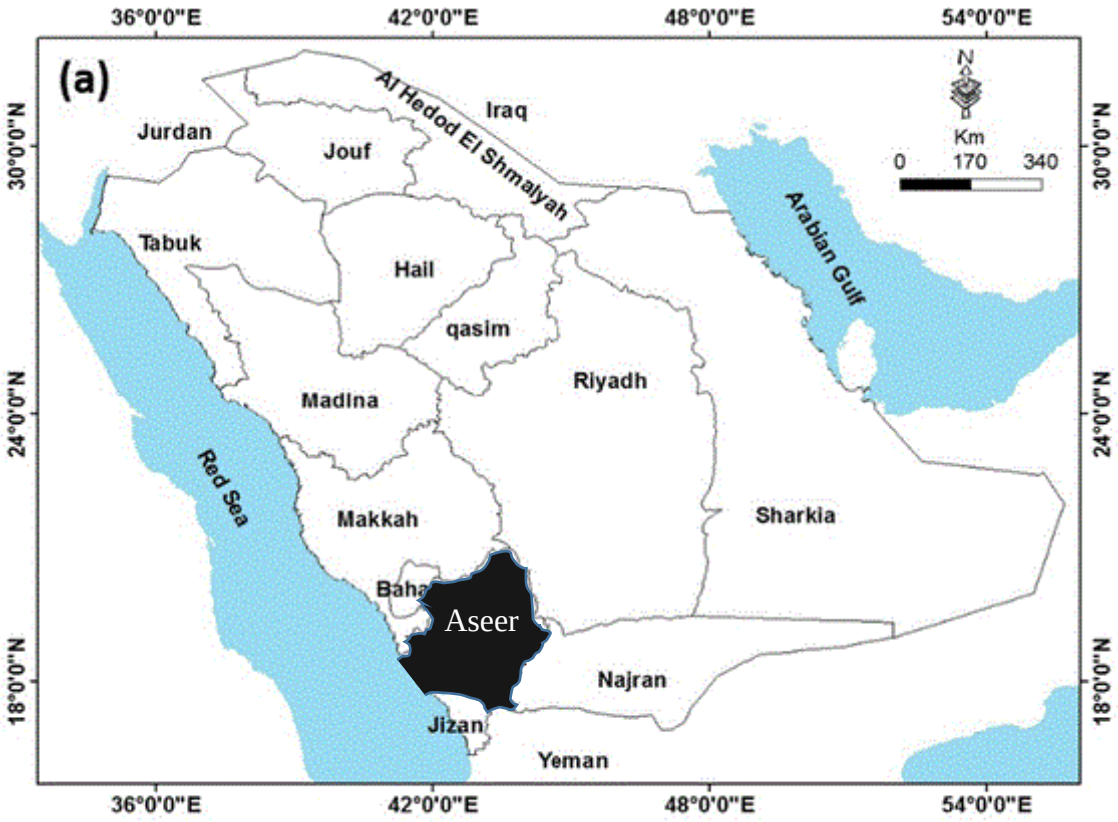

Figure 2: The location of the participating regional administration (Source: Youssef et al. 2016)

Saudi Arabia is divided into 13 administrative regions (Ministry of Foreign Affairs 2010). Aseer is one of these regions, and is located in the south-western part of the country. The headquarters of its emirate (the governing body of the region) is located in Abha (Emirate of Aseer Province at the Ministry of Interior 2017). The area of Aseer is about 81,000 km², and its population is estimated at 1,563,000 individuals (Emirate of Aseer Province at the Ministry of Interior 2017). According to the national regions Act, the director of the research setting is a member of the regional council in Aseer region. However, the regional councils have no

influence on the organisational structure of this setting. Each city, town or village in the Aseer region has an ambulance centre. The large cities, such as Abha and Khamis Mushait, have more than one ambulance centre.

4.4. Participant groups

Three groups of participants were included in this ethnographic study. The main targeted participant group, or the social group, to be studied were non-physician EMS providers. The estimated total population of this group in the participating region was 350 based on information provided by the central administration of the participating institution. The other two groups of participants were administrative and training staff. These two groups were included because their roles and positions within the study setting influenced the CPD of the EMS providers. The administrative leaders were in the position to make decisions or develop policies that could affect CPD, and the training staff were responsible for planning, implementing and evaluating all training and education programs and activities. Each phase of the study had specific participant groups. The participants in phase 1 were the non-physician EMS providers only, while phases 2 and 3 involved all three groups. The participants' distribution in the study phases is outlined in Table 5.

Table 5: Included and excluded participants in each phase

Data collection phase	Included participants	Excluded participants
Phase 1	• Non-physician EMS providers	• The pilot participants • Physician EMS providers • Administrative staff • Training staff
Phase 2	• Non-physician EMS providers • Administrative staff • Training staff	• Physician EMS providers • Administrative staff who were non-policymakers; worked in non-decision-making positions such as clerks, receptionists or drivers; or provided roles that did not influence CPD
Phase 3	• Non-physician EMS providers • Administrative staff	• Physician EMS providers. • Administrative staff who were non-policymakers; worked in non-decision-making

	• Training staff	positions such as clerks, receptionists or drivers; or provided roles that did not influence CPD

4.4.1. Participant selection

4.4.1.1. Inclusion criteria

The participants could be of any nationality, any gender and fluent in either Arabic or English language. The age of the participants ranged from 20 to 65 years old, which matched the employment age requirement in the participating workplace. Each participant group had specific inclusion criteria.

4.4.1.1.1. Group 1: EMS providers

All non-physician healthcare professionals at any professional or speciality level who provided clinical EMS roles in the participating region were eligible to participate. This included paramedics (EMS specialists), EMS technicians, pre-hospital emergency nurses, and any healthcare professional providing clinical EMS roles at any specialty level ranging from non-physician consultants to health assistants.

4.4.1.1.2. Group 2: The administrative staff

The eligibility criteria for this group were that they needed to be policy makers, decision makers or leaders at any leadership or managerial level whose roles affected EMS providers.

4.4.1.1.3. Group 3: The training staff

The included training staff needed to be in positions that involved planning, implementing, reviewing or providing training or educational activities or programs to EMS providers.

4.4.1.2. Exclusion criteria

4.4.1.2.1. Group 1: EMS providers

The main exclusion criterion for the EMS providers' group was being a physician EMS provider. Physicians were excluded because they have a higher level of education and they are medically qualified. Physicians also provide formal training activities to the EMS providers such as lectures and workshops, as well as informal clinical discussions.

4.4.1.2.2. Group 2: The administrative staff

The exclusion criteria for the administrative staff included non-policymakers; those working in non-decision-making positions such as clerks, receptionists or drivers; or those providing roles that did not influence the CPD of EMS providers.

4.4.1.2.3. Group 3: Training staff

There were no exclusion criteria.

4.5. Data collection

The process of ethnographic data collection and analysis is not linear; rather, it is iterative or a spiral, in which researchers keep circling around collecting and analysing data until they achieve their projects' aims (Holloway & Galvin 2015; LeCompte & Schensul 2013). This study involved three phases of data collection.

4.5.1. Phase 1: The online survey

This phase aimed to provide the researcher with an introductory overview of the EMS providers in the region, the processes and approaches to CPD in the participating workplace, and the perceptions of EMS providers about these processes and approaches. This phase assisted the researcher to plan the subsequent phases of data collection.

A bilingual online questionnaire was utilised in this phase. The expected time to complete this questionnaire was approximately five minutes or less. This questionnaire consisted of three parts: demographic questions; two groups of CPD questions; and five open-ended questions related to CPD and workplace culture (Appendix 1). This questionnaire was transformed to an online format using Survey Monkey. The development of this questionnaire was guided by the literature related to CPD and workplace culture (Collin et al. 2012; Knox et al. 2015; Schostak et al. 2010), as well as consultations with senior academics at the University of Adelaide. The aim of these consultations was to ensure the validity and reliability of the questionnaire content and to identify the appropriate statistical tests for analysis. These consultations also assisted in ensuring that the questionnaire complied with, and was able to achieve, the aim of the study.

The researcher developed this questionnaire and did not use other questionnaires because there were no suitable identified questionnaires relevant to the context of this study. This was in line with Fetterman (2010), who elucidates that questionnaires utilised in ethnographic studies need to be relevant to the culture or subculture being studied, and adapted based on researchers' knowledge about this culture. Also, Creswell (2014) reports that qualitative researchers are unlikely to utilise instruments or questionnaires that have been created by other authors. Most importantly, these questionnaires do not need to involve scales that have been nationally validated or tested; instead, they are validated locally by testing them on the particular research site and group (LeCompte & Schensul 2013).

4.5.1.1. Piloting

The questionnaire was piloted by participants outside the researched region to ensure that the items and the questions were understandable. The total number of participants in the pilot was nine. The eligible participants in the pilot were all EMS providers working at any regional

administration within the participating institution, excluding the participating region. The pilot participants received the questionnaire in an email from the Research Department at the central administration.

The pilot participants were asked to complete the questionnaire and comment on the time that they took to complete the survey; the vocabulary and language used; the overall format and flow of the questionnaire; difficulty with any of the questions; and any questions that they thought needed to be deleted or added. They were also asked to be mindful that these questions need to be related to the aim and objectives of the study. Their responses were analysed to formulate the final draft of the questionnaire. Their comments included only minor amendments, such as changing the wording of the first question and adding an open-ended question about the support that EMS providers receive for development.

4.5.1.2. Surveying the actual participants

Having refined the questionnaire, the researcher recruited participants for phase 1. The recruitment materials encompassed emails containing a link to the questionnaire (Appendix 2), participant information sheets (Appendix 3), invitation letters (Appendix 4), posters (Appendix 5) and information sessions. These recruitment materials were distributed to the proposed participants in both Arabic and English languages. The researcher translated these materials to ensure that Arabic and non-Arabic participants could understand their contents.

The participants received an email that contained the information sheets, the invitation letters and the link to the questionnaire from the coordinator. The researcher printed out the posters in different sizes (i.e. A3 and A4) and the invitation letters, and visited all EMS centres in the region to post them in the main areas of each centre, such as noticeboards, entrances, staff lounges and corridors. During these visits, the researcher ran information sessions for the EMS providers in each centre to explain the aim and the objectives of the study. The EMS

providers then had the opportunity to ask about, and discuss, many aspects of the study with the researcher.

The process of visiting the EMS centres enabled the researcher to perform descriptive observations (Figure 3) in all EMS centres in the region. This is based on the process of observations in ethnographic studies which will be detailed later in this chapter. These descriptive observations enabled the researcher to have an overview of the EMS and CPD contexts. This facilitated determining the eligible EMS centres for the focused and selective observations (Figure 3). That is, during these visits some EMS providers in different EMS centres discussed many aspects of and challenges related to the researched phenomenon with the researcher, either face-to-face or over the phone. These aspects were documented as preliminary field observation notes and as phone interviews, and used as data.

The online questionnaire remained opened for four weeks then closed for the analysis. The reason for keeping the questionnaire open for four weeks was to ensure flexibility in completing the questionnaire by providing the participants adequate time. This is to avoid burdening them in addition to their workload. Another reason was to enable the online questionnaire to reach to the maximum number of EMS providers, specially some of them might be off-duty or on holiday when the questionnaire was sent. During these four weeks, the EMS providers received two reminder emails. The total number of participants in the online survey was 133 out of 332, which constituted a 40% response rate. Then a preliminary data analysis was performed to guide the next phases of data collection.

4.5.2. Phase 2: Focus groups and individual interviews

Phase 2 of the study involved conducting focus groups and individual semi-structured interviews. The duration of each focus group ranged from 30 to 90 minutes, and the semi-structured individual interviews ranged from 30 to 60 minutes. The plan of this phase was

refined based on the preliminary analysis of the online questionnaire and the notes of the descriptive field observations. This was through focussing on the elements of the questionnaire that have issues or challenges after performing the preliminary descriptive statistical analysis.

A data collection guide was developed and used in this phase, and in phase 3, which involved brief points of the discussion in the focus groups and semi-structured interviews, and the protocols to guide the observations (Appendix 6). This guide was developed from the literature that discussed CPD and workplace culture (Knox et al. 2015; Schostak et al. 2010) and was used flexibly. That is, these dot points were used as a guide, while the discussions during the focus groups and interviews and participants' input triggered further discussion points. To refine the researcher's skills in managing focus groups and interviews, he conducted trial focus groups and interviews using this guide with his supervisors and colleagues.

The researcher recruited participants in this phase with the assistance of the coordinator. The recruitment materials included emails (Appendix 7), participant information sheets (Appendix 8), invitation letters (Appendix 9) and posters (Appendix 10). All these materials were provided in the Arabic and the English languages, and included full details about this phase. The coordinator, who was a 'gatekeeper', distributed these materials to all relevant staff, as this phase involved all the three participant groups.

Staff who were interested in participating in a focus group, from each participant group, contacted the researcher to arrange a convenient time and location. Though the recruitment materials involved details about this phase, the researcher also provided these details face-to-face to participants before each focus group and interview to ensure comprehensive understanding. The researcher handed over a consent form (Appendix 11) to each participant before commencing any discussion. All focus groups and semi-structured individual interviews were audio-recorded using two recording devices, which was explained clearly in the consent

form. A total of five focus groups were conducted with a total of 23 participants from all participant groups. The description of these focus groups is provided below in Table 6.

Table 6: Description of the group for each focus group

Focus group	Description of the group
Focus group 1	4 training staff participated in this focus group. They played an important role in CPD as they were responsible for conducting training activities to EMS providers in the region.
Focus group 2	5 administrative staff participated in this focus group. They were responsible of processing the financial requirements, flight tickets or any administrative procedure related to training and CPD and submit them to the central administration for final decision.
Focus groups 3 and 5	7 EMS providers from one of the metropolitan EMS centre participated in focus group 3, and 3 EMS providers from a remote EMS centre participated in focus group 5. EMS providers were the targeted participants by the study. Focus group 5 was conducted as per the participants' request.
Focus group 4	4 leaders from the Medical Administration, the Quality Department and the Ambulance Affairs Department participated in this focus group. They play a key role in EMS providers' CPD as they were the leaders who manage all clinical, professional, and quality processes of EMS in the region. They monitored and supervised the performance and competencies of EMS providers in the region. This focus group was conducted based on recommendations from the participants of focus group 1.

The study also involved semi-structured individual interviews with all participant groups. The semi-structured individual interviews enabled participants to add some information freely away from the group, which provided them an opportunity to add their own thoughts especially if they are unable to attend the focus group (Baillie 2019). The questions that were discussed in the semi-structured individual interviews were guided by focus group inputs. This was through enlightening the researcher on some new points that were not considered previously. There was a total of 13 individual interviews from all participant groups distributed as follows: six interviews with the EMS providers group, four with the administrative staff and three with the training staff. The reason for interviewing different

groups is to have a comprehensive understanding of the researched phenomenon from different perspectives, because each group had a key role in influencing CPD for EMS providers as detailed in section 4.4. Each focus group and individual interview was given a code number.

As the researcher's contact details were provided in all recruitment materials, some participants preferred to contact him anonymously to provide information related to the researched phenomenon. For example, an EMS provider rang the researcher and provided him some information related to CPD. An administrative leader documented some notes about CPD in the region, photographed these notes and sent them to the researcher. All focus groups, semi-structured individual interviews, phone calls and the provided notes were categorised into three groups based on the participant groups (Table 7).

Table 7: Categorisation of the focus groups and interviews (FG = focus group)

Category	Focus group & interview codes	Number	Total
EMS providers	FG3-EMS, FG5-EMS, Interview5-EMS, Interview7-EMS, Interview8-EMS, Interview10-EMS, Interview11-EMS, Interview12-EMS and the phone call from an EMS provider	FG = 2 Interview = 6 Other = 1 (the phone call)	9
Administrative staff	FG2-Admin, FG4-Admin, Interview3-Admin, Interview4-Admin, Interview9-Admin, Interview13-Admin, Interview14-Admin and the notes from an administrative leader	FG = 2 Interview = 4 Other = 1 (the leader's notes)	7
Training staff	FG1-Train, Interview1-Train, Interview2-Train and Interview6-Train	FG = 1 Interview = 3	4

4.5.3. Phase 3: Focused and selective field observations and document collection

The last phase of the study was the focused and selective field observations (Figure 3). These observations were performed last because by this time the researcher had an overview of the context of CPD and workplace culture in the participating workplace and the staff had become familiar with, and trusted, the researcher.

Field observations in ethnographic studies are performed through three main stages: 'descriptive', 'focused' and 'selective' (Spradley 2016b). 'Descriptive' observations is the initial stage, which is characterised by broad and non-systematic observations aiming to explore the context and identify which events need more focus (Roper & Shapira 2000; Spradley 2016b). So, the descriptive observations for this study were performed when distributing the recruitment and participation materials for phase 1. Then, 'focused' observations are more focused, during which a researcher attends to the significant aspects in the environment and ignores others that are not important (Roper & Shapira 2000; Spradley 2016b). For example, attending and observing some training activities or clinical discussions between EMS providers while ignoring their personal conversations. 'Selective' observations are the final stage, involving narrower and sharper observations by concentrating on certain attributes of events (Roper & Shapira 2000; Spradley 2016b). The reason for performing selective observations at this phase was to enable collecting rich and concentrated data as the researcher became more familiar with the research setting, the participants, and their roles with relation to the researched phenomenon. Figure 3 summarises these phases.

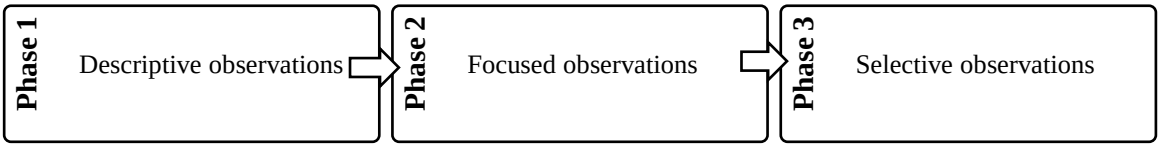

Figure 3: Participant observation phases based on Roper and Shapira (2000), and Spradley (2016b)

The plan of this phase was refined based on the data obtained from the previous phases. While there were no identified observation tools or checklists relevant to the context of this study, the researcher developed a data collection guide (Appendix 6) that guided the observations and the types of workplace documents that needed to be collected. The observations were unstructured, and the data were documented in the form of descriptive notes arranged chronologically and some photos. The participants were informed and consented (Appendix 11) that the researcher would observe their centres and obtain de-identified photos.

There were three *places* that had been observed in this phase: the administrative department, the training centre and EMS centres. The EMS centres included one metropolitan and one remote centre. The total time of the observations was distributed between all these departments by spending 20% of the total observation time in the administrative department, 40% in the training centre and 40% in the EMS centres (20% in the metropolitan and 20% in the remote centre). The 'remote' EMS centre was not situated in a geographically isolated area; the word 'remote' just means that this centre was far from the administrative department. The basis of this time distribution was the significance of these departments in the researched phenomenon based on the notes of the descriptive field observations; the preliminary analysis of the online questionnaire; and the input of the focus groups. Involving all these departments in the observations ensured that the researcher became immersed in the culture of CPD for EMS providers from different perspectives.

The observations in this phase included morning and night shifts; weekdays and weekends; and public holidays such as the national day. This was to ensure the availability of the researcher in the field during different events and circumstances.

During the observations in the administrative department, the researcher was situating in the offices of the targeted staff. For the training centre, the researcher observed the training rooms and storerooms, and the staff. When observing the EMS centres, the researcher was locating in the staff lounge, as it was the main place in each EMS centre where EMS providers spent their time. The researcher also rode in an ambulance with EMS providers, observing their informal learning discussions.

A total of 300 hours of focused and selective field observations were performed throughout nine weeks. These included observing and attending some training sessions, observing the participants' routine *activities* in relation to CPD, and having some discussions

with them about CPD. The participants' discussions between each other, their workloads and their activities during their free time were also observed. During this phase, the researcher also conducted some informal discussions with the participants about some aspects of the researched phenomenon. The overall workplace environment, such as the availability and the status of the resources and facilities that were available for CPD, were also sighted. The data from this phase included a document of 97 pages of observation notes and a great deal of workplace photos.

4.5.3.1. Workplace documents (written artefacts)

During observations, some non-confidential workplace documents that were relevant to the researched phenomenon were collected from the observed places, that is, the administrative department, the training centre and the metropolitan and remote EMS centres. The collected workplace documents included details of the organisational structure; some statistical reports about EMS staff, centres and care provided in the region; some policies and procedures about general financial matters; some letters related to CPD; a collaboration agreement for training with a university in the region; different forms related to EMS practice; and a manual of EMS protocols.

4.6. Ethics approval and ethical considerations for the study

Before commencing the study, ethics approval was obtained from the Human Research Ethics Committee at University of Adelaide (Appendix 12). Similarly, approval was obtained from the central administration of the participating institution (Appendix 13). The approval from the participating institution came with the condition that a coordinator would be assigned who would accompany and assist the researcher throughout all phases of the data collection. These approvals were granted after assessing all likely ethical considerations such as maintaining and ensuring safety, confidentiality, anonymity, privacy and autonomy for participants.

There were some general ethical considerations shared across all phases of the study that were considered and protected, complying with the advice of the National Health and Medical Research Council (National Health and Medical Research Council, Australian Research Council & Universities Australia 2019). Participation in all phases of the study was voluntarily. Participants were informed that they had the right to withdraw from the study at any time without concern for any consequences. There were some specific ethical considerations concerned with each phase of the study.

4.6.1. Ethical considerations for phase 1 (the online survey)

The likely burden on participants was the time that they spent completing the questionnaire. To mitigate this burden, this approximate time was explained in all recruitment materials. Also, participants were provided three weeks to answer the questionnaire and they were offered an option to save and continue the questionnaire at a later date within these three weeks. This was to ensure the flexibility of completing the questionnaire.

The participants' anonymity and privacy were protected. The online questionnaire did not include questions that required participants to disclose any personal or identifiable information.

4.6.2. Ethical considerations for phase 2 (the focus groups and interviews)

The burden of participating in focus groups and interviews was the time that participants spent attending any of these activities. To reduce the burden, the required duration of these activities was clarified in all recruitment materials, and participants were provided the opportunity to schedule the time of their focus groups and interviews. This was to avoid impacting on the work, social or family commitments of participants. As the questions in the focus groups and interviews were general, it was not expected that any participant would become distressed. However, participants were informed that if they did become upset then they could withdraw

from the discussion. If these participants required further support, the researcher and the coordinator discussed what to do based on the institution's policy.

The participants' confidentiality, anonymity and privacy were protected. The focus groups and semi-structured individual interviews were conducted privately. The real names of participants in the focus groups and semi-structured individual interviews were not provided; instead, they were replaced with code numbers which were used to present the findings. Due to the large amount of audio-recorded focus groups and interviews, assistance was required from an external transcriber. The transcriber was required to sign a bilingual confidentiality agreement (Appendix 14) before proceeding. This process was clarified in the ethics application.

The participants' informed consent was obtained voluntarily. The researcher asked the participants to sign consent forms and reminded them that they could choose to leave at any time if they did not want to participate without any consequences.

4.6.3. Ethical considerations for phase 3 (the observations)

There were no safety issues during the observations. The observations were performed in a safe environment where the researcher did not impede any staff who provided patient care. The researcher did not access any confidential, unsafe or private zones that he was not permitted to enter, complying with the advice of Angrosino (2007).

For participants' privacy, the data and the photos that were obtained during the observations were not presented in a way that could identify any individuals. During observations, the researcher maintained a respectful distance. In addition, the researcher did not criticise, evaluate or interfere with the participants' work performance. The researcher did not observe any clinical provision of EMS.

As for the documents, they were non-confidential and did not identify any individuals. The voluntary collection of these documents was explained clearly to the central administration of the participating institution in the ethics application. Also, the researcher sought permission from the administrative department and from each department or centre before collecting any documentation.

4.7. Verbatim transcribing of the focus groups and interviews

All focus groups and individual interviews were transcribed into written texts by an external transcriber. The researcher reviewed all transcribed texts by listening to each recording and comparing it with its transcribed text. All transcribed interviews were returned to their participants to provide them an opportunity to read the texts and confirm that what had been transcribed reflected their thoughts. This was to ensure the credibility of data as advised by Thomas and Magilvy (2011), which will be explained later in this chapter (Section 4.10.1). Participants were notified that they had two weeks to respond, and participants who did not reply implied their confirmation.

4.8. Translation and language aspects

The observation notes were documented by the researcher in the English language. The focus groups and interviews were conducted and transcribed in the Arabic language, which is the native language of the researcher and participants. This process enabled the participants to be comfortable, natural and fluent in expressing their exact thoughts without having to deal with language barriers. That was because they were communicating and being communicated in their native language. This increased the quality of data because participants did not avoid expressing significant data by searching for, and using, familiar English expressions due to language issues.

The transcribed focus groups and interviews were coded in the Arabic language. Selected excerpts were translated into the English language by the researcher, as he is an Arabic-English bilingual. There was no literal translation of the entire texts. Al-Amer et al. (2016, p. 155) recommended researchers who interview participants in the Arabic language to analyse their data in the source language and 'and carry out translation at a higher level such as the thematic level'. This process was essential to maintain the essence of the data and to avoid the possibility of altering or missing the participants' significant meaning when the 'the whole narrative' was translated initially (Al-Amer et al. 2016). The researcher ensured the validity of the translated excerpts by asking an independent translator to compare them with the original texts, complying with the recommendations of Sperber (2004).

4.9. Data analysis

The process of analysing ethnographic data is challenging and complex, because it is time consuming (Roper & Shapira 2000), as ethnographic records involve a massive amount of field observation notes (Leininger 2006; Murchison 2010; Roper & Shapira 2000). The ethnographic literature did not identify explicit, compatible and unified formulas, instructions or methods to guide this process (Angrosino 2007; Gobo & Molle 2017; Hammersley & Atkinson 2007; Jones & Watt 2010; Leininger 1985; Roper & Shapira 2000). Therefore, data analysis can be performed in various ways by adopting different theoretical frameworks, procedures or methods. That is, ethnographic data can be analysed by a coding and thematic analysis approach (Jones & Watt 2010; LeCompte & Schensul 2013; Leininger 1985; Murchison 2010; Roper & Shapira 2000); discovering cultural themes through domain, taxonomic and componential analysis (Spradley 2016b); using descriptive analysis to identify patterns (Angrosino 2007; Fetterman 2010); or adopting 'theoretical analysis' (Angrosino 2007).

4.9.1. Analysis of phase 1: the online questionnaire

The online questionnaire was analysed using descriptive statistics and computed via SPSS (Statistical Package for the Social Sciences) version 25. There was no intention to provide more advanced or highly developed statistical tests and analyses based on the aim of this questionnaire, which complied with the purposes of utilising questionnaires in ethnographic studies, as explained previously (see Section 4.5.1, pages 53 & 54). This meant that there were no other forms of statistical tests applied in this research. An accredited statistician at the University of Adelaide assisted in analysing this questionnaire.

4.9.2. Data analysis of phase 2: the focus groups and interviews

Thematic analysis was used to analyse the focus groups and individual interviews by following the steps set out by Holloway and Galvin (2015). Holloway and Galvin (2015) listed structured steps for analysing and interpreting ethnographic data. These steps are: (1) ordering and organising the data; (2) reading data several times and thinking about them; (3) coding the data; (4) summarising the codes into larger groupings; (5) searching for patterns in the data and recognising themes; (6) revealing disparities in the data that are not compatible with the rest; and (7) integrating the final findings with the related literature. These steps help with organising the immense amount of collected data, which assisted the researcher to become immersed in them. This facilitated interpreting meanings of this data. These steps were also utilised to structure the data from phase 3 to contextualise the *social situation*. The process of data analysis was as follows.

4.9.2.1. Ordering and organising the data

In this step, the files of the transcribed focus groups and individual interviews were named with their code numbers, as explained previously in Table 7. The data for each group were saved in a computer folder labelled with the name of the group. The observation notes were arranged

and organised in a Word document. When documenting the observation notes, the researcher reflected on them, which facilitated the coding process by developing a profound understanding. The observation photos were saved in folders that were organised and named based on the place and time that these photos were taken. Each workplace document was given a code number, which was documented on a sticky note and attached to the top of each document.

4.9.2.2. Reading data several times and thinking about them

The next step after ordering and organising data was reading them several times. Though the researcher had an overview of the data as he reviewed all transcribed focus groups and interviews and documented the observation notes, this step was to ensure immersion in the data. While reading the data, the researcher wrote comments and notes on the margin of each document to facilitate the coding process by developing preliminary ideas about the codes.

4.9.2.3. Coding the data

After becoming immersed in the data and developing ideas about the codes, all data then were coded. Each focus group and individual interview, and the observation notes were coded line by line individually, sometimes using MAXQDA software and sometimes manually. This software facilitated coding Word documents as well as photos. After completing the coding for each type of data, the codes were exported into Excel sheets. The coding step resulted in several themes.

4.9.2.4. Summarising the codes into larger groupings

The next step was summarising the themes from the previous step into larger groupings. Within each type of data, the themes that were repeated and shared common aspects were combined into one larger theme. For example, the themes ‘centralisation of training activities’ and ‘distant locations of CPD activities’ were two different themes. However, they were combined into one

larger theme because they shared the same idea, which was centralisation. Then, these larger themes from each group of participants were merged together. This process was performed for all of the data. These groupings represented the sub-themes in the findings.

4.9.2.5. Searching for patterns in the data and recognising themes

After grouping the themes, patterns in the data were identified. Patterns are commonalities that are repeated across the data. The achievement of data saturation earlier in the data collection assisted in identifying these patterns. Data saturation is the adequacy of data where no new ideas or information emerge from data, which is described to be a 'gold standard' for the quality of qualitative research (Hancock et al. 2016). For example, earlier in the data collection in this study, the issue of centralisation of training activities and the positive attitudes of all participants towards CPD appeared frequently. The identified patterns were coded to be the major themes in the findings.

4.9.2.6. Revealing disparities in the data that are not compatible with the rest

The outlier data were identified. These outliers represented individual experiences and were not compatible with the rest of the data. For example, a participant in one of the interviews indicated that he was not convinced about the importance of training courses because he thought that these courses were purely theoretical with no practical benefits for EMS practice (Interview 5). Whereas the rest of the data indicated that all other participants, across all groups, were aware of the value and the significance of training. Such data were identified critically and excluded from the findings.

4.9.2.7. Integrating the final findings with the related literature

This phase was applied in the discussion when the findings of this study were compared to the literature.

4.9.3. Data analysis of phase 3: the observation notes and documents

Having structured the data from phase 3 using the steps of Holloway and Galvin (2015), the framework of Spradley (2016b) was then utilised to contextualise the *social situation* of the participating workplace. The *social situation* was presented using the dimensions developed by Spradley (2016b), as explained in Section 1.8. Presenting the *social situation* of this study using the framework of Spradley (2016b) enables readers to understand and engage with the cultural context of this study.

4.10. Appraisal of quality in ethnographic studies

It is important to assess the quality of ethnographic studies, like any other qualitative studies, to ascertain the trustworthiness of their findings based on appropriate justifications for utilising the methodology and methods (Antwi & Hamza 2015; Thomas & Magilvy 2011). A number of models and frameworks have been developed to critique the quality of such studies (Clissett 2008; Thomas & Magilvy 2011). Each framework assesses whether a study has achieved a number of criteria and principles. Some of these principles are credibility, transferability, dependability and confirmability (Clissett 2008; Thomas & Magilvy 2011). Triangulation and reflexivity are also reported to be part of these principles (Cruz & Higginbottom 2013; Polit & Beck 2010; Whittemore, Chase & Mandle 2001).

4.10.1. Credibility

Credibility is the principle of *truth value* (Schou et al. 2012; Thomas & Magilvy 2011). This principle is defined by Polit and Beck (2008, p. 751; 2010, p. 551) as ‘the criterion for evaluating integrity and quality in qualitative studies, referring to confidence in the truth of the data; analogous to internal validity in quantitative research’. Credibility indicates the genuineness and reliability of the qualitative research (Liamputtong 2013). Qualitative research is deemed credible when the descriptions and interpretations of participants’ data are presented

precisely and participants are able to immediately recognise that their viewpoints have been reflected (Clissett 2008; Thomas & Magilvy 2011).

The credibility of the individual interviews was ensured by returning the transcribed interview texts to the participants for feedback. This process enabled the participants to confirm that the transcribed texts reflected their real experiences and gave them an opportunity to provide further feedback. Also, the descriptive observation notes were documented immediately in a chronological way, so the data were collected in a timely basis to avoid missing any significant data.

4.10.2. Transferability

Transferability is the principle of *applicability* (Schou et al. 2012; Thomas & Magilvy 2011), which is equivalent to generalisability in quantitative research (Liamputtong 2013; Polit & Beck 2010). Transferability is defined as the usefulness of applying the study findings in other contexts, settings or to other groups (Clissett 2008; Green & Thorogood 2018; Liamputtong 2013; Polit & Beck 2010; Thomas & Magilvy 2011). Transferability is achieved by providing intensive details about the population involved in the study through describing the demographics of the participants and the geographic characteristics of the research (Thomas & Magilvy 2011). Also, the setting, time and culture where the study has taken place need to be reported with rich description (Clissett 2008).

An intense description of the study settings, participants and their routine activities in relation to the researched phenomenon is provided in Section 5.3. This process will assist readers to determine the usefulness of transferring the findings of this research into their contexts based on the thick description reported about the informants, the context of the study and the time of conducting the study.

4.10.3. Dependability

Dependability is the standard of *consistency*, *stringency* or *stability* (Polit & Beck 2008, 2010; Schou et al. 2012; Thomas & Magilvy 2011). Dependability means consistent findings would be achieved when replicating the research in similar contexts with similar informants (Clissett 2008). To achieve dependability, researchers need to take into account a question: would the research findings be replicated if the study was repeated in a similar context with similar participants (Polit & Beck 2008, 2010)? To do so, researchers need to report, and justify, the utilised methodology, which needs to be presented in thick descriptions to enable readers to track the process (Clissett 2008; Liamputtong 2013). So, the methodology and the methods of this research have been presented in dedicated chapters with justifications.

4.10.4. Confirmability

Confirmability is the criterion of *objectivity* or *neutrality* in interpreting the data from qualitative studies, which means the degree to which the data are reflected in the findings and conclusion of a study (Clissett 2008; Polit & Beck 2010). This makes it clear that interpretations and findings are undoubtedly linked to the data and do not stem from researchers' imaginations (Liamputtong 2013). For confirmability to be achieved, informants' voices and the conditions of the research question must be reflected in the findings rather than researchers' perspectives and biases (Polit & Beck 2008, 2010). Confirmability was ensured in this study by identifying and describing the researcher's perceptions and background about the researched phenomenon; clarifying which theorists and theories inspired the data analysis; and ensuring that the themes emerged from the data rather than being prepared in advance, which is in line with the steps of Schou et al. (2012).

4.10.5. Triangulation

Triangulation refers to the process of utilising more than one method to gather and interpret data about the same phenomenon to provide a representative and accurate coverage of reality from different perspectives (Polit & Beck 2008, 2010). The idea of triangulation stems from the notion that reading from two sources enables us to identify the truth more precisely than from one (Green & Thorogood 2018). Triangulation is a core and a powerful process to consolidate the validity, credibility and the authenticity of qualitative studies by covering various sources of data and perspectives, and offering extra ways of creating evidence (Creswell 2014; Fetterman 2010; Liamputtong 2013; Nelson, Abendroth & Lynch 2014). Triangulation is also utilised to overcome biases and to 'offset' any weaknesses in data if a single perspective or method of data is relied upon (Green & Thorogood 2018). This enables 'richness' of data description to create valid and credible meaning (Whitehead 2013).

The common forms of triangulation espoused in social sciences and health research include triangulation of methods, data or sources, theories and researchers (Liamputtong 2013). Triangulation of methods implies utilising different data collection techniques such as observations and interviews (Polit & Beck 2010, pp. 497–498). The triangulation of data indicates collecting data in different points in time from multiple places and diverse levels or types of people about the same phenomenon (Polit & Beck 2010). Generally speaking, triangulation can be achieved by applying multiple data collection activities in a number of contexts in one study (Nelson, Abendroth & Lynch 2014). In terms of ethnographic research, Roper and Shapira (2000) ascertained that, if ethnographic studies involve data from observations, participant interviews and written documents, their findings are deemed to be triangulated.

There were a number of triangulation methods applied in this study. The first was triangulation of places, as the data were collected from three places: the administrative department; the training centre; and the metropolitan and the remote EMS centres. Secondly, there was triangulation of participants, as three categories of participants were involved: the administrative staff; the trainers; and the EMS providers. The third level of triangulation was the collection of various types of data, encompassing quantitative data, which was the online questionnaire, as well as qualitative data, which involved focus groups; semi-structured individual interviews; observation notes and photos; and workplace documents. The last level of triangulation was time, as the studied field was observed in different points in time, as explained in the data collection section (see Section 4.6.3).

While this study involved different types of data, certain steps were followed for each type to ensure rigour. Table 8 summarises how the rigour of different types of data was ensured in this study.

Table 8: How the rigour of the data was ensured in this study

Type of data	How
Online questionnaire	• Obtaining the questions and the items from the literature • Including closed as well as open-ended questions • Asking succinct, direct and clear questions • Providing explanations and examples of unclear statements • Providing a mix of positively and negatively worded statements • Providing spaces for alternative responses • Consulting senior academics • Pilot testing of the questionnaire
Observations	• Providing intense description of the study settings, participants and activities. • Documenting the observation notes immediately in a chronological way

	• Triangulating time (i.e. attending morning and evening shifts; workdays and weekends; and public holidays) • Triangulating places (i.e. observing the administrative department; training centres; and metropolitan and remote EMS centres) • Triangulating participants (i.e. EMS providers, administrative leaders and training staff)
Focus groups and semi-structured individual interviews	• Preparing discussion points based on the study aims and objectives, which were obtained from the literature • Returning the transcribed texts of the individual interviews to the participants for confirmation and feedback. • Triangulating participants.
Workplace documents	• Collecting workplace documents relevant to the study

4.10.6. Reflexivity

Reflexivity is essential in qualitative research so that researchers are aware that their backgrounds, perceptions, assumptions and identities have an influence on the research process as they become part of the data they are collecting (Lathlean 2015; Polit & Beck 2008; Thomas & Magilvy 2011). Draper (2015) explains that qualitative research cannot be devoid of the influences of researchers' assumptions, values and beliefs about the researched phenomena. Therefore, qualitative researchers must acknowledge and disclose their experiences, personal history and perceptions about the researched phenomenon that could affect their research 'up front' (Draper 2015; Liamputtong 2013). This increases the credibility of the findings by disclosing intellectual and personal biases explicitly (Liamputtong 2013).

Reflexivity is relevant in qualitative healthcare-related research studies, especially if the researchers have healthcare backgrounds (Lathlean 2015). That is because researchers are considered as discerning and valuable research tools in the process of data collection and lenses for interpretation (Draper 2015; Hodgson 2000). Although this may result in subjectivity and bias, which may compromise the rigour of the research, it enables the data to be evaluated

(Hodgson 2000). Researchers' standpoints in terms of their demographics, past experiences or ethical worldviews can influence the research outcomes in three main areas: the researched phenomenon, the context and the participants (Gullion 2016). So, the researcher's assumptions about the study (Section 1.9), and the ontological and epistemological positions that informed the design of this research (Section 3.3) have been declared.

4.11. Chapter summary

This chapter has provided detailed descriptions of the methods used for this study. This study was conducted in four phases using a focused ethnographic design. The study was conducted in one of the main institutions that provides EMS to the community in Saudi Arabia. There were three groups of participants: EMS providers, and administrative and training staff. Ethical considerations were respected by obtaining the required ethics approvals. Having obtained these approvals, the researcher obtained permission to access the research settings to collect the data. The data collection process was performed in three phases. The first phase was an online survey, including a piloting phase. The second phase involved focus groups and individual interviews. The last phase was performing field observations and collecting some non-confidential workplace documents. All phases complied with the philosophical underpinnings of ethnographic data collection. The quantitative data from the online survey were analysed using descriptive statistics, and the qualitative data were analysed using the steps set out by Holloway and Galvin (2015) and the framework of Spradley (2016b). The quality of this research was appraised using the principles of credibility, transferability, dependability, confirmability, triangulation and reflexivity. The next chapter presents the findings of this study.

Chapter 5: Findings

5.1. Introduction

Having collected and analysed the data, this chapter now presents the findings from the study. The findings are presented in four sections. These sections are: (1) statistical overview of data from phase 1; (2) *social situation* based on data from phase 3; (3) perspectives of the administrative and training staff on EMS providers' CPD based on data from phases 2 and 3; and (4) the EMS providers' perspectives on their practice and workplace environment based on data from phases 2 and 3. The *social situation* section has been presented second, even though it is based on data from phase 3 of the study, to provide a cultural overview of the context of the study, which then enables the reader to understand and become engaged in this context. The presentation of these findings uses a framework from the work of Spradley (2016b), and Holloway and Galvin (2015), as detailed in Section 4.9.2 and Section 4.9.3. At the end of the chapter all the findings sections will be synthesised.

5.2. Statistical overview of data from phase 1

This section reports the results of the online questionnaire. This questionnaire was analysed using descriptive statistics.

5.2.1. Demography of the participants

The total number of non-physician EMS providers in the region was 332. From those, the number of participants who completed the online survey was 133, which constitutes a 40% response rate. The data has been cleaned to remove outlier results. A total of 107 participants (32%) were included after cleaning the data.

All participants were male, because there were no females providing EMS roles in the participating institution. The EMS centres in the participating region were divided into metropolitan and remote based on their distance from the administrative department. There

were similar numbers of participants from metropolitan centres (n = 57, 53.3%) and remote centres (n = 50, 46.7%). As for their qualifications, the majority of the participants (n = 70, 65.4%) had diplomas in EMS, and only 12 (11.2%) had bachelor's degrees, either in EMS or in nursing. Some of the participants (n = 22, 20.6%) had associate degrees, also either in EMS or in nursing.

Because the highest educational level for most of the participants was a diploma, most of them were employed at the professional level of technician, either emergency medical technicians (EMTs) (n = 81, 75.7%), or nursing technicians (n = 11, 10.3%). Only 6 participants (5.6%) were categorised as paramedics, or so-called EMS specialists, and only 1 participant (0.9%) was categorised as a nursing specialist who provided an EMS role. The majority of the participants (n = 106, 99.1%) had more than 1 year of professional experience. That is, 36 of them (33.6%) had between 1 and less than 5 years' experience, and 36 (33.6%) had 5 to 10 years' experience. The number of participants who had more than 10 years' experience was 34 (31.8%). Table 9 summarises the demographic characteristics of the participants.

Table 9: Demographic characteristics of the participants

Demographic information	n (%)
Centre type	
Metro	57 (53.3%)
Remote	50 (46.7%)
Gender	
Male	107 (100.0%)
Education level	
Diploma	70 (65.4%)
Associate degree	22 (20.6%)
Bachelor's degree	12 (11.2%)
Other	3 (2.8%)
Professional level	
Paramedic	6 (5.6%)
Nursing specialist	1 (0.9%)
Emergency medical technician (EMT)	81 (75.7%)
Nursing technician	11 (10.3%)
Other	8 (7.5%)

Years of experience	
Less than 1 year	1 (0.9%)
1 to 5 years	36 (33.6%)
5 to 10 years	36 (33.6%)
More than 10 years	34 (31.8%)

5.2.2. The participants' views about the opportunities and types of CPD within their workplace

Most of the participants (n = 71, 66.4%) had no idea about the required number of CPD hours per year (Figure 4). As a result, 58.4% of the participants responded that they 'never participated' in a wide range of CPD activities during the last year, which was (2016) (Figure 5). This implies that the participants had few opportunities to participate in various types of CPD activities. The possible CPD activities that the participants reported that they never participated in during 2016 included: lectures 47 (43.9%); workshops 68 (63.6%); conferences 84 (78.5%); online CPD activities 65 (60.7%); writing papers for journals 101 (94.4%); and reviewing case studies 83 (77.6%). Table 10 provides details about this result.

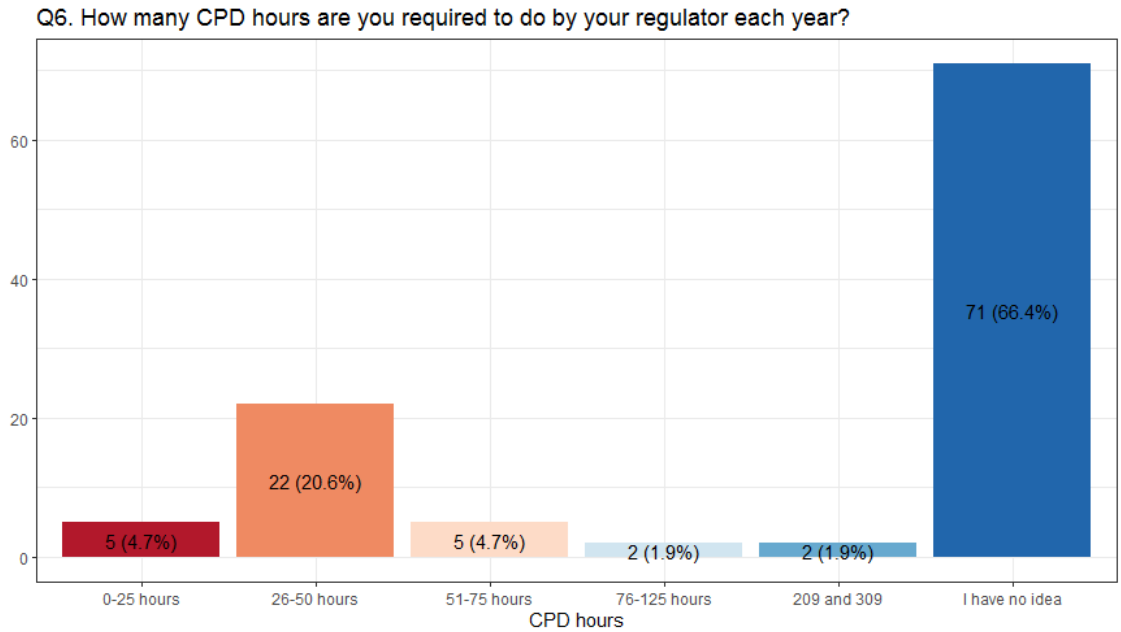

Figure 4: Participants' ideas about the required CPD hours

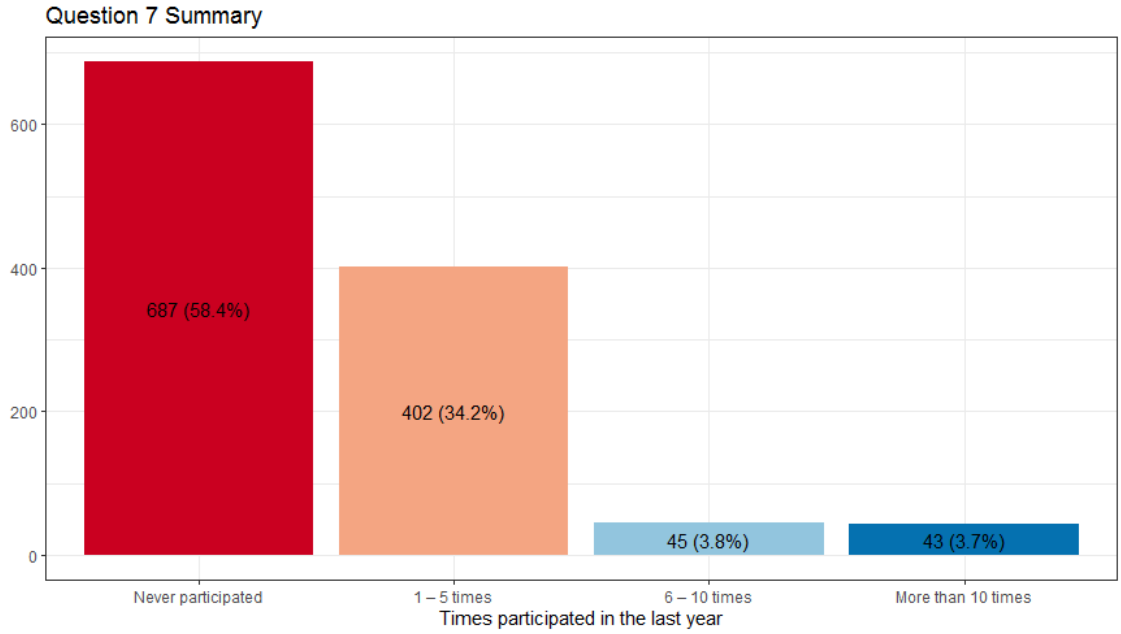

Figure 5: The frequency of participants' engagement in CPD activities in the last year (2016)

Table 10: The participants' engagement in various types of CPD activities in the last year (2016)

Participation in various types of CPD activities	**Frequency (%)**
Question 7	
What types of CPD activities have you participated in in the last year?	
Lectures	
Never participated	47 (43.9)
1 to 5 times	53 (49.5)
6 to 10 times	5 (4.7)
More than 10 times	2 (1.9)
Workshops	
Never participated	68 (63.6)
1 to 5 times	37 (34.6)
6 to 10 times	1 (0.9)
More than 10 times	1 (0.9)
Conferences	
Never participated	84 (78.5)
1 to 5 times	22 (20.6)
6 to 10 times	1 (0.9)
More than 10 times	0 (0.0)
Writing for journals	
Never participated	101 (94.4)
1 to 5 times	5 (4.7)
6 to 10 times	1 (0.9)
More than 10 times	

Case studies review	
Never participated	83 (77.6)
1 to 5 times	18 (16.8)
6 to 10 times	3 (2.8)
More than 10 times	3 (2.8)
Online CPD activities	
Never participated	65 (60.7)
1 to 5 times	29 (27.1)
6 to 10 times	7 (6.5)
More than 10 times	6 (5.6)
Question 7 summary	
Never participated	687 (58.4)
1 to 5 times	402 (34.2)
6 to 10 times	45 (3.8)

The clinical roles of EMS practice were reported to be one of the workplace factors that inhibited some of the participants (n = 56, 57.2%) from active engagement in CPD. This result was calculated by combining the responses of 'agree' and 'strongly agree' about this statement as they represented the participants' agreement (Figure 6). Some participants (n = 63, 64.3%) reported that their workplace did not provide access to online evidence-based learning resources. The responses of 'disagree' and 'strongly disagree' were combined as they represented the participants' disagreement with this statement (Figure 7).

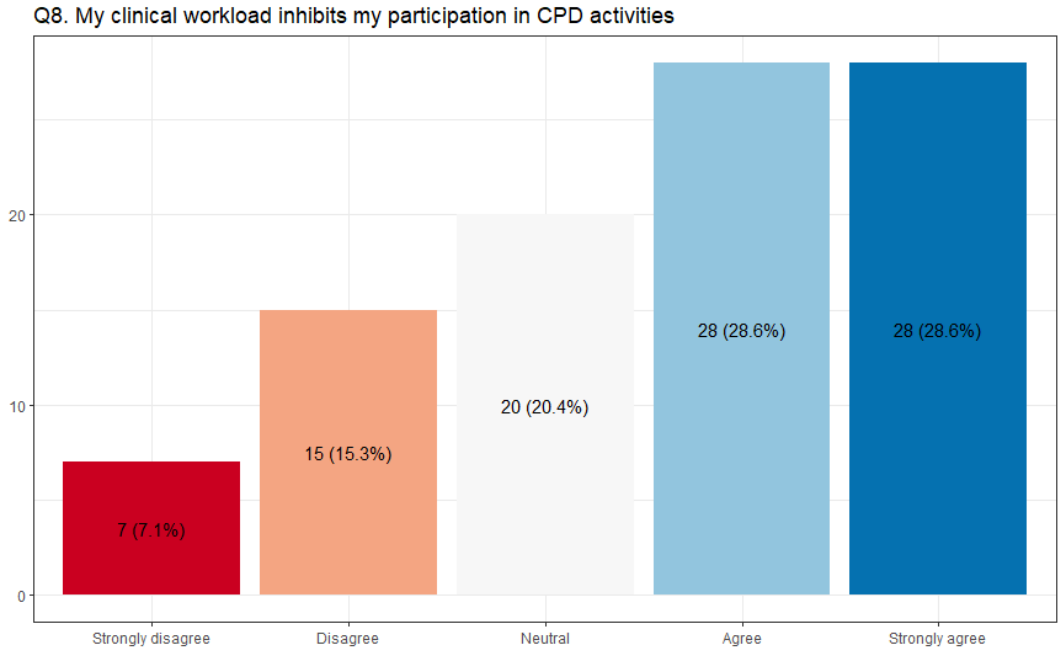

Figure 6: The influence of the clinical roles of the participants on their CPD

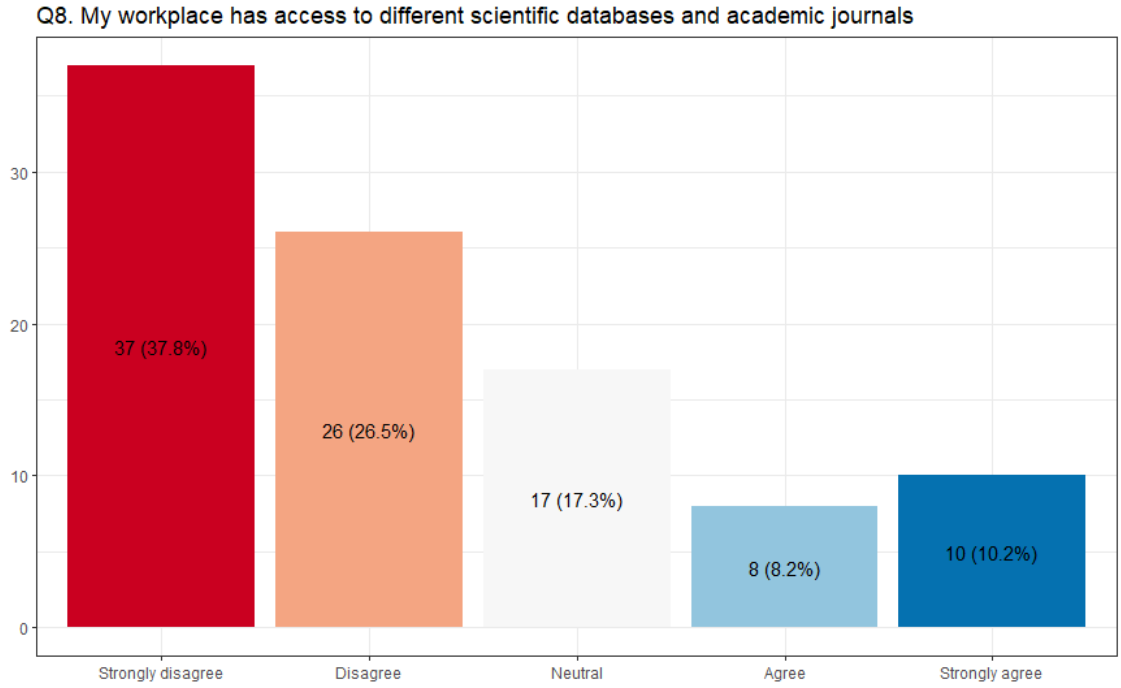

Figure 7: The ability of the participants to access online evidence-based learning resources

This statistical overview has outlined the researched phenomenon within the context of the participating institution. The meaning of these statistical results will be interpreted through the qualitative data in the following sections of this chapter.

5.3. *Social situation* based on data from phase 3

Having provided a statistical overview of the researched phenomenon, this section presents extensive and detailed descriptions of the *social situation* of the participating workplace. Describing this *social situation* enables the reader to understand and feel engaged with the culture of this workplace. As outlined in the Chapter 4, the study was conducted in the main institution that provides public EMS to the community in Aseer region in Saudi Arabia. However, this institution reports to a central administration that possesses higher authority and is located in the capital city Riyadh. The *social situation* of the participating workplace is presented under three main dimensions: the *places*, the *actors* and the *activities*, which are based on the observed places. Figure 8 illustrates the *social situation* of the study.

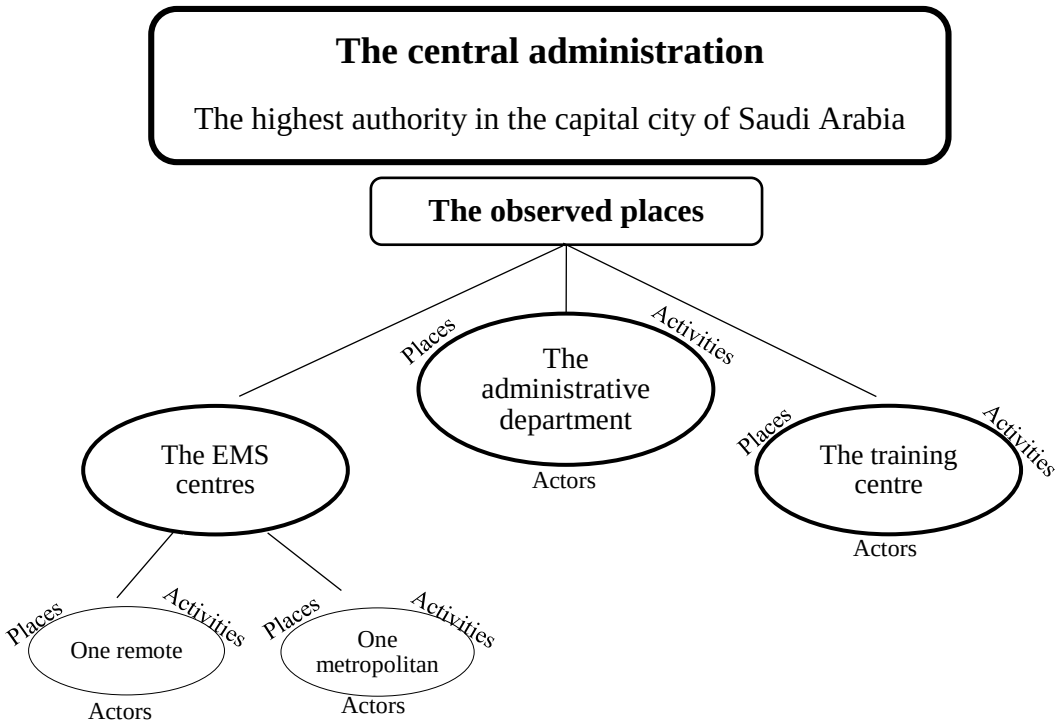

Figure 8: The social situation based on the observed places within the participating workplace

5.3.1. The places

This section provides details about the physical and organisational aspects of the participating institution. There were three different places within this institution where data was collected. These places were the administrative department, the training centre and EMS centres/ambulance stations. The organisational and physical structures of these places are described here to demonstrate the physical communications and the authority lines within them. The resources and facilities that contribute to CPD are also highlighted.

5.3.1.1. <u>Place 1: The administrative department</u>

The administrative department of the participating institution possessed administrative authority over all staff in the region, including the EMS providers. This administrative department comprised the regional director as well as the administrators, departments and units that manage all administrative, financial, professional and technical aspects of EMS in the region.

The Medical Administration and the Ambulance Affairs Department are the departments that manage the professional and technical aspects of EMS within the participating institution. Therefore, the activities of the actors in these departments have the potential to influence the CPD of EMS providers. During the data collection, the participating institution had no definite organisational structure. This institution was in the process of developing an organisational structure and they had a tentative one (Document 20). This tentative organisational structure showed that the director of the regional administration was the head of the organisational hierarchy in the region. Figure 9 shows the chart of this tentative organisational structure, which is a translated version of Document 20.

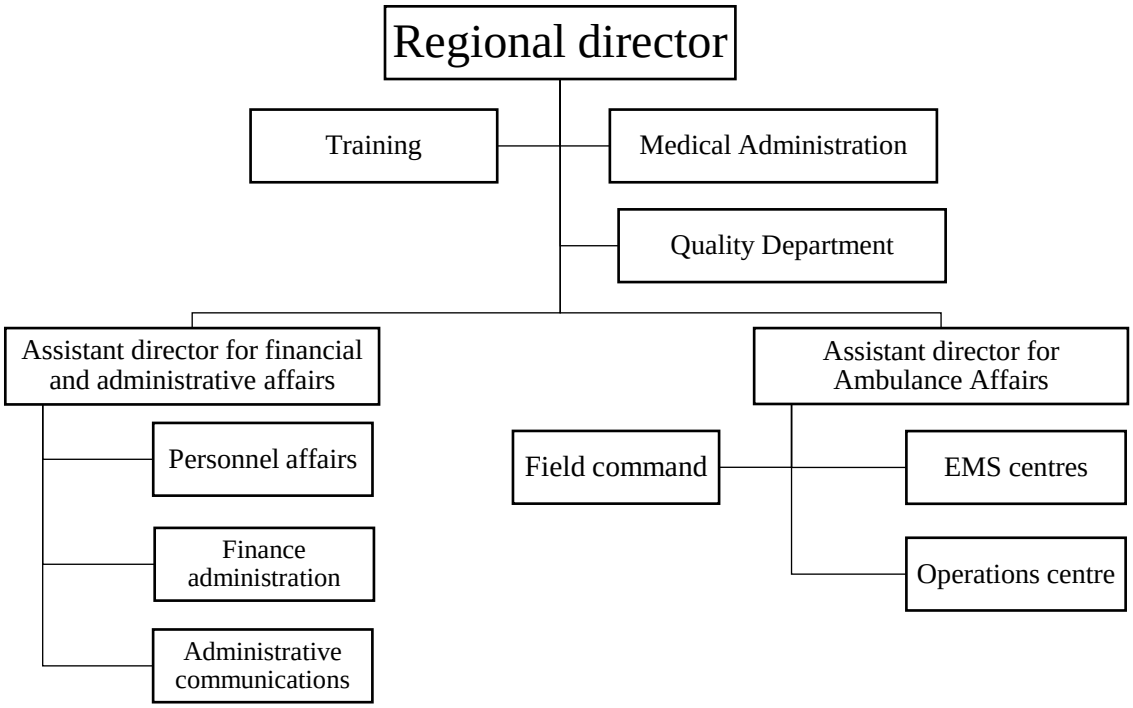

Figure 9: Organisational structure chart

The physical building of the administrative department was located on one of the main roads in the capital city of the region. The offices of the regional director, the Ambulance Affairs Department and the Medical Administration were located in this building (Observation notes, July 2017, p. 1). This building did not have any training or lecture rooms. In terms of

CPD resources and facilities, neither the Ambulance Affairs Department nor the Medical Administration had learning resources and facilities such as books or journals.

5.3.1.2. Place 2: The training centre

The second observed place was the training centre. The participating institution had only one training centre for all EMS providers in the entire region. This training centre started operating in 1409 AH (1988–1989). There was no specific building dedicated particularly for the training centre. That is, this training centre was situated in a building that was dedicated for an EMS centre, which was located in an outer suburb of the capital city of the region. This training centre was approximately 28 kilometres away from the administrative building (Observation notes, August 2017, p. 22).

The building of the training centre contained three offices and two training rooms. The first training room was allocated for lectures and accommodated 20 attendants. This room was equipped with 20 chairs, 1 computer, 1 whiteboard, 1 projector and 1 projector screen (Observation notes, August 2017, p. 22). The second training room was allocated for workshops and accommodated 32 attendants. This room was equipped with 32 chairs, 2 big tables and 2 small tables (Observation notes, August 2017, p. 22). There was also an empty room in the training centre that was allocated for intubation training; however, this room was not equipped with any training materials (Observation notes, August 2017, p. 22). Photos 1, 2 and 3 were taken at the training centre to demonstrate the status and the resources in these training rooms.

Photo 1: Training room 1 (the lecture room)

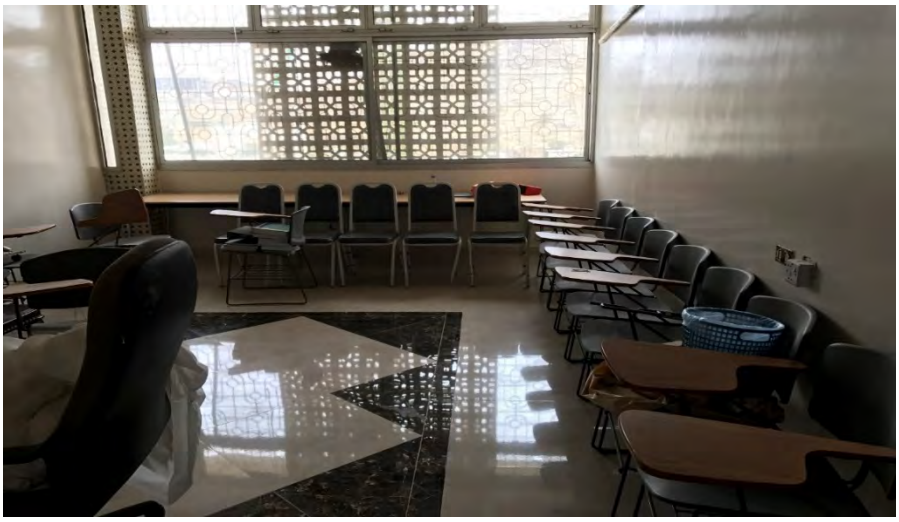

Photo 2: Training room 2 (the workshop room)

Photo 3: The training room dedicated for intubation

There were no lecture theatres, simulation laboratories or libraries in the training centre that were identified during the field observations. There was only a cabinet located in one of the offices that contained some textbooks related to different healthcare sciences in the English language, as displayed in Photo 4 (Observation notes, August 2017, p. 33).

Photo 4: The books cabinet

5.3.1.3. Place 3: The EMS centres

The last observed places were the EMS centres, which were the workplaces of the EMS providers. These EMS centres were also referred to as ambulance stations. The participating institution had 33 EMS centres spread over all the cities, towns, villages and areas of the region (Observation notes, August 2017, p. 13). One metropolitan and one remote EMS centre were involved in the focused and selective field observations.

5.3.1.3.1. The metropolitan EMS centre

The metropolitan EMS centre was located on a main road in one of the urban contemporary districts in the capital city of the participating region. The location of this centre was within a few kilometres of the administrative department building. The building of this centre accommodated two EMS centres merged in the same building. The staff of both centres shared

the facilities of the building; however, each centre had its own staff members. Although the metropolitan centre was close to the administrative department building, it was away from the training centre because the training centre was outside the city (Observation notes, September 2017, p. 53).

The building of this EMS centre did not include offices for the EMS providers or training rooms. The staff lounge was the core place where the EMS providers spent all their time when they were not attending cases. This lounge was large in size; however, it was not equipped with facilities to conduct CPD or training activities (Observation notes, September 2017, p. 53). Photos 5 and 6 show the facilities that were available in the staff lounge of this centre.

Photo 5: The staff lounge of the metropolitan EMS centre

Photo 6: Another view of the staff lounge in the metropolitan centre

5.3.1.3.2. The remote EMS centre

The remote EMS centre was located in a city at the far north of the participating region. This EMS centre was not located in a geographically isolated area, as the city contained a university, a central hospital, a domestic airport and all government agencies. However, this city was considered remote because it was more than 300 kilometres away from the regional administrative department and the training centre (Observation notes, September 2017, p. 74).

The building of this EMS centre consisted of two levels. The ground level included the staff lounge and an office for the EMS providers that contained basic medical supplies. The second level included a training room as well as the office of the centre's director. This training room was dedicated and equipped to train community members only. The facilities and the use of the staff lounge of this centre was similar to the metropolitan centre, and it was not equipped with facilities and resources that enhance CPD. The office of the EMS providers was also not prepared with facilities and resources to enhance CPD as it was used to store basic medical supplies (Observation notes, September 2017, p. 74). Photos 7 and 8 show the facilities in the staff lounge of this EMS centre.

Photo 7: Staff lounge in the remote EMS centre

Photo 8: Another view of the staff lounge in the remote EMS centre

Having detailed the *places* through highlighting the structures and the resources of the departments and the units, now the participants from these *places* will be described in the *actors* section.

5.3.2. The actors

This study involved three groups of *actors*: the administrative staff, the training staff and the EMS providers. The majority of the staff within the participating institution were male, except

for three female staff with nursing backgrounds who worked under the management of the training centre; they were not practising clinical EMS (Observation notes, August 2017, p. 13).

5.3.2.1. Actors group 1: The administrative staff

The administrative staff *actors* included the directors or the heads of departments, and the support staff in the administrative department. The directors of all EMS centres in the region were also part of this group. There were 1 physician and 19 EMS technicians and healthcare assistants working in the administrative department to provide administrative roles (Observation notes, July 2017, pp. 10, 13). Only staff who played a role in CPD, either in a direct or indirect way, were included in this study.

The staff in Ambulance Affairs Department and Medical Administration were included in this actors group. There was one director and three support staff in the Ambulance Affairs Department. Their qualifications included associate degrees or diplomas in different healthcare fields including nursing, paramedicine and anaesthesia technology. None of them had a bachelor's degree or higher. There was one director and one support staff in the Medical Administration. The director was an emergency physician and the support staff was an EMS technician (Observation notes, July 2017, pp. 10, 12).

There were a number of administrative support staff from non-healthcare backgrounds working in other departments of the regional administrative department. This included the staff in the Finance Department and the Quality Department. These staff played a role in influencing CPD, as will be explained in the *activities* section. The Quality Department had only one staff member. However, the regional director had experience in quality, so they worked as a team (Observation notes, July 2017, p. 7; Notes of the initial visit to the participating institution, May 2017, p. 1).

5.3.2.2. Actors group 2: The training staff

This group included the director, the trainers and the support staff who worked in the training centre. The total number of this group was five staff members (Observation notes, August 2017, p. 22). All these staff members had healthcare backgrounds including nursing and anaesthesia technology, but none of them had a bachelor's degree or higher. Of these staff, there were only two accredited trainers who had obtained additional training qualifications. The director of the training centre was one of these accredited trainers (Observation notes, August 2017, p. 22). One of the staff was assigned to an administrative support role, as he was a trainer but his training licence had expired. The remaining two staff members were not providing any training roles because they were new in the training centre (Observation notes, August 2017, p. 22).

5.3.2.3. Actors group 3: The EMS providers

The EMS providers were the healthcare staff who provided clinical EMS roles to patients and injured people. EMS providers in the context of this study were either physicians or non-physicians. The total number of non-physician EMS providers in all EMS centres in the participated region during the data collection period was 332. Amongst them, there were three paramedics who held a bachelor of paramedicine, and five nursing specialists who had a bachelor of nursing. The remaining 324 EMS providers were technicians with either EMS or nursing backgrounds (Observation notes, August 2017, p. 13).

Now the focus will be on the EMS centres included in the observations. The metropolitan EMS centre had 20 EMS providers. The three paramedics in the region were assigned to this EMS centre, and they were called a 'medic team' because they provided a rapid emergency response as one of their main roles (Observation notes, August 2017, p. 14; September 2017, p. 53). The remote EMS centre had 12 EMS providers and all of them were technicians and healthcare assistants (Observation notes, September 2017, p. 74).

Having illustrated the actors who were the study participants, now the *activities* of these actors that had some influence on the CPD of EMS providers are described below.

5.3.3. The activities

The *activities* of these *actors* that were observed in the *places* and had an influence on the CPD of EMS providers will be described. These activities include what these actors *said*, what they *did* and what they *used*, which had potential influences on CPD.

5.3.3.1. The activities of the administrative actors

The director of the Ambulance Affairs Department approved the duty rosters of all EMS providers in the region, which were prepared by the directors of each EMS centre on a monthly basis. The Ambulance Affairs Department support staff approved the holiday breaks of the EMS providers and any amendments to the duty roster; organised the leave and relief staff of the EMS providers who needed to attend training activities outside their region; visited the EMS centres in the region frequently to supervise the EMS workflow; and reviewed the numbers of the EMS centres and providers (Observation notes, July–August 2017, pp. 11–16).

The director and the support staff of the Medical Administration reviewed and analysed the EMS reports that were completed by the EMS providers for each patient to determine any issues or errors committed by the EMS providers, which may indicate training needs. As a training role, the director of the Medical Administration was required to provide lectures to EMS providers by coordinating with the training centre. The director of the Medical Administration visited the EMS providers frequently and went into the field with them to supervise and evaluate their EMS clinical performances. The director of the Medical Administration also provided supportive clinical guidance when EMS providers faced difficulties when dealing with patients and injured people (Observation notes, August 2018, p. 13).

Quality was an emerging department and a new concept for the participating institution, as the Quality Department started operating in 1438 month 6 (February–March 2017). As this department was newly created, it was in the process of developing its roles (Observation notes, July 2017, pp. 3, 8).

The support staff in the Finance Department and Personnel affairs processed the flight ticket applications and 'the assignment allowance' for EMS providers who would attend training activities outside their region (Observation notes, July 2017, p. 4). The 'assignment allowance' is a full-day salary paid to any staff who travels 80 kilometres or more from his/her workplace to carry out any job-related assignments, including training activities, for each day spent in this assignment (Observation notes, August 2017, p. 38). During the field observations in the Finance Department, the financial support staff stated that there were no special financial rules or legislation dedicated to CPD or training of EMS providers (Observation notes, July 2017, p. 4).

5.3.3.2. Activities of the training actors

The main activities of the training *actors* were conducting training activities for the EMS providers, community members and non-healthcare organisations. The training activities for EMS providers were conducted in the training centre, while the training activities for community members were conducted either in the training centre or in the site of the organisations that requested this training activity. During the field observations, no training activities for the EMS providers were noted. Most of the activities were either administrative tasks or training targeted at community members or non-healthcare organisations (Observation notes, August 2017, pp. 24, 29–32, 47).

5.3.3.2.1. The training activity for community and non-healthcare organisations: The 'Prince Naif' training program

'Prince Naif' was a six-hour training program in first aid and basic life support (BLS) including theoretical lectures and practical workshops (Document 21; Observation notes, July 2017, p. 10). This training program was designed and prepared by the central administration and targeted community members with non-healthcare backgrounds (Observation notes, July 2017, p. 10). The role of the training *actors* in the participating region was to organise and conduct sessions of this training program (Observation notes, August 2017, p. 47).

5.3.3.2.2. The training activity for the EMS providers: The refresher course

The refresher course was a one-week condensed and comprehensive educational program conducted for healthcare staff providing clinical EMS fieldwork (FG1-Train). This course was later modified and renamed the 'EMS protocols course' (FG1-Train; I6-Train). This course had a specific curriculum that covered general, medical and trauma treatment protocols and skills. The curriculum and the education materials of this program were ready-made by the central administration. During the last day of this course, there was a theoretical and practical exam based on the course curriculum and materials (FG1-Train). Attending this course and passing the exam were mandatory to achieve an incremental promotion (FG1-Train).

5.3.3.3. <u>Activities of EMS provider actors</u>

The EMS providers in the region had similar daily routine activities. This routine included receiving calls from the operations centre, attending patients, providing them with essential clinical EMS, and transporting them to healthcare facilities when required (Observation notes, September 2017, pp. 54, 57, 58, 60, 62, 77, 80, 85). At the beginning of each morning shift, an EMS provider in each centre was assigned to inspect the ambulance vehicles for medical

supplies and mechanical status (Observation notes, September 2017, p. 68) using an official checklist (Document 15).

When EMS providers were available in their centres and had free time, they were observed eating, playing cards, playing multiplayer phone games, talking and joking with each other, lying down to rest, sleeping and watching movies (Observation notes, September 2017, pp. 54, 55, 56, 57, 59, 60, 61, 64, 77, 79, 83). As the metropolitan EMS centre had a physician and a number of EMS specialists, active informal learning discussions were observed occasionally between the physician and some EMS technicians to explain some EMS procedures such as inserting a chest tube (Observation notes, September 2017, pp. 55, 56). However, there were no educational or CPD activities observed among the EMS providers in the remote EMS centre such as learning discussions or reading either textbooks or online evidence-based resources (Observation notes, September 2017, p. 60).

Having provided a rich description about the *social situation*, the following sections present the findings of data from phases 2 and 3, classified based on groups of *actors*.

5.4. Perspectives of the administrative and training staff on EMS providers' CPD based on data from phases 2 and 3

This section reports the perspectives of the administrative and training *actors* on the CPD of EMS providers. These perspectives are based on the thematic analysis of the data obtained in phase 2 and 3 from the administrative leaders located at the administrative department, and the training staff located in the training centre. The participating administrative and training staff were EMS providers who occupied different administrative, leadership and training positions in the participating institution.

The administrative group included staff from the Ambulance Affairs Department, the Medical Administration, the Quality Department and directors of some EMS centres in the

participating region. The participating training group included the director of the training centre and the training staff. In this phase of the study, data was collected from one focus group and five individual interviews conducted with the administrative group; and one focus group and three individual interviews with the training staff. Also the observation notes, photos and documents from both groups were included.

The qualitative data from the administrative and training groups have been analysed together because they both provided supporting data that enabled a comprehensive understanding of the context of the CPD culture in the participating workplace. That is, the administrative and training groups were complementary to each other in terms of influencing CPD for EMS providers, as explained by these participants from the training centre:

> *the Medical Administration reviews the case reports that EMS providers used to write about each case, so they know the professional deficiencies* [of each EMS provider]. *For example, is it* [the deficiency] *related to using specific equipment, administering fluids or applying splints? As such we focus the training on aspects that have many comments.* (Interview1-Train, p. 10)

> *to be clear with you, we* [training centre] *are directly associated with the Ambulance Affairs Department and I cannot accept anyone* [in a training course] *unless they are nominated by them* [the Ambulance Affairs Department]. (Interview6-Train, p. 4)

> *the Medical Administration has a role* [in training and developing EMS providers]. *They participate with us. We call the medical director and other colleagues from the field command ... we seek their assistance during training courses. There is* [name] *who is an accredited trainer and* [name] *from the Medical Administration. They all participate with us.* (FG1-Train, p. 8)

The data revealed that both groups provided similar views.

Three major cultural themes emerged from the analysis of these groups. These cultural themes are: the effect of the administrative systems and procedures; lack of appropriate resources to support accessing CPD; and the attitudes of administrative leaders and training staff. Each of these themes has a number of subthemes which will be presented in this chapter. Figure 10 provides details about these themes and their related subthemes.

Figure 10: Themes and subthemes that emerged from the administration and training staff data

5.4.1. The effect of the administrative systems and procedures

There were some administrative systems, processes and procedures that have been adopted by the participating administrative and training staff that influenced the CPD of EMS providers. This theme is concerned with aspects of the administrative systems that influenced CPD, and will be discussed and presented under four subthemes: centralisation of CPD activities; lack of a management system to organise CPD; lack of support for formal professional development for EMS providers; and restrictions on the pursuit of academic education.

5.4.1.1. Centralisation of CPD activities

The *actors* revealed that CPD had been centralised by the central administration in Riyadh. That is, designing and planning CPD activities took place in the central administration. Therefore, the administrative leaders and the training staff in the participating regional administration provided these established CPD activities without any modifications relevant to regional needs. The training programs that EMS providers attended outside their institution were not accredited for them, as these participants stated:

> *but unfortunately, they* [training and professional development programs] *are not that much. That is, there are no programs, and if there are programs the number of attendants is very limited … that is because the programs are centralised; they are issued via the central administration in Riyadh and they are the ones who distribute the programs.* (FG4-Admin, p. 1)

> *Most of these courses* [the refresher course, ACLS and Pre-Hospital Trauma Life Support (PHTLS)] *have been centralised until now, and the regional training centres are not equipped with either trainers or the essential resources for each course.* (Interview6-Train, p. 9)

> *now there is a rule issued stating that any certificate* [for training courses] *will not be accepted if it is from outside the authority* [the participating institution]. *The required training courses for all fieldwork healthcare providers and technicians* [EMS providers] *must be obtained from the authority; if it is not from the authority the course will not be accepted.* (FG1-Train, p. 13)

Because the training activities were centralised by the central administration, the administrative leader *actors* agreed with the training *actors* that they lacked independence in conducting their training activities. That is, the training staff were required to obtain approval

from the central administration before conducting any training course, yet the approvals were difficult to achieve, as these participants explained:

> *OK, can they, as a training centre, conduct a one-day training activity in intubation? They will say no, we cannot; we need to obtain an approval from the main training administration.* (Interview4-Admin, p. 11)

> *the main problem in* [name of institution] *is centralisation, generally. This problem affects training particularly. That is, certificates are from Riyadh, training activities are from Riyadh, we cannot conduct any training course unless we obtained an approval from Riyadh, and we cannot produce any output unless we obtained an approval. These approvals are difficult to get.* (Interview2-Train, p. 5)

> *as for training the EMS providers, we never have the freedom. ... To conduct any training activity, we need to obtain an approval from the central administration; they have the authority.* (Interview1-Train, p. 8)

The training *actors* reported that the centralisation of training activities has restricted their authority to design appropriate training activities for the EMS providers in the region, because these activities come *'ready-made'* from the central administration, as mentioned in the following excerpts:

> *The policy* [of training] *is centralised. We receive them* [training activities] *ready-made and then we implement them.* (Interview1-Train, p. 19)

> *All* [learning content] *for training courses comes from the central administration in Riyadh.* (Interview6-Train, p. 12)

> *Due to the centralisation of training plans, we have no free choice to plan. Things come from Riyadh and we implement only. We are instructed to implement. But for us to plan* [for training] *or share in planning, this is not allowed.* (Interview2-Train, p. 9)

The sites where CPD activities were held have been centralised by the central administration. That is, the central administration has approved only a very limited number of centres to offer some core CPD courses for the EMS providers in the entire country. These core CPD courses include Pre-Hospital Trauma Life Support (PHTLS), International Trauma Life Support (ITLS) and Advanced Cardiac Life Support (ACLS). As such, most of these core CPD activities have been conducted in locations that are geographically distant from the region of the participants. The following quotations explain this:

> *but now they* [the central administration] *have centralised these courses. This means that once they* [EMS providers] *need to attend, for example ACLS course, they* [EMS providers] *have to go Riyadh* [to the central administration]. (FG4-Admin, p. 2)

> *the courses' locations are distant. To enable an EMS provider to attend a course you will find these courses either in Tabouk* [a city in the far north of Saudi Arabia] *or in the Eastern Province.* (FG4-Admin, p. 4)

> *or for example they* [EMS providers] *go from distant regions like here or the Northern Province to Riyadh, Jeddah or Eastern Province to attend a training course.* (Inteview3-Admin, p. 13)

The *actors* considered the centralisation of CPD as a deficit in the administrative system that prevented the EMS providers from having convenient access to CPD. The distances that needed to be travelled and the time required were disincentives for the EMS providers to access CPD.

5.4.1.2. Lack of a management system to organise CPD

The *actors* highlighted that there were some management issues related to organising CPD and the attendance of EMS providers. These management issues included: the lack of policies that

regulated the required attendance at CPD; the irregular timing of CPD activities; and the lack of a wide range of CPD modules.

The participating administrative and training *actors* declared that there was no policy that required EMS providers to attend training that is relevant for their role and context of practice. There was no system to monitor the amount, the category and the quality of the courses that EMS providers were attending. As such, the EMS providers could attend CPD activities that were not related to the area of their practice, as explained by the following participants:

> *The policies* [for the EMS protocols training course] *are still not clear until now. We are still waiting to know if it* [the EMS protocols training course] *is mandatory for incremental promotions for the fieldworkers* [EMS providers]. *Still we have not received clear instructions neither from the Ambulance Affairs Department, employees' affairs department nor from the Central Training Administration.* (Intreview6-Train, p. 2)

> *there are no particular policies* [for training], *except during incremental promotions for the EMS providers, in which they are required to attend a refresher course. Now I think that the only requirement is the BLS course, depending on the professional level of the EMS providers.* (Intreview9-Admin, p. 8)

The administrative *actors* discussed the need for a systematic administrative approach that monitors the participation of EMS providers in CPD. This was to ensure that these providers were attending CPD activities that were relevant to their practice, as described in the following statement:

> *yes, the lecture might be related to dentistry, but they* [the EMS staff] *could register in this lecture and get its CPD hours from the Saudi Commission for Health Specialties, even if it is not related to their* [EMS providers'] *practice. Sometimes they* [CPD activities] *are related to gynaecology or plastic surgery. OK, so what is the relationship*

> *of the EMS providers with plastic surgery? ... there are no rules, no rules.* (FG4-Admin, p. 3)

There was a lack of regular rostering of CPD activities for the EMS providers in the administrative system, which delayed the periods between activities. The participating administrative *actors* articulated that the EMS providers were rostered to attend specific training activities only for the purpose of incremental promotions, which occur once every four years. For example, the refresher course and BLS were mandatory courses required to achieve incremental promotions rather than CPD. Within these four years, the majority of EMS providers did not attend any CPD activities, as mentioned below:

> *there is a course conducted for every EMS provider only once every four years. To achieve an incremental promotion from one level to the next, they should attend a course called a refresher course for EMS providers for one week ... can you imagine a course for one week over four years?* (FG4-Admin, p. 2)

> *This means that they will attend this course* [the refresher course] *once every four years, which is a long period to be four years without training course ... as I have said, this course is conducted every four years but attendance is limited to those who are due for an incremental promotion.* (Interview4-Admin, p. 5)

> *there was a refresher course; BLS and refresher course for those who are entitled to an incremental promotion after four years. So, during this four-year period they will not be aware of updates in knowledge. I suggest that if* [EMS providers] *attend this one-week course every year it will be better ... Now, the staff* [EMS providers] *are not able to attend training courses unless they are due for an incremental promotion from one level to the next. That is, they will stay four years 'frozen up'.* (Interview13-Admin, pp. 2, 5)

The administrative and training *actors* highlighted that the EMS providers were not provided with a wide range of CPD modules in their region. That is, training courses that

focused on developing EMS practice, such as the management of injuries, scene safety or managing women in sudden onset of labour were not available. Furthermore, advanced courses such as ACLS, ITLS, and PHTLS were also not provided in the researched region, as explained in the following quotations:

> *we provide only the EMS protocols course, which is the alternative to the refresher course ... there are other courses called short courses such as ACLS, ITLS and PHTLS courses. We cannot conduct these courses here, because we do not have suitable materials and proper infrastructure.* (Interview6-Train, 11)

> *but as for EMS providers, they need training courses in, for example, head injuries. In other words, any cases that are related to their practice and could benefit them. But unfortunately, these courses are not available. I mean, the short courses that are EMS-practice focused are not available!* (Interview4-Admin, p. 6)

> *there are no courses about personal or scene safety. We have studied these things at college and in books only, but we have not experienced these things in real life. ... and the* [name of institution] *have not focused on providing training courses related to this matter.* (Interview9-Admin, p. 13)

> *Yes, training courses on giving birth should be more intensified. Most EMS centres have not dealt with such cases previously; they might have studied but not practised such cases.* (Interview13-Admin, p. 10)

The participants believed that there was a lack of management systems to monitor CPD activities and provide diversity of learning modules on a regular basis for the EMS providers within their region.

5.4.1.3. Lack of support for formal professional development for EMS providers

The training *actors* confirmed that the central administration focused on providing 'continuing' training programs for community members in first aid skills and BLS and disregarded the training needs of the EMS providers, as illustrated in these excerpts:

> *really, training courses for the community has impacted* [on training the EMS providers]. *There was more attention on the community, which is assumed to be more on EMS providers as they need more training.* (Interview1-Train, p. 22)

> *now what we have basically is something called Price Naif program for first aid, which targets the community.* (Interview2-Train, p. 5)

> *There is another aspect which is training the community. The authority* [the participating institution] *is keen on this aspect by conducting training courses continuously.* (FG1-Train, p. 3)

Due to this focus, the training and administrative *actors* affirmed that there were some training units within some EMS centres in the region, but these units were established and equipped to provide training activities to community members instead of EMS providers, as the following participants described:

> *We have training units responsible for awareness activities* [for the community] *and Prince Naif program, but not for training the EMS providers. These units have nothing to do with the EMS providers.* (Interview6-Train, p. 14)

> *There will be* [training] *centres, two centres: one in* [name of centre] *and the other in* [name of centre]. *They will be established to be a small copy of the training* [centre] *here, but unfortunately, the EMS providers will not benefit from these centres; the benefits of these centres will be for the community … for educating the community only! Yes, awareness courses for the community only.* (FG4-Admin, p. 5)

> *For example,* [name of centre] *is in Tihamah* [a big area in the region] *which has a training unit, but this unit cannot be used by the EMS providers; instead it is dedicated to the community.* (Interview9-Admin, p. 5)

> [Name of centre] *is entitled to a training unit, which should have been launched. But, who is this unit for? It is for the community members and schools.* (Interview13-Admin, p. 8)

The training and administrative *actors* stated that their workplace had only one training centre; however, this centre was not certified by the appropriate training bodies to conduct accredited training activities:

> *at the level of the authority* [the participating institution], *there are no* [training centres in this region other than this centre]. (Interview6-Train, p. 14)

> *but we will say it again, training centres in the regions are very important. If these training centres have been developed and equipped well, believe me that each day there will be a course.* (FG4-Admin, p. 8)

> *I remember that we have discussed this matter in various meetings in the central administration in Riyadh, which is accrediting a number of training centres in the regions. For example Aseer region; we have qualified trainers and we have a training centre. What is the problem for them to accredit this training centre?!!* (FG4-Admin, p. 2)

> *the second aspect is that there are no accredited and licensed training centres to conduct training courses; there are no accredited centres ... so our training has not been certified by the Saudi Commission for Health Specialties.* (Interview4-Admin, pp. 19, 20)

As shown above, the central administration retained a strong focus on training community members and less focus on the EMS providers' CPD, so their training needs were overlooked. That is, the EMS centres in the participating region lacked training units that were

dedicated for the EMS providers. It was noted that the one training centre in the region was not licensed to provide accredited CPD activities for the EMS providers. Consequently, the EMS providers were not able to claim any CPD points. This reduced their inclination to attend CPD courses.

5.4.1.4. Restrictions on the pursuit of academic education

The training *actors* deemed pursuing academic education as an integral part of CPD:

> *Indeed it* [pursuing academic education] *is considered an essential part of CPD, but unfortunately it is not supported at all. The first reason is the urgent need for EMS providers because if they left* [to study] *who will fill their positions?* (Interview1-Train, p. 29)

However, the training and administrative *actors* stated that the administrative processes and procedures hindered the EMS providers from pursuing academic education. This was due to some strict conditions the EMS providers were required to fulfil as part of their application to study. They were required to study full-time and needed an official exemption letter for work release. However, these requests were usually rejected, as these participants stated:

> *but instead, they* [EMS providers] *confront hostility in this aspect; they are being prevented from continuing their education by the central administration in Riyadh via complex conditions and conditions.* (Interview2-Train, p. 20)

> *as for ceasing the international scholarships, I see it really caused a defect, a big defect, in the professional development of the EMS technicians ... I know some* [EMS technicians] *who study in colleges using their own money and time. Such professionals require release from their work because they want professional development. So, I* [as a workplace] *must not be against supporting their professional development. This is what should happen in the* [name of institution], *but unfortunately it is not happening nowadays ... they could obtain approvals to study ... but then they confront a list of*

> *conditions. How can I* [as a workplace] *maintain their professional development?* (Interview6-Train, p. 18)

> *I have tried* [to continue my education]. *I, myself, was trying but I could not, because it had specific conditions including that I have to be released from the work, and the work never releases. ... the private health institutes and colleges were opening in the evenings, so for example I could work in the morning and study in the evening. They* [name of institution] *refused and asked us for a release letter.* (Interview9-Admin, p. 10)

> *For example here in Aseer region, it is impossible* [for the EMS providers] *to be released from their work if they want to continue their education in a college.* (Interview13-Admin, p. 6)

The regulations for nominating staff for national or international scholarships to pursue academic education were obtained during the field observation (Document 10). The conditions for receiving national or international scholarships confirmed that the applicants have to be released from their work to be full-time students at an accredited national or international university or college without affecting the workload of other EMS colleagues (Document 10). The rules of the administrative system were strict on the release of staff and lacked the flexibility to allow the EMS providers to pursue any suitable academic programs.

5.4.2. Lack of appropriate resources to support accessing CPD

Conducting accessible CPD requires some essential resources including human resources, learning facilities and financial investment. The data showed that the participating workplaces were lacking in most of these resources, as described under the following subthemes: significant shortages in the workforce; lack of material resources for CPD; language barriers to accessing learning resources; and lack of financial investment in CPD.

5.4.2.1. Significant shortages in the workforce

The *actors* discussed that their institution experienced significant shortages in their workforce including EMS providers, registered EMS specialists, expert trainers and administrative leaders. From an administrative perspective, the significant shortages in EMS providers prevented them from being released to participate and engage in CPD activities because there was no relief staff available, as presented in these comments:

> *especially here in the* [name of region], *there is a severe shortage of EMS providers ... and I am not happy to shut down an EMS centre in order to send the available two EMS providers to attend a course ... each shift is staffed with* [only] *two EMS providers ... there is a severe shortage of EMS providers, so each EMS centre is staffed with a minimum occupancy ... we would like all EMS providers to attend training courses; but the problem is that there is a shortage.* (FG4-Admin, pp. 3, 4)

> *our problem is staff shortages … for example ... This year we have approximately five EMS providers who will be handed off from their job* [not able to work due to disciplinary procedures] … *there is another aspect which is the annual holidays in addition to the sick and emergency leave. … Another challenge confronting the EMS workforce is retirement. We have approximately seven EMS providers who will retire without any relief.* (Interview4-Admin, pp. 3, 5).

> *So if I have released two or three* [EMS providers] *from our centre* [to attend CPD], *how many staff members remain? A relief staff member has to be assigned.* (Interview13-Admin, p. 6)

> *The issues that have negatively impacted on CPD include shortages in the workforce* [of EMS providers]. *As a result, we will not be able to release them to attend continuing training courses without impacts on other aspects such as the arrangement of their shifts.* (Interview14-Admin, p. 2)

From a training perspective, the severe shortage of EMS providers hindered the training staff from continuously conducting activities due to the low number of attendees. This was because the EMS providers were not released to attend these activities. This is explained further in these quotations:

> *we cannot conduct training courses due to personnel shortages in some EMS centres. About ten EMS centres do not have an adequate number of EMS providers. This means about a third of the total centres in the region.* (FG1-Train, p. 12)

> *the Ambulance Affairs Department often apologises by saying we cannot* [send EMS providers for training]. *For example, if we ask for ten EMS providers to attend training, they send only five because some EMS centres cannot* [nominate] *as they do not have relief staff ... the main cause* [of insufficient training] *is the shortages in the number of EMS providers.* (Interview1-Train, pp. 8, 9, 11)

> *We are able to conduct the EMS protocols training course but, as I have told you, the problem is the* [EMS staff] *shortages in the EMS centres. The shortages aspect really caused a defect* [in training]. (Interview6-Train, p. 9)

Shortages in the EMS workforce were further evidenced from the field observations and documents (statistical reports) sighted while undertaking observations, highlighting the inequity in staff distribution across the region (Documents 16 and 17; Observation notes, August 2017, pp. 13, 14). The statistical report showed that the total number of the cases that were attended by all EMS centres in the region was 35,030 in 1437 (October 2015 – October 2016) and 14,754 cases in the first six months of 1438 (October 2016 – March 2017), with a total number of 332 EMS providers in the region (Documents 16 and 17; Observation notes, August 2017, p. 13). However, the distribution of these EMS providers among the centres did not consider the workload of each centre. That is, in 1437 one centre attended 142 cases and

another attended 3474 cases (Document 16); however, the two centres were staffed with a similar number of EMS providers (Observation notes, August 2017, p. 14).

Both administrative and training *actors* agreed that the shortages of EMS providers impacted on the staff's time dedicated for CPD. EMS staff focused on their clinical work responsibilities, leaving no time for CPD. Consequently, the EMS providers were required to attend CPD activities outside of work hours, as these statements illustrate:

> *yes the EMS providers are compelled; the Ambulance Affairs Department here compels the EMS providers to attend their training courses during their off-duty times ... and also, for example, the Basic Life Support course, which is BLS, the EMS providers have to manage when to attend it themselves.* (FG1-Train, p. 12)

> *really the last courses had big issues because the nominated EMS providers were not released from their duties* [to attend the courses]. *So, I had to wait. Sometimes those whose duties finish at 8 am were attending cases at 7:30 am, so they were not able to come here before 9 am. So instead of starting the course at 8 am I had to delay it to 9 or 9:30.* (Interview6-Train, p. 4)

> *Sometimes they* [EMS providers] *were required* [to attend CPD] *during their off-time, especially during summer when there is a high workload, so they were required to attend during* [their] *off-time.* (Interview3-Admin, p. 16)

> *Instead, they* [EMS providers] *need courses; they are willing to develop their skills, but there is no time. If they want to watch a learning video or a CD-ROM* [provided by the training centre], *there is <u>no time</u>. If the staff* [EMS] *number is enough, they will be able to find time for such activities.* (Interview13-Admin, p. 6)

In addition to the shortages of EMS providers, the participating institution also had a limited number of registered EMS specialists and physicians who would be available for mentoring, as these participants mentioned:

> *I was surprised in the last meeting that the Field Commander in all or most of the main regions are physicians; in our region no physician* [as a Field Commander] ... *it is necessary to have a physician because they mentor EMS providers in the field once they face any issue ... the medic team* [EMS specialists] *are only here in* [name of city]. *At the level of the entire* [name of region], *the medic and rapid response team are available here in* [name of city] *but other cities no.* (FG1-Train, p. 11)

> *instead, most of them* [the available EMS providers] *are EMS technicians. ... We have only … eight EMS specialists* [he mentioned their nationalities] *and two EMS physicians for the centres in the <u>entire</u>* [name of region] *region!* (Interview4-Admin, pp. 15, 16)

> *also there is a need to have an EMS specialist, at least one specialist in each squad or in each two squads. This EMS specialist is essential to discuss different topics with the EMS providers and also to educate them about the equipment.* (Interview13-Admin, p. 11)

There was a significant shortage of expert trainers in the participating region. The training *actors* stated that the training activities in the entire region, for community members and EMS providers, relied on only two accredited trainers. However, there were volunteer trainers who were external to the management of the training centre, as explained by these participating training staff:

> *part of the problems that we confront is the shortage of staff working here in the training centre. That is, the training centre in the entire region of* [name of region] *depends on this person and that person* [pointing to two of the trainers]. *There are just only two trainers ... as we have told you, our problem is the number of the trainers and the building. If these two things were offered, I guarantee that we would be the best centre in the entire kingdom.* (FG1-Train, pp. 5, 14)

> *our total number is five. The director,* [the names of the other three] *and me. But as for the actual training,* [name] *is an old man and cannot train.* [Other name] *was assigned*

> *to do the administrative work of the training centre. So, it is only me and* [other name] *who are actual trainers ... our number is not enough at all, not enough at all.* (Interview1-Train, pp. 5, 6)

> *'a person can't give what s/he doesn't have'; I do not have many trainers. There are only two at the level of* [name of region]. *There are other volunteer trainers within the authority* [the participating institution], *but they are not under my jurisdiction and I cannot take them from their original work.* (Interview6-Train, p. 6)

> *the actual trainers are only two, yes, at the level of* [name of region]. *There are external cooperating trainers, about five, but they are outside our centre – only cooperating ... indeed it is not enough and even if this number is multiplied by ten, because there is work overload really.* (Interview2-Train, pp. 3, 4)

There were significant shortages in the number of EMS administrative leaders in the researched region. These administrative leaders also required CPD to be competent in managing all aspects of EMS practice, including CPD of EMS providers. This would enable creating a workplace culture that support CPD for EMS providers. However, the limited number of these leaders in the region affected their ability to access CPD, because there were no relief staff, as explained by this participant:

> *but the problem is … the shortages in the workforce, even here in the administration. Look, even here in Ambulance Affairs Department,* [the staff here include] *just me and my colleague* [name], *if one of us has left the other must be available.* (Interview4-Admin, p. 13)

5.4.2.2. Lack of material resources for CPD

The training centre for the region did not have adequate learning and teaching resources such as lecture rooms or computers. These resources were essential to enable CPD, provide access to electronic evidence-based resources and prepare presentations. However, the *actors*

explained that their institution did not provide or equip rooms appropriately for CPD activities. This problem is substantiated by these statements:

> *we hope that each EMS skill or procedure has their particular equipped room. For example a room for intubation; a room for cardiopulmonary resuscitation equipped – equipped and prepared. ... the numbers and the size of the training rooms are really not enough. The rooms are small, and the participants get really annoyed.* (Interview1-Train, pp. 12, 13)

> *We do not have equipped rooms, really. So we put in personal effort to prepare this room. But if you look at the entire situation here, it has nothing to do with training.* (Interview6-Train, p. 10)

> *There is no* [appropriate] *infrastructure at all. It* [the training centre] *is not prepared to be a training centre. There are no preparations; it* [the lecture room] *is a room in a rented house which was a kitchen then converted to* [a room] *... when you see the rooms, they are cramped ... all that we can do is provide chairs and tables.* (Interview2-Train, p. 9)

Some photos of the training rooms were taken during the field observations. These photos confirm the comments by the participating training *actors* about the small size and the limited equipment of the training rooms (Photos 9 and 10).

Photo 9: Lecture room in the training centre

Photo 10: Lecture room in the training centre

Some directors of the EMS centres in the region made a personal effort to equip rooms within their centres to be appropriate for CPD, as mentioned by this participant:

> *The preparation of this lecture room was all personal effort from me and from the director of the training unit. We have obtained the chairs and the tables from the technical institute* [of health] *and from the university. … We did what we could.* (Interview9-Admin, pp. 6, 19)

The administrative *actors* clarified that their institution had very few computers that could be utilised for CPD, as illustrated by this participant:

> *The directors have computers as they are directors, <u>but</u> not for the purpose of knowledge or things like this; <u>instead</u>, they are personal computers for the directors of the centres, and usually used for correspondence and things like this.* (FG4-Admin, pp. 12, 13)

The participating institution lacked some essential material resources, which was a barrier to the EMS providers accessing lectures or technology for learning.

5.4.2.3. <u>Language barriers to accessing learning resources</u>

Accessible evidence-based learning resources, such as peer-reviewed journals or textbooks, are essential for supporting CPD. For scientific evidence-based learning resources be accessible to the EMS providers, they need to understand the language of these resources. Most medical and healthcare evidence-based learning resources are offered only in the English language. However, the administrative *actors* believed that the EMS providers had very limited English language skills. Therefore, the *actors* described language as a major barrier to accessing contemporary evidence-based resources. This issue is clarified by the following quotations:

> *The international journals are in the English language. <u>How</u> could they* [EMS providers] *read and understand them? ... they <u>do not</u> have English language skills; all their studies were in the Arabic language.* (FG4-Admin, p. 12)

> *the problem is that most books are in the English language, and the English language skills among EMS providers are <u>less than low</u>! ... so it is difficult for them to search for information on international websites or even in the official EMS books ... the most challenging barrier is the language; the language is most challenging ... so why have they* [name of institution] *conducted the refresher course? Because it is in the Arabic language.* [The refresher course is] *A number of courses that are grouped to be Arabic chapters, for example, the respiratory diseases, but all their references are in the English language.* (Interview4-Admin, pp. 18, 19)

The training *actors* agreed with the view of the administrative *actors* and confirmed that the English language is fundamental to understand contemporary evidence-based research. However, the majority of the EMS providers in the region lacked proficiency in the English language, as pointed out in these comments:

> *the problem is that most of the EMS providers, about 90% of them, have no* [English] *language ... it* [the English language] *is the official international language for medical professions now.* (FG1-Train, p. 10)

> *there are many things that influence the CPD of the EMS providers. From what I know, but am sure of, is that most of them* [EMS providers] *have very weak English language proficiency. You know that all updates in the* [knowledge] *are in the English language globally.* (Interview6-Train, p. 15)

> *These books* [pointing to the books cabinet (Photo 4)] *are 100% for show only ... most of them are in the English language.* (Interview2-Train, p. 14)

The lack of proficiency in the English language hindered the EMS providers from accessing understandable learning resources and materials. That is, most of the available international health-related learning resources and evidence-based materials are presented and published in the English language.

5.4.2.4. Lack of financial investment in CPD

Both administrative and training *actors* outlined that their workplace did not have a budget that was clearly dedicated for CPD, as these participants illustrated:

> *Really the financial aspects have many problems, either in the procedures or in the provision of the funds* [for CPD]. (Interview1-Train, p. 23)

> *There is no budget specified for training. But now we have something called 'loan' ... this is a loan, deemed as a loan to manage training aspects ... but there is no budget specified for training at all.* (Interview6-Train, p. 10)

> *and also there is a department for training, of course, which is staffed with people who are explicitly competent and excellent; but however, they lack many financial and human resources.* (Interview9-Admin, p. 3)

As a result, the training *actors* remunerated some of the training expenses from their own pockets. This issue is illustrated by these quotations:

> *really from the year 1434* [November 2012 – November 2013] *until last year I was paying* [the training expenses] *from my own pocket.* (FG1-Train, p. 4)

> *there is no budget unfortunately, especially* [name of region]. … *Most of the expenses for Prince Naif courses are paid from our own pockets.* (Interview2-Train, p. 8)

> *as for the financial investments* [in CPD], *I do not think that they are sufficient ... I remember that the director of the training centre was paying* [training expenses] *from his own pocket ... truly the financial resources are very weak.* (FG4-Admin, p. 13)

The administrative *actors* mentioned that there was a fund to support CPD indirectly. This was in the form of an assignment allowance; however, they expressed the view that their institution did not utilise this fund cost-effectively, as this participant clarified:

> *if there is a training course in Riyadh, they* [name of institution] *will assign the EMS providers to attend in Riyadh for three days and they will get paid their assignment allowance for these three days. Their daily assignment allowance is 450 SR* [167 AU$] *multiplied by three days; it will be more than 1200 SR* [447 AU$] *plus flight tickets* [from the region of the participating institution to Riyadh] *which cost about 580 SR* [216 AU$]. *Now it is nearly 2000 SR* [745 AU$]. *So, why* doesn't [name of institution] *pay 800 SR* [299 AU$] *and allow the EMS providers to attend the course* [at any approved institution in the region]? *How much money would they* [name of institution] *save? They would train two EMS providers for the same cost as one* [attending in Riyadh]. (Interview4-Admin, p. 20)

Another aspect of the lack of financial investment in CPD reported by the participants regarded providing financial incentives. This was either for the volunteer trainers, to retain their training services, or for EMS providers, to encourage them to attend training courses, as outlined by these training and administrative staff:

> *now we have started a program called the volunteer trainer which has incentives for about 500 SAR* [$190 AUD] *for each course they provide. But unfortunately, I have not heard that any of these trainers have received any of these incentives yet.* (Interview6-Train, p. 16)

> *there are no rewards or incentives, or any motivation that encourage them* [EMS providers] *to come to the training centre to attend a training course.* (Interview2-Train, p. 6)

> *some other institutions, not* [name of institution], *for example … those who have computer course are eligible for 10% increment in their monthly salary. Also those who attend five courses a year are eligible for 5% increment in their monthly salary. As such, all of their staff were keen to attend courses. Why doesn't* [name of institution] *apply the same? For example, offering 3% increment for those* [EMS providers] *who do the ITLS*

> *course. As such, they* [EMS providers] *will be keen to attend this course whatever the circumstances. If they* [name of institution] *used this system, everyone* [EMS providers] *will be interested in attending these courses.* (Interview4-Admin, p. 26)

A review of the financial system documents of the participating institution supported the *actors'* experience, because the documents disclosed that there were no clear and specified instructions, items or procedures for financial investment in training and CPD (Documents 18 and 19). The financial instructions for training and CPD were presented in one item only, which was summarised in a small section (Document 18). This section mainly focused on the administrative requirements (Document 18) and forms (Document 19) for processing the assignment allowances. However, the financial budgets, dues, processes or procedures of training and CPD activities that are conducted within the participants' workplace were not captured within the financial systems documents.

5.4.3. The attitudes of administrative leaders and training staff

The final theme that emerged from this group is the different attitudes of administrative and training *actors* towards the EMS providers and their CPD as well as the nature of EMS practice. These attitudes had a strong influence on the CPD of EMS providers in the region. This theme will be presented under four subthemes: focus on restricting rather than developing the EMS providers; positive attitudes towards CPD; facilitating informal learning initiatives; and fostering a culture of cooperation to enable CPD.

5.4.3.1. Focus on restricting rather than developing the EMS providers

The *actors* described that they, as administrative leaders, had adopted a leadership style in which they focus on disciplining the EMS providers instead of developing them. These participants revealed that:

> *instead of developing the EMS providers in the fieldwork, our direction has been shifted to more disciplining them. … So the focus of the* [name of institution] *is to strictly manage the duties of the EMS providers … more than developing them.* (FG4-Admin, p. 5)

> *and I remember when I was in the follow-up department that some staff* [EMS providers] *have been reported* [to us] *from Riyadh* [the central administration] *as they have not attended a course. These staff have been investigated for not attending this course.* (Interview3-Admin, p. 16)

The training *actors* also had a similar view that the EMS providers must be compelled to attend some training courses by force. This could include making these courses a requirement to achieve incremental promotions. As such, the EMS providers will be obligated to attend these training courses, as illustrated in these excerpts:

> *it* [the refresher course] *is linked with the incremental promotion ... I see that it should be mandatory, because if it is not mandatory no one will come ... the last course was semi-optional, so the number of attendees was very low, but after it became mandatory all of them* [EMS providers] *were racing to attend.* (FG1-Train, p. 9)

> *but if these courses are compulsory and associated with the incremental promotions and salary, they* [EMS providers] *will attend coercively.* (Interview6-Train, p. 2)

> *so training courses were associated with the incremental promotions. That is, they* [EMS providers] *were not entitled for a promotion from one level to the next unless they attend the refresher course, Basic Life Support and many other courses.* (Interview2-Train, p. 6)

The administrative *actors'* focus on disciplining the EMS providers has contributed to a lack of recognition and acknowledgment of the professional development achievements of some EMS providers, as these participants stated:

> *I see that they* [EMS providers] *have to be motivated. That is, for example, anyone who obtains distinctions and high marks* [in the refresher course] *will be rewarded, may be given a few days off or an additional allowance. Unfortunately they* [EMS providers] *did not have these kind of motivations really.* (Interview6-Train, p. 7)

> *at some point of time there were some distinguished* [EMS staff] *at work. There were two or three EMS technicians who wrote books related to* [first aid] *awareness promotion ... but if there were any type of encouragement and motivation such as certificates of appreciation or any type of celebrating them. I think that these staff <u>have not</u> received even honouring. This is important.* (FG2-Admin, p. 5)

> *the second thing is the motivation* [for CPD] *through recognising distinctions. For example, whoever* [EMS providers] *obtain specific courses should be entitled to such distinctions.* (Interview9-Admin, p. 11)

5.4.3.2. <u>Positive attitudes towards CPD</u>

While the administrative *actors* had adopted a disciplinary leadership style towards the EMS providers, they admitted that they do have positive attitudes towards CPD. That is, they appreciated its significant value. This point was frequently declared by the majority of the administrative *actors*, as presented in these statements:

> *Continuing education is very important.* (FG4-Admin, p. 3)

> *I do not think that there is a sane person saying that training is not good; instead, any organisation that does not have training and development will shut down after a period of time. It* [training] *is very important. Particularly on-the-job training, it is core for development … It is important that training, development and education are ongoing … so training and development are important, continuing education is important, and continuing and ongoing learning is important. No matter how much knowledge you have, you still need more. Every day you gain new knowledge. Even if you read the same*

chapter, every time you will understand it in different ways and gain new knowledge from it. (FG4-Admin, pp. 6, 7)

I see it [training] *as very important and on a continuing and ongoing basis, because forgetfulness is easy. All of us have studied, for example English or computers, and if we have not practised or kept reviewing we will forget. So training is very, very important and it should be continuing and ongoing, and not only once or twice; instead, it should be continuing because knowledge is updating.* (Interview3-Admin, p. 15)

I see it as fundamental to their [EMS providers'] *work, which is the aspect of training and development. This means that training is very important for developing some of their skills and procedures. If they have not been trained on these aspects, their work will have an old-fashioned rhythm despite the innovations, the new skills, etc. ... they have to be trained in these things. ... There are some skills that are rarely practised and if they* [EMS providers] *have not refreshed these skills they* [EMS providers] *will lose them. So the importance of training is not arguable.* (Interview4-Admin, p. 1)

training is an essential pillar for development. If there is no training there will be no development. This is a rule, because training is the basis for development, for education and for CPD. So training is a fundamental pillar for the work whatever the circumstances. (Interview9-Admin, p. 2)

sometimes they [EMS providers] *confront cases in which they lack the experience or knowledge in dealing with these cases, so training is very essential, and it should be continuing. Each one* [EMS provider] *must attend a refresher course for about a week or two weeks each year.* (Interview13-Admin, p. 2)

Likewise, the training *actors* considered training and professional development as a vital component for EMS providers to practise their profession competently. The training staff believed that EMS providers need to keep learning from the fieldwork experts continually and

not rely merely on the knowledge that they have learnt in universities or institutes. This view is demonstrated in these quotations:

> *Training and professional development for EMS providers is fundamental ... if the staff* [EMS providers] *are trained well their output will be very good, and if they are not trained well they will have no* [good] *output.* (Interview2-Train, p. 15)

> *I see that the success of any organisation is based on the success of their training. If training is successful, the organisation will succeed 100%. Similarly, the failure of any organisation starts from the failure of their training.* (FG1-Train, p. 4)

> *From my fieldwork experience, training is very important, and it is not enough to learn in a university or institute and rely only on this learning in providing fieldwork. There might be some* [fieldwork] *experts who can provide better methods of applying knowledge.* (Interview1-Train, p. 25)

> *Training and professional development is a basis to succeed at any work.* (Interview6-Train, p. 6)

As part of valuing CPD, the training and administrative *actors* believed that CPD enhanced the clinical decision-making skills of the EMS providers, as described below:

> *if there is any error in the EMS clinical fieldwork, the beginning of this error is from here* [training centre]. (FG1-Train, p. 8)

> *some of them* [EMS staff] *argued that the same courses and same information are been repeated. OK, ... as EMS providers,* [they are] *unlike the hospital staff who can ask for laboratory tests and sonography results and based on these tests they could undertake their decisions after half an hour or two hours, or even they could ask for a consultation. They* [EMS providers] *are working in the field and they should make a decision within a few minutes, sometimes within ten minutes they should have made their decision. So*

> *repeating information prepares them to make an appropriate decision.* (FG4-Admin, p. 7)

> *as for training and development, I consider it fundamental for any individual at any work; particularly EMS, as it* [EMS practice] *deals with people's lives. Sometimes the staff forget some aspects of their profession because they spend some time without attending particular cases. So, I think that training is necessary and should be continuing.* (Interview3-Admin, p. 1)

Furthermore, the administrative *actors* were aware that CPD could reduce workplace stress for EMS providers. This aspect is clarified in the following quotations:

> *the more CPD that EMS staff have, the more their fieldwork stressors will be alleviated.* (FG4-Admin, p. 7)

> *So now the stressors on them* [EMS providers] *become more and more and more, so they need more development, more training courses, more counselling, and more discussion sessions.* (Interview13-Admin, p. 4)

In addition, the administrative *actors* acknowledged that CPD fosters the self-confidence of EMS providers, as illustrated by these participants:

> *and also self-confidence in the fieldwork. Indeed they* [EMS providers who attended CPD] *will not be like those who know nothing in the fieldwork; they become puzzled at any circumstance.* (FG4-Admin, p. 7)

> [The workplaces] *are training them* [EMS providers] *in order to develop them. So this will increase their self-confidence, which in turn increases their sense of belonging to their work and consequently achieving job satisfaction.* (Interview9-Admin, p. 14)

Thus, providing opportunities for CPD assists EMS providers to feel that their workplace values them, as this participant explained:

> *most EMS providers do not have infection control* [experience], *while the most confronting issue for them is infections or getting infected. So if they have been trained in how to control infections or deal with infected patients, they will feel that their workplace is worried about them or trained them to be protected when they perform their fieldwork ... also if they* [EMS providers] *have been provided courses about crisis and disaster management, they will feel that their administration is concerned about them when they do fieldwork.* (Interview9-Admin, pp. 11, 12)

> *if the EMS providers are being trained and their knowledge is being updated, they will feel that their workplaces value them. As such, their workplaces foster their self-confidence*. (Interview9-Admin, p. 17)

The training and administrative *actors* had a strong positive attitude towards training and CPD. That is, they believed that these activities maintained the knowledge and skills of the EMS providers, which enabled them to make immediate, accurate and appropriate clinical decisions, as the context of their practice required this skill.

5.4.3.3. Facilitating informal learning initiatives

As identified previously, the administrative *actors* valued the importance of CPD. Some administrative leaders had adopted informal CPD activities to overcome the barriers described above and to foster professional development. For example, one of these informal activities that supported CPD was the distribution of questions in the form of written quizzes to EMS providers to encourage them to read and search for answers, as these participants mentioned:

> *I remember that before, maybe four years ago, we have tried to implement an idea … This idea ... is distributing questions which are a refresher* [for the EMS providers]. *They were free to read or ask other colleagues and then return the answers back to us. … If this initiative has continued it will be good as the EMS providers will keep searching,*

> *because if they search for the answers they will never forget them, but if you give them ready-made information they will forget them.* (FG4-Admin, pp. 4, 5)

> *previously, there was an informal written quiz distributed to EMS providers* [in the region]. *This quiz involved questions about EMS practice or trauma. The EMS* [providers] *were free to search either online or in books. Some* [EMS providers] *were interested in this quiz and answered the questions, but many others were not.* (Interview3-Admin, p. 29)

> *I conducted a self-leaning activity some time ago. We asked questions, three pages of them, and distributed them to all EMS centres. … The questions were distributed to all* [EMS providers]. *Some of them returned the answers and many others did not ... we endeavoured with the directors of the EMS centres to encourage the EMS providers to participate. It was good as it stimulated them* [for self-learning]. (Interview4-Admin, pp. 16, 17)

Another form of informal learning involved encouraging group discussions led by EMS providers. These discussions included case report presentations:

> *So I have suggested that we could meet once a month to discuss some of the cases that they* [EMS providers] *have attended. … We have met, actually, several times and discussed some road traffic accident cases that they have attended. For example, one of the colleagues attended an amputation case and he discussed how he managed the case. As such, the colleagues will exchange their experiences. This* [discussion] *is considered part of training … I have suggested this idea* [of discussions] *to our colleagues and they have accepted it. Sometimes, five or six EMS providers have met during the handover and discussed some of their cases in the previous shift. As such, they exchange their experiences. Really we have some good expert EMS providers in this centre so our novice colleagues have benefited from their experiences.* (Interview9-Admin, p. 7)

Sometimes these informal discussions included practising EMS skills:

> *One time, I brought a splint; some of our colleagues did not know what it was, and some others simulated its application on their colleagues several times.* (Interview13-Admin, p. 11)

Another informal learning initiative adopted by the training *actors* was to establish peer evaluation of EMS providers' performance with other EMS leaders throughout the region. To achieve this, a team of EMS leaders and trainers visited the EMS centres to evaluate the clinical performance of the EMS providers. Based on the outcome of the performance evaluations, further informal CPD activities were initiated, as demonstrated in these extracts from the training *actors*:

> *we have formed a committee from the Medical Administration, Training Centre and the Ambulance Affairs Department; about three or four people, who accompany EMS providers to evaluate them in order to aid their professional development.* (FG1-Train, p. 14)

> *from the plans* [for training and professional development] *we visit a specific centre and stay with them for a shift or about eight hours. Me as a training delegate – an accredited trainer – and another one or two delegates from the Medical Administration. We accompany the EMS technicians and see how they deal with the cases ... if they need professional development we solve their issues ... for example if they did not know how to deal with a giving birth case due to lack of either knowledge or skill, or confusion, we develop their professional competence.* (Interview6-Train, p. 6)

> *we have suggested in the past years that instead of keeping training at one place,* [we] *move, for example to visit a specific EMS centre each week and work with the EMS providers to look at their learning needs and discuss cases after returning to the EMS centre ... when the trainer accompanies the EMS provider in the field, they will be close to them. Both the EMS provider and the trainer will have the same uniform and appearance ... the trainer documents notes about the performance of the EMS providers*

> *to discuss with them and correct any errors, if there were any errors.* (Interview1-Train, pp. 10, 27)

Quizzes, group discussions and training and administrative staff accompanying the EMS providers in their fieldwork were deemed to support informal CPD activities.

5.4.3.4. Fostering a culture of cooperation to enable CPD

Some administrative *actors* were mindful that attending training could be challenging for EMS providers. To enable more attendance, the administrative *actors* encouraged the EMS providers to support their colleagues by covering each other's shifts. This approach fostered a culture of cooperation that allowed attendance at CPD activities, as these participants discussed:

> *But, in fact, any work without cooperation will not be successful. So, if each EMS provider refused* [to fill in for their colleagues who sought to attend CPD] *they* [EMS providers who seek to attend CPD] *will not get the benefit and the other staff also will not get the benefit, and eventually the goal will not be achieved. So, the directors of the centres reschedule the shifts of their staff to ensure the shifts of the released staff are covered.* (Interview4-Admin, p. 5)

> *there are some solutions. For example, for the training courses that they* [EMS providers] *will attend, we ask some staff to cover the shifts of those who will attend courses, or we ask the centre to change the working system of the centre by reducing the number of squads from four to three squads.* (Interview4-Admin, p. 15)

> *There is cooperation among the* [EMS] *colleagues. Thankfully we work as one team; gratefully ... We motivate any staff* [EMS] *who found a training course* [that could benefit them] *by covering their roles ... we have organised the roles of our colleagues in the past. ... there were four or five EMS providers who studied* [at college]*, so we have adopted a coordinating strategy in which EMS providers who are not studying need to fill in for those who are studying during their exams, but once we need them they have*

> *to assist. So, we have motivated them until they have finished their studies and been certified as EMS technicians. This was achieved through internal coordination among us.* (Interview13-Admin, pp. 5, 7)

A culture of cooperation among the EMS providers was fostered by the administrative leaders. As a result, each EMS provider accepted responsibility for taking over the shifts of their colleagues so that they could attend CPD activities or academic studies.

5.5. The EMS providers' perspectives on their practice and workplace environment based on data obtained in phases 2 and 3

This section presents the findings from the perspective of EMS providers based on the thematic analysis of the data from this *actors* group during phases 2 and 3 of the study. There were two focus groups, six individual interviews, and one phone interview conducted with a participant from this group. The observation notes, photos and documents from this *actors* group were also included.

The aspects of workplace culture that influenced the CPD of EMS providers that emerged from this group are presented under three major cultural themes: organisational and professional dynamics; lack of appropriate resources to support accessing CPD; and the positive attitudes of the EMS providers. Figure 11 illustrates these themes and their associated subthemes.

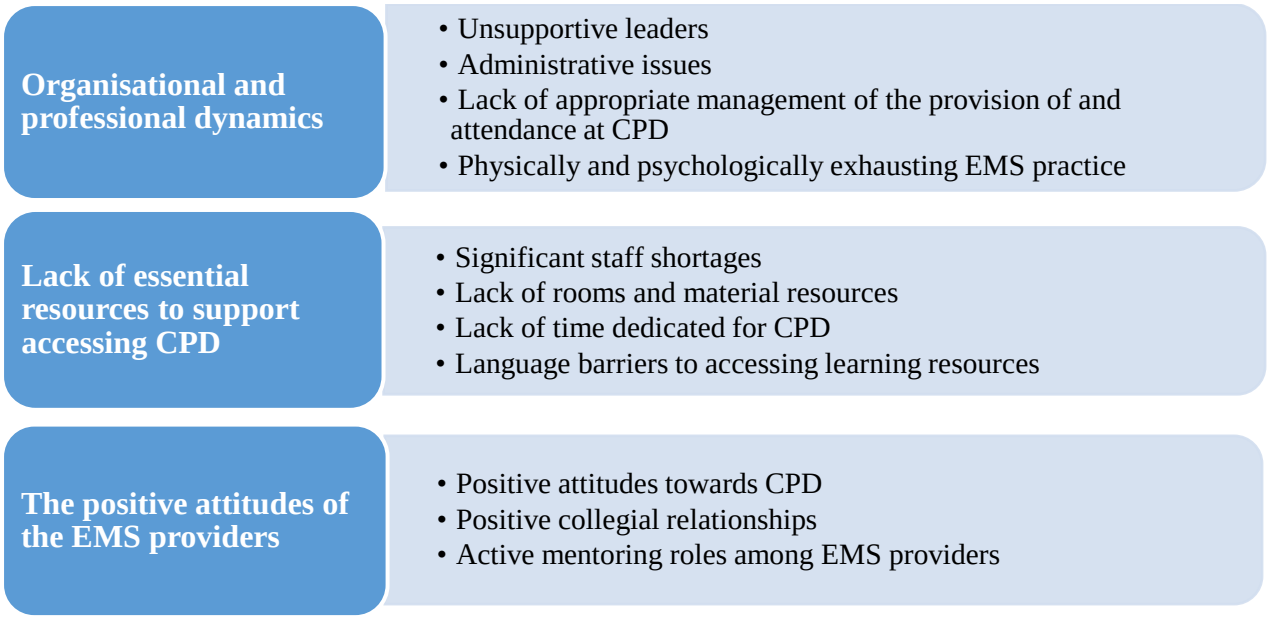

Figure 11: The themes and subthemes of the EMS providers group

5.5.1. Organisational and professional dynamics

The culture of the participating workplace had some issues related to organisational dynamics including leadership, administration and management processes related to CPD; as well as the nature of practising EMS in the participating region. These issues had great influence on CPD for EMS providers. This theme will be presented under four subthemes: unsupportive leaders; administrative system issues; lack of appropriate management of the provision of and attendance at CPD; and physically and psychologically exhausting EMS practice.

5.5.1.1. Unsupportive leaders

The EMS provider *actors* believed that their administrative leaders were not interested in maintaining them with professional development opportunities. These *actors* concluded that the aim of their administrative leaders was only to maintain a sustainable workflow in the EMS centres without supporting the professional development needs of the EMS providers. That is, the administrative leaders discouraged the EMS providers who were interested in CPD such as studying or attending training activities, as these participants identified:

> *they* [the administrative leaders] *used to ask us: 'Why do you want to study? Why? Be as you are; work as a technician or something like this even if you are a driver but we want you to be as you are. We want you to be as you are! We want you to perform your work and keep it going'. That is it! The* [professional] *development is zero!* (FG3-EMS, p. 25)

> *unfortunately I have requested from our administration, many times, that I need a specific training course but my requests were rejected … they* [the leaders] *say that my attendance at training will affect the workflow.* (Interview12-EMS, p. 12)

> *and they* [the administrative leaders] *did not like the EMS providers to have professional development, and the evidence is that they did not facilitate any way for them to receive professional development.* (Interview7-EMS, p. 11)

Furthermore, the *actors* identified that, instead of promoting their professional development, their administrative leaders used to annoy, intimidate and harass them. The EMS providers described their administrative leaders threatening them and tracking their errors without looking after their professional development needs, as these participants explained:

> *the* [name of institution] *is, instead, not looking after the EMS providers; but even more, they upset the EMS providers. It is not only neglecting the EMS providers, but also upsetting them.* (Interview7-EMS, p. 10)

> *the* [leaders in] *Ambulance Affairs Department never, never support us to participate in training courses; instead, they used to deal with us using threatening language.* (Interview10-EMS, p. 17)

> *as for the regional administration in* [name of region], *... we started to believe that they* [the leaders] *track any error committed by EMS providers, looking for any minor error that has been committed by any EMS provider.* (Interview12-EMS, p. 6)

> *we wanted to improve ourselves professionally, but no one* [leader] *would listen to us; rather, I am worried that if I explain this aspect, I might be disciplined.* (Phone Interview1-EMS, p. 1)

The above excerpts demonstrate that the administrative leaders did not support the CPD of the EMS providers. That is, CPD was not an objective for these administrative leaders. They aimed to maintain the EMS workflow in the centres by asking the EMS providers to only perform their clinical EMS roles without encouraging them to engage in CPD. These leaders appear to have undermined the importance of CPD as well as adopting a leadership style that focuses on tracking the errors of the EMS providers rather than developing them professionally.

5.5.1.2. Administrative system issues

It was not only the leaders of the participating institution who impacted on the CPD of the EMS providers; there were also some administrative system issues. The *actors* believed that they were not provided with job descriptions and their scope of practice. Some EMS providers did not even understand what a job description or scope of practice was, as shown in the following extracts:

> *Do you mean a full memo came from the central administration?* [The researcher said: No, it is not a memo; it is something called a 'job description'.] *Is it the way of making the duty roster?* [The researcher said: No, no, it is not the duty roster; it is a description of your duties.] *Nature of our work?* [The researcher said: Yes, it is the nature of your duties.] *Do you mean something that is specific and official?* [The researcher said: Yes.] (FG3-EMS, p. 21)

> [The researcher said: Each EMS staff category has a scope of practice ... please tell me about yours.] *I am sorry I did not understand this topic; I could not get this point.* (Interview7-EMS, p. 6)

> *Never* [has the workplace provided a written official scope of practice]. *They* [the workplace] *have employed us and told us that this is your job. Even, we have learned our job more from our previous colleagues; not from them* [the workplace]. (Interview8-EMS, p. 5)

> *no, I do not know the scope of practice. We do not have this thing* [scope of practice]. *We follow the EMS protocols of* [name of institution] … *really, it is the first time that I have heard scope of practice.* (Interview12-EMS, p. 17)

The field observations further confirmed this point. That is, no documentation related to job descriptions or scope of practice were located throughout the entire observation period.

The administrative system rules have restricted the EMS providers' opportunity to pursue their academic education. This issue emerged in the data from the administrative and training *actors* (see Section 5.4.1.4), and was further identified by the EMS providers. The *actors* illustrated that there were strict conditions for obtaining approvals to continue academic education, either nationally or internationally, which were challenging and restricting. Those who did succeed in obtaining the approvals were notified that they would not achieve any professional advantages after completing their studies, which was discouraging for them, as these participants stated:

> *I have done every possible thing to either study nationally or internationally. <u>No hope</u>! It was stopped for many years. So we have studied and paid for our studies; ... additional to that they almost gave me an approval to study, but with conditions, conditional approval. What are their conditions? The study should not influence my work. This is something that is agreed upon and there was no problem. The second condition was that I should not ask for professional advantages after completing my study. This means that I am a technician and I <u>should not</u> ask to be a specialist!* (FG3-EMS, pp. 24, 25)

> *I wanted to continue my academic education. I sent my paperwork through the director of our centre; ... They* [the central administration] *refused and they said that you can continue your education but it should not conflict with your work. How can I study daily without it conflicting with my work while I have a duty every three days!* (FG5-EMS, p. 7)

> *we have one of our colleagues here. He ... joined* [name of college]. *Now this is the second year that he has sought approval to study in this college. The approval means that the central administration knows that he is studying in the college only; it does not mean that they* [the central administration] *will exempt him from his shifts or provide him with leave; only they know that he is studying. But they refuse! ... Just they refuse to let him continue academic education for no reason.* (Interview7-EMS, pp. 11, 12)

The EMS providers considered pursuing their academic education as one of the main contributors to their professional development. That is, further education would enable them to expand and develop professionally, as these participants highlighted:

> *it is* [continuing academic education] *part of the* [professional] *development.* (Interview7-EMS, p. 12)

> *of course continuing academic education is linked with CPD. That is, instead of being an EMS technician I will be an EMS specialist. So the ACLS course will be part of my role. Furthermore, once I am an EMS specialist I will able to administer medications and intraosseous infusion, and read the electrocardiogram. So our roles in EMS practice will be developed.* (Interview8-EMS, p. 7)

> *why didn't they* [the workplace] *send the EMS providers to colleges of health sciences to study a bachelor of EMS? If they* [the EMS providers] *obtained bachelor's degrees, they will be specialists so they will broaden their roles.* (Interview12-EMS, p. 16)

Centralisation of training was also raised as an issue by the administrative and training group (see Section 5.4.1.1). Similarly, the participating EMS providers revealed that the centralisation of training activities has decreased the number of training courses available to them in their region. Also, centralisation required the training centre in the participating region to seek approvals before conducting any training course, which delayed CPD, as demonstrated in the following:

> *we here in* [name of region] *do not have courses that develop the EMS providers, really. The advanced courses that develop the EMS providers professionally are not available in* [name of region]. (Interview10-EMS, p. 8)

> *but also they* [the training centre] *report to a higher authority, which is the training centre in Riyadh; our training centre is not able to conduct any training courses without their approval.* (Interview11-EMS, p. 7)

The EMS provider *actors* agreed with the perspectives of the administrative and training *actors* that centralisation of training courses limited the opportunities of the EMS providers who work in remote and rural EMS centres from accessing training and CPD activities, as these participants reported:

> *particularly we, as remote centres, we do not achieve a good proportion* [of training] … *because we are so far … probably they* [the administration] *neglect us as remote centres. Sometimes do not receive or know about the training courses; if there are courses.* (Interview10-EMS, pp. 11, 13)

> *also they* [the training courses] *are limited to the big cities and centres that are close to the training centre. So, the remote and rural areas do not receive their share of training courses.* (Interview11-EMS, p. 8)

The administrative systems issues identified by the participants included a lack of documents related to job descriptions and scope of practice. Job descriptions and scope of

practice inform staff about their roles and duties, which in turn helps to determine their CPD needs. Although pursuing academic education was deemed an essential aspect of CPD, the administrative system set challenging conditions that restricted the EMS providers from obtaining approval to pursue their academic education. Another issue was the centralisation of the training activities, which reduced and delayed the training courses in the participating region.

5.5.1.3. Lack of appropriate management of the provision of and attendance at CPD

The participating EMS providers indicated that their workplace had some management issues related to the provision of and attendance at CPD. This finding was congruent with the findings of the administrative and training *actors* (see Section 5.4.1.2). The EMS providers clarified that there was insufficient provision of training opportunities to support CPD in the participating region. The *actors* expressed that there were some training courses that were no longer available. As such they need more training courses, as the following participants declared:

> *The development of the work cannot be achieved without the development of the staff* [via] *scholarships, or studies; here all these things are zero!!* (FG3-EMS, pp. 24, 25)

> *even the refresher course has been cancelled and we do not know the reason for its cancellation.* (Interview5-EMS, p. 2)

> *as for the training in* [name of institution], *we hope it will be better ... the training outcome is very little ... the training activities have stopped for the last two years.* (Interview11-EMS, pp. 7, 10)

The insufficient provision of training courses created a delay in the training activities that the EMS providers attended. The *actors* stated that they were scheduled to attend a mandatory training course only once every four years to achieve an incremental promotion.

They expressed that this is a very long period of time to remain without training or CPD to keep their practice up to date, as highlighted in the following excerpts:

> *I did not remember that there were courses since a year or two years, except the course that we all know, which is BLS, but also it has been stopped.* (FG3-EMS, p. 16)

> *they* [the administration] *conduct the refresher course when we are entitled to an incremental promotion. If we do not have a promotion, for about three or four years, there are no courses.* (Interview8-EMS, p. 3)

> *after we have attended this refresher course, they* [the workplace] *did not provide any training courses afterwards. They provide training courses before the next incremental promotion; i.e. after the next four years they will provide us with another refresher course.* (Interview12-EMS, pp. 3, 4)

In addition, the *actors* explained that their institution failed to provide a variety of CPD modules or any advanced training courses for them. They mentioned that the most common CPD module implemented in their region was the refresher course and BLS, which were outlined in Section 5.3.3.2, as highlighted in the following excerpts:

> *even the* [name of organisation], *I think it provides only the BLS and the refresher course, which is about how to deal with burns, fractures, lifting and moving patients; just only these things; nothing more than this is provided in the* [name of organisation]. (FG5-EMS, p. 6)

> *now, it has been three years for me and the fourth year is approaching, I have not noticed* [training courses] *except the refresher courses. This is the main* [training] *approach that they* [the workplace] *have adopted. I have not noticed any other types of courses.* (Interview8-EMS, p. 5)

> *they* [the workplace] *only send us to attend training activities that are mandatory for promotion such as BLS and the refresher course ... as I have told you, these courses*

> [ACLS and PHTLS] *are very rare and also not available in* [name of region]. (Interview11-EMS, pp. 8, 9, 12)

The EMS providers in the study indicated that they had limited opportunities to attend and participate in a wide range of CPD activities such as conferences or research seminars, as they were restricted to attending specific courses.

The *actors* highlighted that there was some inconsistency between the provided and required CPD activities and their EMS practice. That is, they identified that they were required to attend an ACLS course as it was mandatory for incremental promotions, registration and renewal with the regulating body. However, the EMS technicians in the participating institution were not allowed to practise ACLS because the tasks of ACLS, such as administering emergency drugs or intraosseous infusion, were not part of their roles. This was because they were only allowed to provide basic EMS skills, as demonstrated in the following quotations:

> *our work in the ambulance or in the* [name of organisation] *is <u>basic</u>, providing basic tasks only. If I have taken an ACLS course; what is the use of it? <u>I do not need it</u>, ... I do not need the ACLS because it involves medication administration ... and also we do not have nitroglycerin and morphine ... actually our practice does not require us to know how to use epinephrine because we do not have epinephrine; so then why do I have to learn it?* (FG5-EMS, pp. 5, 6)

> *knowing that they* [the administration] *have required us to attend an ACLS course, and of course we are, as EMS technicians, not doing ECG! ... they* [the administration] *have asked us to know intraosseous infusion as part of the ACLS course, while we are not doing intraosseous infusion. Also they* [the administration] *have asked us to know the drugs* [medications] *and we are not administering medications. In other words, we are required to attend an ACLS course just to renew our registration with the Saudi Commission for Health Specialties, <u>but</u> we are not getting any advantages in our real*

> *practice ... all of the* [medications] *that I could administer are only three fluids: normal saline, dextrose 5% and Ringer's lactate. I can only administer these three fluids as an EMS technician. However, in the course we are required to know adrenaline, epinephrine and so on while we are not using them, yet, we are not competent to administer them.* (Interview8-EMS, p. 4)

> *our workplace has compelled us to do an ACLS course. The ACLS course should be for staff who work in hospitals. I know and understand it very well but it will not benefit me in my EMS fieldwork.* (Interview10-EMS, p. 10)

As shown above, there were some management issues related to the provision of and attendance at CPD. Appropriate training courses were not provided on a regular basis in the participating region. The attendance of the EMS providers at training and CPD courses was also restricted by other issues, which were the long periods between CPD activities and inconsistency between the EMS roles and the training courses provided.

5.5.1.4. Physically and psychologically exhausting EMS practice

The physical and psychological exhaustion related to the nature of EMS practice was identified as another major barrier that hindered the participating EMS providers from engaging in CPD. They expressed that the nature of EMS practice and the shifts scheduling systems in their region were exhausting. The *actors* highlighted that they frequently felt tired and stressed because they routinely experienced a high workload. They believed that this routine of EMS practice exhausted them and reduced their motivation to undertake any CPD activities such as reading or attending training activities, as these participants stated:

> *I think that with this work overload it is impossible to have the motivation* [for development]. *That is, we have four days to work then four days off. In these off days we want to catch our breath, so we cannot* [attend training activities]. *This is from my point of view.* (FG3-EMS, p. 3)

> *during all our 12-hour duty, we are overloaded, exhausted and tired. So we finish our duty to have some rest and come back again to the next duty and so on. This is our routine. ... this routine has kept us away from reading.* (Interview7-EMS, p. 9)

> *The* [duty] *system now is 12-hour shifts for four days. 12 hours in the morning shift for two days, then it turns to work in the night shift for two days, then four days off. So once we have our time off we are so tired and exhausted.* (Interview11-EMS, p. 5)

Furthermore, the *actors* expressed that this routine which caused exhaustion influenced their CPD by preventing them from being able to concentrate and engage with the learning resources. That is, they could not focus during CPD activities because their 'brains' and 'minds' were affected and consequently were not able to respond to the learning materials, as illustrated by the following:

> *imagine that this week we are working, for example, Sunday, today Monday and tomorrow Tuesday, I work from 8 am until 8 pm; then only four days off ... then return to work at night ... from 8 pm to 8 am; so how do you want our brains to respond* [to CPD]*?* (FG5-EMS, p. 12)

> *our biological clock is being affected by sleeping and then having a duty then having a duty then sleep. Having duties in the mornings then duties in the nights, how can our bodies afford this? Our minds and brains are affected. Staying awake overnight increases our psychological stress. Lack of sleep affects us.* (Interview12-EMS, p. 14)

However, the field observation notes show that the EMS provider *actors* performed various recreational activities during their free time to relieve their stress. These *actors* played cards or phone games intensively, joked with each other or just relaxed in the staff lounge (Observation notes, September–October 2017, pp. 55, 60, 64, 69, 79, 93) instead of using this time to participate in CPD, because this was their approach to relieving their stress. These activities were instead of participation in CPD.

The EMS providers were exhausted and stressed due to the frequent work overload and the system of scheduling their shifts, which affected their physical ability to attend CPD and their mental capacity to understand the learning activities.

5.5.2. Lack of essential resources to support accessing CPD

The organisational issues discussed above have resulted in some barriers to accessing CPD. The participating EMS providers articulated that they confronted a significant lack of essential CPD resources, which hindered them from being able to actively engage and participate in CPD. This viewpoint was consistent with that of the administrative and training *actors*. The second major theme analyses this issue under four subthemes: significant staff shortages; lack of rooms and material resources; lack of time dedicated for CPD; and language barriers to accessing learning resources.

5.5.2.1. Significant staff shortages

The significant shortages in the EMS workforce has been examined from the perspective of administrative and training staff (see Section 5.4.2.1). Likewise, the majority of the participating EMS providers identified that the significant staff shortages have strongly impacted on their EMS practice as well as their engagement and participation in training and CPD. Several participants identified this shortage of EMS providers as one of the major issues that impacted on CPD:

> *the problem* [with training and development] *is summarised in:* [the number of staff]. *That is, if the number of staff increases, so many of the problems will be solved ... Yah, correct! But, if the number of the staff remains the same, the problem will not be solved.* (FG3-EMS, p. 16)

> *No doubt that the problem that has destroyed and limited the training, generally, is staff shortages.* (Interview5-EMS, p. 24)

> *they* [name of institution] *have a problem which is the shortage in the workforce* [EMS providers] *in the EMS centres. When they release an EMS provider from a certain centre to attend a training course, his position should be filled. And there are no fill-in EMS providers.* (Interview10-EMS, p. 4)

The *actors* identified some factors that had contributed to the significant shortages in the number of EMS providers in the region. For instance, new EMS centres were launched in the region without recruiting the required number of EMS providers. That is, the central administration launched some new EMS centres in the region without employing EMS providers dedicated to work in these centres. Instead, the Administration exported some EMS providers from the current EMS centres to work in these new centres. Consequently, the number of EMS providers in the current centres was dramatically reduced, as this participant clarified:

> *Suddenly, some EMS centres have been opened in the region such as* [names of two EMS centres in the region]. *Then, we found our centre with the minimum number of staff. ... Yes, they* [EMS providers in this centre] *have been distributed* [to the new centres]. (FG3-EMS, p. 16)

The field observation notes confirmed that the central administration asked the regional administration to launch some new EMS centres in the region without employing EMS providers dedicated for these new centres (Observation notes, August 2017, p. 16).

As the *actors* explained, the significant shortages of EMS providers affected CPD in a number of ways. For example, they could not be released to attend training or CPD because of the difficulties in finding EMS providers who could fill in for them.

5.5.2.2. Lack of rooms and material resources

The observation notes revealed that the buildings of the EMS centres in the participating region did not contain any rooms that enable EMS providers to learn or share knowledge and experiences (Observation notes, September 2017, pp. 53, 74). Instead, it was observed that the EMS centres in the region had staff lounges as a main room in all EMS centre buildings (Observation notes, September 2017, pp. 53, 74). However, these lounges were not equipped with materials that facilitate learning; instead, they were constructed for the EMS providers to have their breaks. The EMS providers used to spend their time in the staff lounges having breaks, sleeping, or performing social activities such as playing cards or multiplayer online phone games, eating or joking (Observation notes, September–October 2017, pp. 54, 57, 59, 62, 64, 65, 76, 79), instead of performing CPD activities. To acquire and share knowledge, EMS providers need rooms or places that enable them to gather and to learn from their experiences and each other's knowledge through discussions or case presentations. To enable this process to occur, these rooms need to be equipped with materials that facilitate learning or sharing knowledge such as computers, projectors and projector screens.

Although some EMS centres in the region had training units within their centres (Observation notes, September 2017, pp. 70, 72, 74, 75), these training units were established and equipped with learning materials that suited the community's learning needs only (Observation notes, September 2017, pp. 70, 72, 76). The participating EMS providers discerned that there were some training units in the region, but these training units were used to conduct training activities to increase the awareness of community members regarding first aid and basic life support rather than furthering the EMS providers' professional development. This view was congruent with the perspective of the administrative and training *actors*, as illustrated in the following:

> *the training unit in* [name of centre], *all it does is increasing the community's awareness through conducting the Prince Naif training program and awareness lectures to schools and different government departments.* (Interview10-EMS, p. 2)

> *we have a training unit here upstairs. There are courses, ... approved courses of the Prince Naif training program ... for the community and the government or private sectors who request these programs.* (Interview11-EMS, p. 10)

In addition to the lack of rooms, it was observed that the EMS centres had limited material resources that support CPD such as computers, projectors or projector screens (Observation notes, September 2017, pp. 53, 76). The EMS providers confirmed this issue in the focus groups and interviews, as stated in the following excerpts:

> *A computer?! I wish that I could see a computer for us EMS providers, but there is no computer … the resources that we lack include a projector – we do not have a projector – there is no projector screen, there is no laptop.* (Interview12-EMS, p. 9)

> *Our centre lacks essential education materials such as computers, manikins, internet.* (Phone Interview1-EMS, p. 2)

Also, there was a lack of educational manikins. During field observations, it was noted that a physician in one of the EMS centres discussed with EMS technician colleagues how to perform different emergency procedures by using their bodies instead of manikins (Observation notes, September 2017, p. 56).

The EMS centres of the participating institution not only lacked rooms that facilitate learning and sharing knowledge but also had limited material resources that fostered this process. Though there were some training units in the region, the participating EMS providers noted that these training units were used for community members rather than the training needs of EMS providers.

5.5.2.3. Lack of time dedicated for CPD

The participating EMS providers' views were congruent with the administrative and training *actors* in that they could not find any time for CPD or on-the-job training or learning activities. This was because they were required to perform clinical EMS roles only without being granted time dedicated to CPD or training activities, as these participants declared:

> *But if the courses are others* [not the refresher course], *we are not released* [from work to attend]. *We may work for 12 hours night shift then we have a training course the next morning, so they* [the administration] *tell us to attend this course without sleeping. Even if we told them that we need to be released to attend this course, they said that there is no potential for release.* (Interview8-EMS, p. 2)

> *as I have told you, the issue* [of CPD] *is circling around the time factor. In fact we do not have time to read anything. Also we could not do on-the-job training as there is no available time.* (Interview11-EMS, p. 10)

> *there is no time* [for CPD], *in fact there is no time. … they* [the administration] *notify us that we have a specific course at a specific time, but they do not prepare us for this course by having time to rest.* (Interview12-EMS, pp. 13, 14)

Time constraints restricted the EMS providers' opportunities to access CPD and learning activities, because they were expected to perform solely the clinical facets of their EMS roles without being conferred time for CPD.

5.5.2.4. Language barriers to accessing learning resources

The native language of the participants in this study was the Arabic language. The EMS providers identified that they had very limited support to improve their English language competencies. This was confirmed by the administrative and training *actors* who had reported that the EMS providers encountered language barriers to accessing learning resources such as

textbooks or peer-reviewed articles (see Section 5.4.2.3). This issue prevented them from accessing a significant number of learning resources, because these learning resources were rarely provided in their native language, as these participants indicated:

> *I confront many challenges learning English language, you know it is the language of the medical and healthcare sciences books.* (Phone Interview1-EMS, p. 2)

> *and the courses are provided to us here in* [name of institution] *in English language without improving our English language … I see the language as an important aspect of training courses, or if I want to read either online or textbooks i.e. when I want to do self-professional development. We desperately need the language* [English language]. (Interview10-EMS, pp. 8, 9)

> *most EMS providers, and I am one of them, do not have English language competency … and* [name of institution] *did not support us in this area.* (Interview7-EMS, p. 8)

5.5.3. The positive attitudes of the EMS providers

This last major theme explores the influence of the EMS providers' positive attitudes towards their CPD and supporting their colleagues to undertake CPD under three subthemes: positive attitudes towards CPD; positive collegial relationships; and active mentoring roles among EMS providers.

5.5.3.1. <u>Positive attitudes towards CPD</u>

The participating EMS providers, as well as the administrative and training *actors* (see Section 5.4.3.2), had strong positive attitudes towards CPD. That is, the EMS providers were aware of the significance and value of CPD in improving their EMS practices, as these participants stated:

> *Indeed, CPD is essential and indispensable in our profession. There is nothing that can replace the importance of CPD for the EMS providers ... it* [CPD] *must be provided to*

> *all EMS providers ... this is to enable us to practise our profession. In the healthcare field, knowledge is updating periodically, and healthcare concepts are changing from one year to another.* (FG5-EMS, p. 1)

> *It* [training and CPD] *is very essential in our work, ... so we need these things, particularly research studies and the topics that could develop our fieldwork, because our fieldwork requires research and evidence to develop it ... It* [training and CPD] *has many advantages such as developing our skills in the work, ... we need training and professional development because they remind us of the main protocols and the knowledge that we may have forgotten. That is, the cases that we confront in our fieldwork have specific protocols that we need to follow. ... So, the training reminds us of the essential aspects of our practice that we have forgotten while we need to know them continuously.* (Interview7-EMS, p. 1)

> *in any profession, particularly healthcare professions, continuing training is very important and necessary because the knowledge is updating worldwide.* (Interview11-EMS, p. 2)

The positive attitudes of EMS providers towards CPD was not only about updating knowledge and EMS practice, but also improving self-confidence in their EMS fieldwork, according to these participants:

> *training courses increase my self-confidence because I know that I am practising based on knowledge that has been updated, so I will be confident. … this means that I have gained updated knowledge which I need in my field practice. I have experienced this feeling.* (Interview7-EMS, p. 13)

> *training courses are good in that they reinforce us with new knowledge that we may need with any patient. The more professional development we have, the more our knowledge is updated, and our self-confidence is increased.* (Interview8-EMS, p. 10)

> *any training course increases our self-confidence really. For example, the last course that I attended about infection control … now I could attend cases without wearing gloves unless I will touch the patients' fluids or belongings as I have learnt in the course … I used to advise my colleagues about this because I have learnt it in a training course. Really this has increased my self-confidence as I have learnt many things … I trust that my knowledge is first-rate because I have attended a course.* (Interview5-EMS, p. 28)

Furthermore, the *actors* had a perception that training and CPD developed their professional practice through learning new skills to apply in their fieldwork, as these excerpts show:

> *for example the scoop stretcher, I did not know how to use it. I have learnt how to use it in the refresher course.* (Interview8-EMS, p. 10)

> *for sure, training for CPD improves our skills. The more knowledge we gain, the better our skills will be.* (Interview10-EMS, p. 19)

> *so training courses help us in practising our fieldwork, so these courses were very helpful. We gain knowledge from any course. This knowledge is very beneficial to us and explains aspects that we may overlook. Gaining knowledge helps us practise them in the fieldwork.* (Interview11-EMS, p. 11)

The EMS providers were aware that CPD was an essential to improve their EMS practices as well as to increase their self-confidence via gaining updated knowledge and skills on a continuing basis.

5.5.3.2. Positive collegial relationships

The participated EMS providers benefitted from the cooperative culture that was fostered by the administrative leaders, which was illustrated by the administrative and training group (see Section 5.4.3.4). That is, the participating EMS providers declared that they had established

strong collegial relationships with their colleagues within the same centre. These relationships extended beyond being only professional or workplace colleagues to being personal friends. The *actors* believed that these relationships assisted them to overcome many issues, either work-related or outside work boundaries, which in turn assisted them to manage the challenges they faced, including accessing CPD, as these participants explained:

> *We used to have discussions about some information after completing the required EMS to a certain* [clinical] *case. … Indeed, if I know, for example, that this colleague is experiencing difficult circumstances, I will come close to him and ask him what he needs and how I can assist him. ... so how about to share knowledge with him! For example, he might come to me and discuss what he has done with a certain case and the outcomes of his practice.* (FG5-EMS, p. 13)

> *For example, in these two centres* [because there are two EMS centres merged in the same building] *we have good and close collegial relationships with each other. This means that it's OK and we could teach each other.* (FG3-EMS, p. 11)

> *Of course cooperation among the EMS providers in the centre has assisted in professional development; either for training courses or continuing academic education ... we have two colleagues who study in* [name of a college]. *During their exams or quizzes we used to cover their shifts. This was a support from us to our colleagues. That is, if our colleagues are not supported by the administration, at least we cover their shifts to support them and cooperate with them. This is one of the points about how colleagues could support each other in training and CPD.* (Interview7-EMS, p. 3)

> *our colleagues are cooperative as one, and they lend a hand to support each other during all circumstances or problems. For example, if one of us confronts a problem, either work-related or not, they all gather around to support him.* (Interview12-EMS, p. 6)

These positive collegial relationships fostered an environment of trust, which in turn assisted in building a culture of knowledge sharing in the workplace.

5.5.3.3. Active mentoring roles among EMS providers

The *actors* described that they had active mentorship roles, in particular between senior and junior EMS providers. As this participant described, senior EMS providers were pleased to mentor the juniors, and share their professional experience and knowledge with them:

> *Our colleagues acquired most of the skills from the fieldwork and from their former colleagues. For example, the new EMS staff accompany seniors and learn from them the skills of the work and so on. So, they acquire skills and experience from their colleagues. So, the colleagues teach* [mentor] *one another; the seniors teach* [mentor] *the juniors. Actually, they do not refrain from teaching each other. Some of them started the job and they did not know even the basic skills, and after some time they became skilful.* (FG3-EMS, p. 3)

Physicians and specialists took on some mentoring roles by discussing some clinical emergency cases, explaining physical examinations required during a pre-hospital emergency, and illustrating some aspects of EMS practice with EMS technicians (Observation notes, September 2017, p. 56). The participating EMS providers acknowledged that physicians played active mentorship roles, as explained here:

> *this* [reading and searching about cases] *was done through the physician and the EMS specialists. But as for us, we used to ask them ... our reliance* [in gaining knowledge] *is on them, they research and teach us.* (Interview7-EMS, pp. 7, 8)

> *but after a physician has been assigned here in our centre, we rely on him, because he is helpful ... he likes to be asked and he provides comprehensive answers. Frankly, he is*

> *very useful and a blessing to our centre. Also, the EMS specialists are useful.* (Interview8-EMS, p. 9)

5.6. Synthesis of the findings

5.6.1. Cultural aspects agreed upon

The quantitative as well as qualitative data across all participant groups were congruent and supported each other. For example, the administrative restrictions that prevented EMS providers from pursuing their academic education, which were reported in the qualitative data, were further supported by the results of the questionnaire in which only 11.2% of the EMS providers in the region had bachelor's degree, either in EMS or in nursing. In addition, the lack of clear policies and administrative approaches that regulated CPD resulted in 66.4% of participants having no idea about the required number of CPD hours per year. Furthermore, the barriers that hindered EMS providers from active engagement in CPD, such as the administrative, organisational and professional issues and the lack of appropriate resources, influenced their participation in CPD. That is, 58.4% of the total survey respondents 'never participated' in a wide range of CPD activities in 2016.

Though the themes and subthemes from the administrative and training group and the EMS group were presented in different ways, they were congruent. The presentation of themes in this way was based on the way in which each group presented their data and the saturation of each group's data. Both groups identified that there were some administrative, organisational and professional issues that hindered CPD. These issues included the centralisation of CPD activities, the lack of provision of a wide range of CPD modules, the delays in rostering EMS providers to attend CPD, and the administrative restrictions on the pursuit of academic education. Another administrative issue that was discussed among all groups was that the focus of training activities within their workplace was mainly on increasing community members'

awareness of first aid and BLS instead of supporting CPD for EMS providers. These administrative issues resulted in EMS providers perceiving that there were inconsistencies between the required CPD activities and the actual roles and responsibilities of their practice.

There was consistency in the views of the two groups that their workplace lacked resources that were essential to support CPD. That is, there were significant shortages of EMS providers which impacted on the time required for CPD because the available staff focused on the clinical facets of EMS, leaving no time for CPD. There was also a significant shortage of trainers, EMS specialists and physicians who could provide mentoring roles to EMS providers and facilitate CPD. In addition, both groups reported that there was a significant lack of material resources that support CPD such as lecture rooms, computers and projectors, either in the training centre or in the EMS centres. Furthermore, all groups agreed that the EMS providers had limited English language skills, which hindered them from accessing and understanding contemporary learning resources related to their practice.

All groups had strong positive attitudes towards CPD. That is, they all strongly agreed that CPD is essential for EMS providers to provide safe EMS practices and to foster their self-confidence. They also perceived that CPD improves EMS practices by enhancing clinical decision-making skills, which in turn develops their professional practice.

The administrative leaders and training staff adopted a strict leadership style that focused on disciplining EMS providers without acknowledging their professional development achievements; this resulted in EMS providers believing that their leaders were not interested in maintaining their professional development. As such, the EMS providers considered that their leaders tracked their errors to annoy, harass and intimidate them rather than utilising these errors to further their professional development. So, they became aware that the aim of their leaders was to maintain a sustainable workflow in their centres. Furthermore, the administrative

and training group reported that they have fostered a culture of cooperation to enable CPD. This culture had a positive influence on EMS providers in that they established strong and close collegial relationship with their workmates in each centre. These collegial relationships assisted them to share knowledge and to cover the roles of those who attended CPD, and enabled the more experienced EMS providers to mentor the juniors.

5.6.2. Differences

While there was congruence in most of the findings, there were some points that were reported in one group but not reported in the other. For example, the EMS providers' group reported that their EMS practice caused them to be exhausted, physically and psychologically, which impacted on their engagement in CPD. This fact was not reported by the administrators and trainers because they were not providing EMS fieldwork. Furthermore, the administrative and training group discerned that there was a significant lack of financial investment in CPD, which was not perceived by the EMS group. That is because the EMS group had neither control over nor responsibilities for any finances, because they were managed by the administrative leaders. Table 11 summarises this synthesis of the findings.

Table 11: Synthesis of the findings

Administrative and training group subthemes	EMS provider group subthemes	Support from online questionnaire
Restrictions on the pursuit of academic education	**Administrative system issues –** restrictions on the pursuit of academic education	Only 12 participants (11.2%) had bachelor's degrees Only 6 participants (5.6%) were categorised as EMS specialists, and 1 (0.9%) as a nursing specialist
Lack of a management system to organise CPD – lack of policies and systematic administrative approaches that regulate attendance at CPD	**Lack of appropriate management of the provision of and attendance at CPD –** inconsistency between the required CPD and EMS practice	71 participants (66.4%) had no idea about the required number of CPD hours per year
Centralisation of CPD activities by the central administration – lacked independence and authority to conduct relevant training activities	**Administrative system issues –** centralisation decreased the amount of training	

Lack of a management system to organise CPD – lack of a wide range of CPD modules	**Lack of appropriate management of the provision of and attendance at CPD –** no variety of CPD modules or advanced courses	In 2016, 58.4% of the total respondents 'never participated' in a wide range of CPD activities in 2016
Lack of support for formal professional development for EMS providers – training units were established and equipped to train community members instead of EMS providers	**Lack of rooms and material resources** – training units in the region were used to train community members	
Lack of a management system to organise CPD – the irregular timing of CPD activities; once every 4 years	**Lack of appropriate management of the provision of and attendance at CPD** – delay in training activities; once every 4 years	
Significant shortages in workforce	**Significant staff shortages**	
Significant shortages in workforce – impacted on time dedicated for CPD by focusing on clinical responsibilities	**Lack of time dedicated for CPD –** EMS providers were required to perform only clinical EMS roles	56 participants (57.2%) agreed that their clinical roles inhibited their participation in CPD activities.
Lack of material resources for CPD – inadequate learning and teaching resources such as lecture rooms or computers	**Lack of rooms and material resources** – the buildings of the EMS centres did not contain rooms for learning or sharing knowledge – limited material resources such as computers, projectors, projector screens	
Language barriers to accessing learning resources	**Language barriers to accessing learning resources**	63 participants (64.3%) reported that their workplace did not provide access to online evidence-based learning resources
Focus on restricting rather than developing the EMS providers	**Unsupportive leaders**	
Positive attitudes towards CPD	**Positive attitudes towards CPD**	
Fostering a culture of cooperation to enable CPD	**Positive collegial relationships** **Active mentoring roles among EMS providers**	

5.7. Chapter summary

The findings of this study show that the workplace culture of the participating institution had a number of features that strongly influenced the CPD of the EMS providers. There were a number of administrative and leadership issues that impacted on the CPD of the EMS providers. These issues included the centralisation of CPD activities, and the lack of management of the provision of and attendance at CPD for EMS providers. The restrictions of the administrative systems and procedures on the pursuit of academic education was strongly identified in the findings. The participating institution experienced a significant lack of appropriate resources to support CPD. These resources included human resources, financial

investment in CPD and material resources that facilitated CPD. However, all participants agreed on, and were aware of, the significant value of CPD, which assisted them to support each other to engage in such activities. The next chapter discusses the significant findings.

Chapter 6: Discussion

6.1. Introduction

This chapter discusses the significant findings identified by the study using the framework of Spradley (2016b). This framework was explained in Section 1.8. A conceptual illustration of the use of this framework is provided first. Then the aspects of workplace culture that supported as well as impeded continuing professional development (CPD) for emergency medical services (EMS) providers will be discussed. The consequences of the aspects of workplace culture that impede CPD will also be explored. The meaning of each issue and its consequence will be interpreted and their interrelationship with each other will be explored to provide a comprehensive understanding of their influence on the overall workplace culture of CPD. A brief summary will conclude the chapter.

6.2. Conceptual framework for the discussion

Spradley (2016b) indicates that ethnographic settings are shaped by nine core dimensions, as presented in Section 1.8. Identifying the relevant dimensions within ethnographic research, and interpreting their interrelations, facilitates understanding of the researched phenomena overall. This research aimed to provide a deeper understanding of the influence of workplace culture on the CPD of EMS providers within a major institution in one of the southern regions in Saudi Arabia that provides EMS to a community. The research question was: How does the workplace culture of emergency medical services providers influence their continuing professional development?

Based on Spradley's ethnographic dimensions, the participating institution was found to have some interrelated aspects of workplace culture that influence the CPD of the EMS providers. Some of these aspects of the culture were considered by all *actors* to encourage CPD. These included their positive *feelings* towards the concept of CPD and the helpful social

relationships they had with each other. However, there were other aspects that significantly discouraged building a workplace culture that embraced CPD. Barriers within the organisational, administrative and management systems were identified to be overarching features of the workplace culture that impacted on all other dimensions. These impacts on the other dimensions were interrelated and sequential. For example, the shortage of *actors*, which is a metaphor for staff, resulted in a high workload. The EMS providers therefore had no *time* dedicated for CPD. There was also a lack of *places* and *objects* that were essential to enable CPD to be provided. The *goal* for *actors* undertaking CPD was not their professional growth but instead a promotion. All these aspects and their interrelationships are illustrated in Figure 12 using Spradley's dimensions, and will be discussed in detail in this chapter.

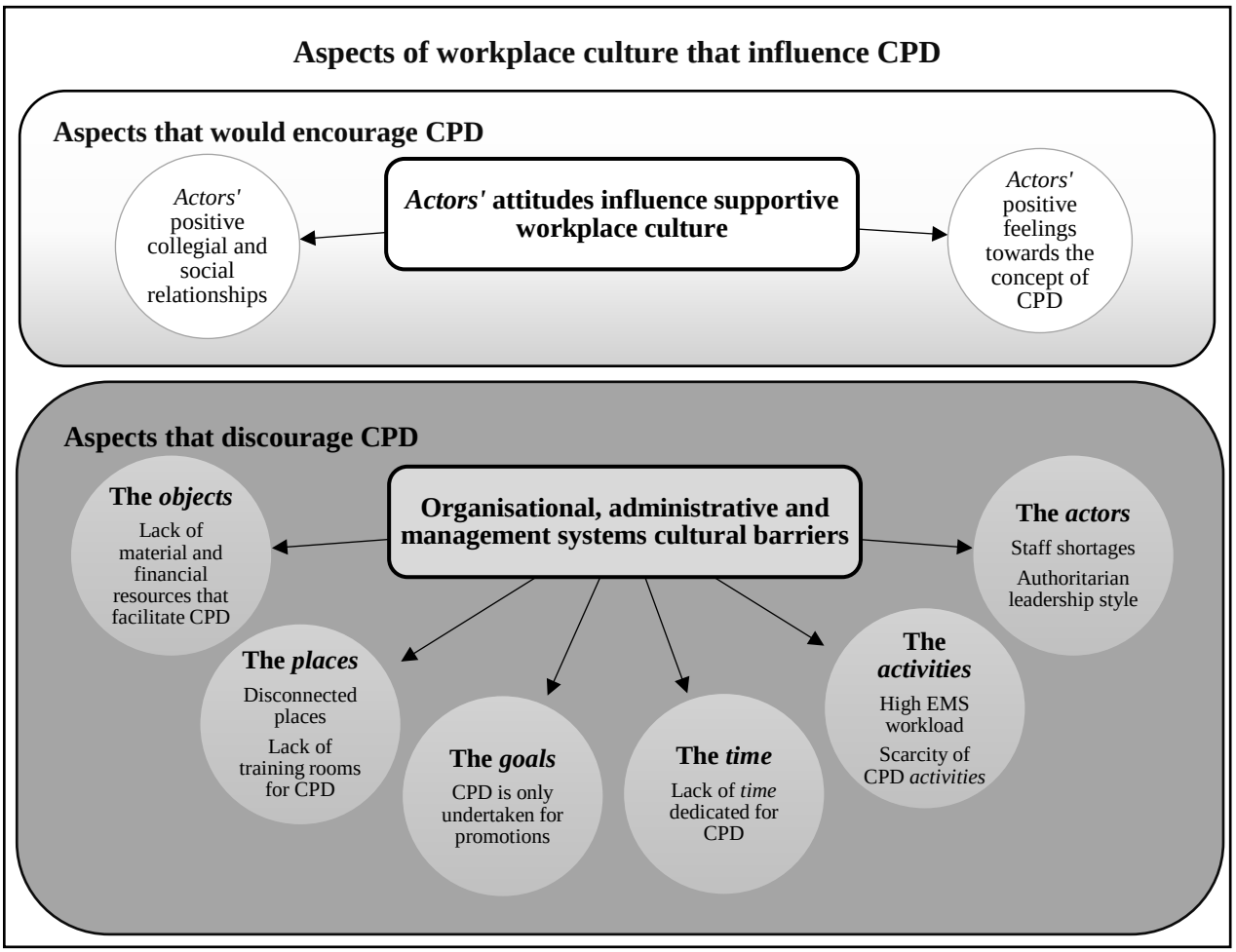

Figure 12: Conceptual illustration of the aspects of workplace culture that influence CPD

6.3. Aspects that would encourage CPD

6.3.1. Actors' attitudes influenced a supportive workplace culture

The findings indicate that the *actors'* attitudes influenced a supportive workplace culture that would encourage CPD. These attitudes included their positive *feelings* towards the concept of CPD and their positive collegial and social networks in their workplaces.

6.3.1.1. The positive feelings towards the concept of CPD

The *actors* indicated positive *feelings* towards the concept of CPD, which was considered an aspect of the culture that would encourage CPD within the participating institution. The findings demonstrate that all *actors* in the study, across all groups, expressed that they were aware of the value of CPD. They understood the value of CPD in increasing knowledge and skills, self-confidence, job satisfaction, and to maintain professional registration. The EMS providers indicated a sense of commitment to and pride in their profession. They wanted to reflect a positive image of a competent EMS in order to gain the community's trust in their profession. Lau et al. (2018) involved community paramedics from New York in a randomised controlled trail and identified similar positive attitudes of paramedics to acquiring skills and knowledge for successful provision of relevant EMS community care.

The positive *feelings* of the *actors* in the current study towards the concept of CPD are consistent with findings internationally where new knowledge and skills could be obtained specifically for key groups in the community. In the United States, Glaeser et al. (2000) identified in their national survey that all EMS providers considered that continuing education is the main way to gain knowledge and skills related to paediatric patients. Subsequently in 2009, Peterson et al. (2009) conducted a qualitative study and identified that EMS providers desired continuing education related to geriatric patients. Within both the Australian (Williams & Edlington 2019) and Irish (Knox et al. 2015) EMS contexts, paramedics value CPD as a

means of maintaining up-to-date practice. This common theme of EMS providers' positive attitudes towards CPD keeps emerging in the contemporary literature from international perspectives and indicates that CPD is considered an essential process to enable EMS providers' scope of practice to expand to meet the changing needs within the community safely and competently, such as paediatric or geriatric paramedicine.

The positive *feelings* of the participants towards CPD influenced each group to adopt different approaches that they considered appropriate to try to support CPD. The findings show that some administrative and training *actors* at the regional administration level facilitated some informal continuing learning initiatives, such as developing written quizzes that evaluate the EMS providers' level of knowledge and skills necessary to their practice. However, these initiatives were performed on an ad-hoc and individual basis rather than being formally structured and officially implemented by all administrative *actors*. This was because these administrative *actors* perceived that they did not have authority from the central administration to officially introduce formal CPD approaches, which will be explained later in this chapter. This interest of administrative *actors* in undertaking informal, ad-hoc learning initiatives demonstrates that they do value the benefits of CPD.

The concept of informal learning in this research denotes non-systematic or non-structured ways of learning or sharing knowledge among staff within their workplace. This process was undertaken unconsciously or incidentally, which afforded an informal learning environment, such as guidance from more expert co-workers. This explanation of the concept of informal learning was adopted in a study conducted by Bjørk, Tøien and Sørensen (2013) aiming to explore informal learning opportunities for nurses in a Norwegian health facility. Pettersson, Bolander Laksov and Fjellström (2015) concluded in their narrative study that informal learning in clinical settings enhances the professional skills of physiotherapists. Bjørk, Tøien and Sørensen (2013) highlighted the critical role of leaders in promoting a culture of

informal learning through facilitating and encouraging such practices in the workplace. This indicates that informal learning opportunities in a workplace are essential for healthcare providers from different backgrounds to foster their CPD.

6.3.1.2. Actors' positive collegial and social relationships

The leadership that was demonstrated by administrative *actors* at the centre level who have direct contact on a daily basis with the EMS providers fostered a culture of cooperation and positive collegial and personal relationships. This is congruent with the findings of a systematic review by Davis, White and Stephenson (2016), who identified that supportive leaders and managers, and cooperative colleagues and mentors, are some of the factors that facilitate learning in the workplace. Such a culture enables involvement in CPD through informal arrangements, such as covering the shifts of the staff who are attending CPD activities and encouraging group sessions to discuss specific clinical cases between EMS providers, which are led mainly by EMS physicians. Bjørk, Tøien and Sørensen (2013) identified that discussions enable healthcare professionals to share their views and experiences regarding, for example, the use of some medical equipment. However, these discussions that took place in the participating institution were not integrated as they were not observed or reported to occur frequently or on a regular basis in all EMS centres in the region. Therefore, this is not considered a deeply ingrained part of their workplace culture.

Another ad-hoc process found within this culture was informal mentoring among EMS providers. Tourigny and Pulich (2005) defined informal mentoring as the process of building mutual, personal and unstructured relationships among staff in a workplace to meet individual needs, on a long-term basis. Inzer and Crawford (2005) added in their literature review that this type of mentoring enables both parties – mentor and mentee – to support each other and share knowledge, insights and wisdom. This type of mentoring is provided on an individual basis

rather than being systematically organised. The findings of the current study show that some senior EMS providers and EMS physicians mentored the novice or less experienced EMS providers through engaging with them in informal clinical learning opportunities. However, mentoring was not embodied in their overarching workplace culture because, where there was a lack of such experienced providers, mentoring was absent.

It was clearly noted that the EMS providers in each centre valued building solid and interconnected personal friendships and social networks in their centres that extended beyond the work boundaries. This indicates that socialising among EMS providers was strong and highly valued. The significance of building personal networks and collegial support in promoting informal CPD is supported by the literature. The realist synthesis case study conducted by Manley et al. (2018) highlights that collaborative relationships that are developed between staff and peers are no less important than formal organisational processes and polices in fostering professional development for frontline healthcare providers. Another pre-post mixed methods study by Pollock et al. (2017) that targeted occupational therapists stressed the importance of a peer networks approach in facilitating professional development.

It is worth noting that establishing and maintaining personal and social friendships among staff in different Saudi Arabian workplaces is normal and common. This culture was demonstrated when the researcher observed EMS providers socialising together during their free time. Such a culture of gathering frequently would enable the EMS providers to be familiar with each other and thus support each other through discussions about their professional needs. This finding is supported by the cross-sectional quantitative study of Azim and Islam (2018) as they suggested that building social networks among Saudi nurses strongly influences their commitment towards their career, as they receive substantial support from each other. However, such a culture in the participating workplace did not influence the formal CPD of EMS providers as the resources and infrastructure in each EMS centre reinforced an

environment for social activities only and did not support the formal CPD process, which will be discussed in the *places* section later in this chapter.

Working in such a cooperative and harmonious atmosphere that was built on collegial and personal relationships enabled the EMS providers to engage in some informal CPD. Though all *actors* valued the concept of CPD, this only translated to the provision of small pockets of ad-hoc informal educational opportunities; and did not influence change in the broader workplace culture in the provision of and access to formal CPD. A culture where informal learning occurs is important; however, to maintain and reinforce staff attitudes towards different approaches to formal continuing learning, Chiu and Tsai (2014) identified in their survey study that managers and organisations need to embed structural and systematic support. This support could be offered, for example, through tailoring organisational policies that reward and encourage staff to participate in workplace or web-based learning activities (Chiu & Tsai 2014). Another way of offering organisational structural support to promote professional development and learning, which is reported in the integrative literature review by Santos (2012), is empowering nurses to apply knowledge and skills they have acquired into practice. The workplace culture barriers that inhibited CPD in the current study will now be discussed.

6.4. Aspects of workplace culture that discouraged CPD

The findings show that the culture of the participating institution involved many significant barriers that impeded the EMS providers from delivering and accessing CPD. The EMS providers within this study were not alone in experiencing these barriers within their workplace, as identified in the international literature. The major identified barriers included: the lack of time and financial reimbursements dedicated for CPD, as highlighted by Williams and Edlington (2019) and Glaeser et al. (2000); and the unavailability of continuing education

topics related to specific clinical areas of EMS practice such as paediatrics, as identified by Glaeser et al. (2000). Another significant barrier which was reported by Peterson et al. (2009) was a lack of CPD in online formats, which if utilised could provide easily accessed CPD opportunities.

6.4.1. Barriers from organisational, administrative and management system failures

The administrative system influences the overall culture of the institution. The findings indicate that there were some failures within the administrative system of the participating institution, which created barriers to implementing and accessing effective formal CPD for EMS providers. These failures include a lack of organisational policies and documents, centralisation of the policy and decision-making process, administrative restrictions on the pursuit of academic education, and lack of engagement in institutional accreditation programs.

6.4.1.1. Lack of organisational policies and documents

The main barriers within the administrative system were the lack of organisational policies and documents that legitimise the employer's requirements for formal CPD. Generally speaking, documents such as job descriptions and scope of practice are essential to clarify the role responsibilities of staff at all levels. For pre-hospital EMS providers, Clements and Mackenzie (2005) identified in their article published in the *Emergency Medicine Journal* that clarifying work roles for such healthcare providers is essential to define their required competencies, which therefore enables an overall growth of their profession. Brooks et al. (2016) explained in their article that reviewed the history of paramedicine in England that role descriptions of different levels and specialisations of paramedics provide guidance on the competence required to deliver the necessary standard of EMS practice. These documents can be used to identify the relevant competencies that form a CPD pathway from orientation through to advanced practice of the EMS providers within an organisation. Knox, Cullen and Dunne (2013) concluded in

their survey of registered emergency medical technicians (EMTs) in Ireland that the professional competence of EMTs increases as an outcome of engaging in multiple and effective CPD activities. Therefore, role requirements provide a clear map that can be used to plan effective formal CPD activities within an organisation to support EMS providers' safe practice. Hence, role descriptions and CPD are inseparable components in EMS practice.

Organisational policies related to CPD are essential to legitimise implementing and resourcing effective formal CPD that enables EMS providers to meet their scope of practice and job descriptions competently. Stewart (2014) defines a policy as a set of formal guidelines and rules designed, issued and implemented by the governing board of an institution to achieve a particular organisational goal which also specifies the required procedures. Sade and Peres (2015) concluded in their qualitative action research that organisational policies which have an interest in supporting 'human capital' are essential for financing and facilitating continuing education that can achieve the highest positive outcomes. This is because CPD is not only a personal, but also an organisational responsibility. Therefore, to formally support effective CPD, organisations need to embed policies that are resourced and supported by administrative staff to set up a culture where CPD is embedded.

The regulating body of healthcare specialities in Saudi Arabia, the Saudi Commission for Health Specialties (SCFHS), has policy directions that require healthcare providers to demonstrate CPD to renew their registration, as explained in Section 1.2.3. These policies were designed to regulate all healthcare specialties including EMS. The participating institution's policies specify the required CPD hours as established by SCFHS. However, there is no mechanism that enables training for EMS providers to meet the CPD hours within their work time. Also, the researcher observed a lack of awareness by the EMS providers of their scope of clinical practice that was provided by the institution.

A lack of such specific organisational policies for CPD resulted in some EMS providers attending training programs that were not related to their EMS roles, such as lectures related to dentistry or plastic surgery. This was because these EMS providers endeavoured to meet their mandatory CPD hours to maintaining their professional registration with the SCFHS. This finding is congruent with the qualitative study of Williams and Edlington (2019) who identified that some EMS providers attend learning exercises related to other healthcare professions because this is just the 'quickest and easiest' way to achieve the required number of CPD hours.

Furthermore, it has been identified that the participating institution required the EMS technicians to attend training courses that were not related to their real EMS practice. For example, they were required to attend the Advanced Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS) courses, while they were not allowed to practise the clinical aspects of these courses in the real world. This would be due to the lack of tailored local organisational policies for CPD that are based on role descriptions of each EMS professional level. The lack of organisational policies for CPD at the local level could be a result of the policy of centralising decision making in the central authority, where decision makers may not be aware of the implications this has at the regional or local level on EMS providers' professional development. The centralisation issue is discussed in detail next.

6.4.1.2. Centralisation

Another major administrative system barrier that has been identified by this study is centralisation, particularly for training activities. The process of overall planning and decision making related to CPD was undertaken by leaders and trainers with high authority located in the central administration. The middle and lower-level managers and trainers, and EMS providers working on the 'ground', had a passive voice in and influence on this process. This centralisation is reflective of the overarching culture ingrained in Saudi Arabia. Discussing the

family and social environment, Achoui (2006) identified that Saudi families can be described as ‘patriarchal’ where authority and power are generally possessed by fathers and grandfathers. At an organisational level generally, a study within public organisations (Alhaqbani et al. 2016) and the education sector (Meemar, Poppink & Palmer 2018) in Saudi Arabia indicated that centralisation of authority and decision making is a dominant feature. This implies that the power is vertically directed from the top of the hierarchy downwards. As such, the managers in the middle or lower levels have limited authority to question or influence systems. Instead, any influence or change in the system needs to be adopted and approved at the higher levels first.

In a social constructive exploratory study about continuing medical education (CME) and quality improvement in Saudi Arabia, Alsabban and Kitto (2018) argued that having a central authority that manages and supports the process of CPD is essential and critical as it provides strong and clear-cut administrative instructions. However, Alsabban and Kitto (2018) clarified that such a central authority needs to recognise the role of the lower-level leaders and engage them in developing and implementing CPD. The problem with centralisation in the current study is that the higher-authority decision makers are rarely located on the ‘ground’ with the lower-level managers and the EMS providers to experience their real practices and needs. Instead, they work in isolation from such experiences. This results in an inconsistency between the planned and the required training activities. The administrative approaches that are required to manage this process are also disconnected. There is a scarcity of literature that discusses the influence of centralised administrative authority on CPD for healthcare professionals.

The overall consequence of centralisation was the training *actors* at the regional level were prevented from planning the most appropriate formal training activities that suited the specific needs of EMS providers in their region. Also the lack of empowerment of the

administrative *actors* meant they could not adopt appropriate local administrative approaches or policies that would enable a better structured formal CPD process. A recent correlational study conducted by Drafahl (2020) found that, where nursing students felt that they lacked empowerment to be creative, innovative and critical thinkers, these crucial skills were negatively affected. This highlights the importance of empowerment of middle and lower-level managers as well as staff to foster a culture that embraces creativity and critical thinking. To empower such *actors* by reducing the centralisation of authority, a reform of the organisational, administrative and management system will be required.

Reforms of healthcare systems and policies can be influenced by professional bodies. Whitmore and Furber (2006) define a 'professional body' as an entity that either acts to safeguard the interests of particular professionals or acts to protect the public by administering and maintaining a code of ethics and the standards of training required of the profession. In their integrative review, Benton et al. (2017) argued that the power of professional associations lies in advocating for a profession. In Saudi Arabia, there is an EMS professional association affiliated to the SCFHS named Saudi Association of Emergency Medical Services (SAEMS). However, the Saudi Commission for Health Specialties (2017) explained in their bylaws that the purpose of SAEMS is to promote scientific and professional facets of practice for its members. Yet, having searched to identify a SAEMS website and review the available CPD resources, no online evidence-based learning or educational resources were identified, as this association has no website on which to publish such resources and share them with its members. This association also has no power or influence over policy. AlShammari, Jennings and Williams (2017) reviewed the evolution of EMS practice in Saudi Arabia and highlighted that the SAEMS does not have any power to influence any organisational systems or policies.

6.4.1.3. Restrictions on the pursuit of academic education

Gaining an academic degree fosters CPD, where the knowledge and skills of EMS providers are advanced via exposure to formal education processes. AlShammari, Jennings and Williams (2019b) added in their cross-sectional study that university education expands the professional roles, responsibilities and ethics of EMS practice. This therefore enables EMS providers to upgrade their professional level from being technicians to being specialists or higher, based on their academic degrees. The advantages of gaining an academic degree extend to the EMS providers' colleagues by furthering informal professional development through sharing their gained knowledge and skills.

Such an expansion and upgrade of professional roles and levels, in turn, entitles staff to earn a higher salary. This indicates that pursuing formal academic education for EMS providers is not supported by the authorities, to avoid expanding the roles of EMS providers and thus incurring the institution extra expense. This is in line with an editorial by Professor FitzGerald (2015), who was a Honorary Fellow of the Australian College of Ambulance Professionals, as he reported that some EMS industries were reluctant to support expanding the skills and the scope of clinical practice of paramedics because these industries were aware that this process would require more financial recognition. FitzGerald (2015) added that these industries were not prepared to invest in and therefore did not value advancing the clinical roles of paramedics.

At the regional level, the findings indicate that the EMS technicians, who were the considerable majority of EMS providers in the participating region, were disadvantaged by administrative restrictions when they wanted to pursue their academic education. These restrictions continue despite the evolution of EMS academic education in Saudi Arabia. AlShammari, Jennings and Williams (2017) indicated that there are currently ten national private and government universities that offer bachelor programs in EMS within Saudi Arabia.

These academic programs are designed for undergraduate students who have no previous professional or academic experience. However, there is a dearth of literature about the availability of academic bridging programs in EMS that enable experienced providers to upgrade their qualifications from diplomas or associate degrees to bachelor's degree. Such EMS providers require academic programs that are designed to meet their specific needs as they have previous experience, qualifications and competencies. Nevertheless, the participating EMS providers perceived that the administrative leaders within the region did not want them to upgrade their professional level, as indicated by a participant who stated that the administration wants them to *'be as they are – technicians'*.

It is noteworthy that none of the EMS leaders or trainers in this region had gained a bachelor's degree or higher. This could indicate that these leaders and trainers were also reluctant to support EMS providers to gain higher qualifications, because they may feel professionally threatened. This is similar to the findings of the two descriptive qualitative studies conducted by Tame (2011, 2012), who reported that some managers within perioperative nursing felt 'threatened' or 'jealous' that their staff gained qualifications that they themselves did not have. Thus, the current study found that the higher as well as the lower authority managers created many administrative obstacles to discourage the EMS technicians from pursuing their academic education. Yet, AlShammari, Jennings and Williams (2017) argued that the minimum qualification required to practise a healthcare profession is a bachelor's degree as per the recommendations of the World Health Organization.

6.4.1.4. Lack of engagement in an accreditation program

Harvey (2004) clarified that the accreditation of institutions grants them 'a licence to operate'. Accreditation of a healthcare institution is defined by the Saudi Central Board for Accreditation of Healthcare Institutions (2018a) as the process of certification of the institution by an

independent external agency following a comprehensive, rigorous and transparent evaluation process of its systems, processes and performance in order to ensure it meets the accreditation standards. One of the accreditation standards includes the provision of CPD for staff. A number of institutional accreditation standards such as those developed by the Accreditation Board for Speciality Nursing Certification (2019); the Accreditation Council for Continuing Medical Education (2020); and the Institute for Credentialing Excellence (2014) share a common criterion of requiring institutions to have a commitment to provide employer-funded CPD for staff to strengthen their professional development and maintain continuing improved competence.

Internationally, there is a wide range of bodies, agencies and programs that award healthcare accreditation to professionals or institutions. They include the National Commission for Certifying Agencies and the Assessment-Based Certificate Accreditation Program, which are approved by the Institute for Credentialing Excellence (2020); the Australian Council on Healthcare Standards (2019); the Accreditation Council for Continuing Medical Education (2020); and the National Association of EMS Physicians, as identified in the expert witness review article of Maggiore, Kupas and Glushak (2011). In Saudi Arabia, there is an official non-for-profit agency authorised to accredit all government and private healthcare institutions named the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) (Saudi Central Board for Accreditation of Healthcare Institutions 2018b). The overall aim of accreditation granted by this institution is to ensure quality and safety in patient care (Saudi Central Board for Accreditation of Healthcare Institutions 2018a), in which CPD plays a key role.

However, the participating institution had not engaged in any nationally or internationally approved accreditation program. This is because the principle of quality improvement was a new and emerging concept within this institution, and was not applied

efficiently. Corrêa et al. (2018), after their empirical survey, followed by Tabrizi and Gharibi (2019) in a systematic review agreed that quality improvement and high-quality care are key components to achieve accreditation. Therefore, Alsabban and Kitto (2018) identified that the application of quality principles proficiently in practice is linked with the accreditation of healthcare institutions and implementation of effective CPD for healthcare staff. This indicates that there is still a long way to go before the participating institution applies for healthcare accreditation, which potentially means the status of CPD will not improve in the near future.

6.4.2. Consequences of the administrative system failures for CPD

The previously discussed administrative system failures created interrelated consequences for the *actors, activities, time, goal, places* and *objects* with relation to CPD, which were elements of ethnographic settings presented by Spradley (2016b). This indicates that impact on one element created an impact on another. These consequences created additional workplace culture barriers to implementing and accessing CPD within the participating institution. This will be discussed in detail next.

6.4.2.1. The actors

6.4.2.1.1. Significant shortages in all actors groups

A major issue related to *actors* that was substantiated in the findings was the significant shortages of administrative staff, training staff and EMS providers. The participants reported that these shortages were due to a lack of recruitment strategies and processes, which were managed centrally by the central administration. The consequence of the lack of a recruitment strategy to fill positions for the new centres is inadequate staffing by EMS providers.

Inadequate staffing has consequences for the provision of, and the attendance at, CPD. These consequences include the inability of EMS providers to attend formal training activities, because they cannot find replacement staff to cover their shifts. This, in turn, discourages

trainers from providing formal training courses as they feel that these courses are not valued because of the low attendance rate. The inadequate number of trainers also reduces their time to prepare their training materials. Furthermore, the insufficient number of trainers in the region prevents the EMS centres from being staffed with professionals who have the capacity and competence to deliver formal CPD within each EMS centre. In a systematic review, Davis, White and Stephenson (2016) stressed the importance of adequate staffing to create a positive workplace culture that supports CPD. This is because staff shortages are a major barrier to accessing CPD. This issue was reported concurrently in the qualitative naturalistic study of Raterink (2011), the survey study of Katsikitis et al. (2013) and the Delphi study of Cooper et al. (2017).

6.4.2.1.2. Authoritarian leadership culture of administrative and training actors

The findings of the current study indicate that the administrative and training *actors*, at the regional level, adopted an authoritarian or punitive leadership style. In adopting such a leadership style, the administrative *actors* took control over the routine work of EMS providers without considering or supporting their formal professional development. This leadership culture could have developed due to possessing administrative power due to their professional titles without having well-defined roles, responsibilities and accountabilities. There were no organisational structures or policies to manage the administrative power held by the administrative *actors* within the participating institution to influence a positive culture of CPD. This was evident by the lack of documented policies and job descriptions, as discussed earlier in this chapter. In addition, in a phenomenological study, Leggio (2014) concluded that there was a lack of formal support for EMS leadership in Saudi Arabia and the leaders were not exposed to adequate training relevant to leadership. These issues generated a punitive workplace culture where the leaders aimed to maintain a sustainable and proper EMS workflow. Therefore, the administrative *actors* ‘disciplined’ the EMS providers when they

committed any work-related errors or mistakes instead of assisting and enabling them to learn from these mistakes for their professional development.

This authoritarian and punitive leadership profile had a consequence of creating an unsupportive environment for CPD through making the EMS provider *actors* frightened of the disciplinary acts of their leaders. As such, these EMS providers became submissive to their leaders and task oriented. This means that the EMS provider *actors* attended their shifts and carried out their clinical EMS duties as a routine job only, aiming just to satisfy their leaders. This is supported by literature from different fields of healthcare practice. The qualitative-quantitative action research of Sim and Radloff (2008), who studied medical radiation science practitioners, and the systematic review of Nevalainen, Lunkka and Suhonen (2018) about nurses' work-based learning reported that 'task-oriented' workplace cultures are characterised by instructing healthcare professionals to adhere to their practice protocols strictly and undermine their intellectual abilities, which accordingly makes critical reflection on, and examination of, practice a secondary priority.

In case of the EMS provider *actors* in the current study, this punitive and submissive culture resulted in an extreme restriction on their skills of innovation, creativity, reflection and critical thinking. However, the incorporation of these skills into practice is crucial for fostering effective CPD. To nurture and maintain such crucial skills, Underwood et al. (2009) concluded in their mixed-methods study that involved policy makers and front-line nurses that workplace atmospheres need to support creative and autonomous healthcare practice by promoting a robust leadership that values the achievements of staff and invests in their learning and training. Petruik et al. (2017) also identified in their qualitative study that to enable healthcare social workers to maintain the skills for critical reflection on practice, their colleagues, leaders and the overall workplace environment need to embrace and support such skills.

In the present study, such a punitive and submissive workplace culture jeopardised the EMS providers' confidence and curiosity in benefiting from their mistakes and utilising them as constructive learning and CPD opportunities. Carhart (2014) explained that instilling a sense of curiosity in EMS providers is the most efficient and intrinsic way to motivate them to engage in CPD and seek knowledge for the sake of learning. Therefore, EMS providers' sense of curiosity should not be undermined by creating a workplace culture that blames them when they commit mistakes or errors. The inductive narrative study of Jantzen (2008) reported that mistakes of one's own or one's colleagues should not be considered absolutely negative situations, because these mistakes provide immense learning potential where the consequences of such mistakes are demonstrated for staff, which is a rich resource for developing knowledge and skills. The EMS providers in the current study tried to avoid mistakes as much as possible because they wanted to be safe from disciplinary procedures.

6.4.2.2. The activities

The *activities* that will be discussed in this section are EMS and formal CPD *activities*. The EMS *activities* include all facets of EMS practice that are required from EMS providers. As discussed above, there were significant staff shortages, which impacted on the EMS *activities* of the *actors* by increasing their workloads. Coventry, Maslin-Prothero and Smith (2015) concluded in their integrative review that a heavy workload significantly restricts CPD opportunities for healthcare professionals as patient care and safety are prioritised over staff CPD. Therefore, in the current study, this created a workplace culture in which staff were occupied with competing clinical demands and had no capacity for learning or engaging in formal CPD *activities*. The consequence of a busy clinical environment was exhausted EMS providers who had no energy, enthusiasm, capacity and time to participate in formal CPD activities.

In addition to this, there were very few formal CPD *activities* for the EMS providers in the region. For example, the researcher noted during the field observations that there was only one mandatory predesigned comprehensive training and educational program named the 'protocols course'. Offering such a comprehensive training and educational course is beneficial as it would boost the knowledge and skills of the attending EMS providers. However, there were some issues, downsides and consequences related to such a training course. Firstly, the researcher did not observe any sessions from this training program being carried out in the region throughout the data collection period.

Furthermore, the participants expressed a view that the characteristics and the methodology of delivering the 'protocols course' were disappointing for them and added to their workload. That is because this program was presented in a school-like manner where attendance at the full course and passing a final exam were compulsory requirements. The consequences included restricting the participants to attend a predetermined program and inhibiting them from being independent, adult and self-guided learners based on their professional and learning needs. However, Carhart (2014) stressed the importance of embracing adult learning principles, specifically enabling learners to understand why and what they learn, in promoting a workplace culture that fosters CPD for EMS providers. Furthermore, Drude, Maheu and Hilty (2019) identified in their article that reviewed the value of CPD among healthcare professionals that CPD is commonly deemed to be a self-directed process where healthcare professionals plan personalised activities based on their needs.

The other consequence is that this program is not considered real CPD, although it is one of the educational programs that EMS providers have to attend. This is because this training course lacked the essential characteristics and structure of CPD that were explained in Section 1.3. That discussion indicated that CPD should not be provided by instructing staff to attend pre-set and ready-made training programs that lack the flexibility to diversify the methods,

methodologies and learning materials. Instead, CPD should be linked to identifying, planning, attending and reflecting on individual professional and learning needs. This program also was not provided to EMS providers frequently or regularly in the region.

6.4.2.3. The time

The previously discussed issues resulted in a lack of *time* dedicated for CPD, as identified in the findings. The consequence was that the EMS providers attended CPD activities only once every four years. This was because the 'protocols course' was a mandatory requirement to achieve an incremental promotion, which occurs every four years. This, in turn, does not enable the knowledge and skills of EMS providers to be maintained and updated in a *timely* manner. Additionally, the EMS providers were required to attend formal training courses in their own *time* when they were off duty. However, CPD needs to be allocated *time* during staff working hours, because CPD is a work-related task. This would avoid conflict with their family or personal commitments. Coventry, Maslin-Prothero and Smith (2015) identified a lack of dedicated *time* for CPD during working hours as one of the main reasons that inhibited nurses from attending either mandatory or non-mandatory CPD sessions. Within the EMS context, Williams and Edlington (2019) identified that lack of time dedicated for CPD was one of the barriers that prevented paramedics from participating in CPD. Davis, White and Stephenson (2016) considered *time* as an important organisational factor that enables attendance at and provision of CPD when it is scheduled regularly for staff.

6.4.2.4. The goal

The observations and interviews indicated that the explicit *goals* of the *actors* towards formal CPD were not lifelong learning to improve the profession, but to achieve personal gains such as fulfilling professional registration requirements and achieving promotions. Therefore, EMS providers attend any lecture just to gain CPD hours, as discussed earlier in this chapter.

Williams and Edlington (2019) found that the mandatory approach to CPD leads EMS providers to attend any CPD exercises without having predetermined *goals* for these exercises in terms of meeting planned learning needs. Though all *actors* in the current study across all groups have positive *feelings* towards CPD, as discussed previously, these *feelings* are translated into a willingness and interest to perform informal and ad-hoc learning *activities*. This is because the administrative system and the workplace culture do not foster these *feelings* by supporting formal CPD; instead, they create significant barriers.

The findings have not revealed any documented requirements for EMS providers to have a CPD portfolio. A portfolio is defined by the Paramedicine Board of Australia (2018a) as a collection of information regarding planned CPD activities, and evidence about completed activities, and their impacts on practice, which are gathered electronically, in hardcopy or both. Martin (2006) added in his article that discussed the challenge of introducing CPD for paramedics that a portfolio enables evaluation and analysis of professional practices and learning, and encompasses reflections for the purpose of demonstrating CPD. Therefore, CPD portfolios assist EMS providers to plan their CPD based on their professional needs. This, in turn, enables EMS providers to achieve clearly determined professional *goals*. These portfolios also provide employers and health regulators with evidence of CPD *activities*. The use of portfolios enables staff to determine the types of CPD, and how much CPD, they require in a certain period of time. Thus, attendance at each formal CPD *activity* is dictated by their professional roles and needs, and must be reflected upon to achieve professional growth. Knox et al. (2015) explained that the utilisation of learning portfolios enables practitioners to identify areas of their practice that need improvement or professional development. Bernard et al. (2018) studied the professional development of ‘infection preventionists’, which is a new field in healthcare, and identified that it is essential to include portfolios as part of professional development programs to advance the practice of these professionals. The absence of CPD

portfolios in the participating institution highlights a lack of organisational policies for CPD, which was discussed in Section 6.4.1.1.

6.4.2.5. The places

The term *places* stands for any area that is utilised, or could be utilised, for CPD in the participating institution. For example, training centres, lecture rooms and libraries are considered CPD *places*. At the regional level, the training centre was geographically disconnected from the administrative department and also from the majority of the EMS centres in the region. However, this training centre was the only officially approved *place* to provide formal training *activities* in the region. This extends the discussion around centralisation. The issue is that when formal training opportunities became available, the EMS providers across centres in the region had unequal opportunities to attend. This is because the EMS centres were scattered around the entire region. This means that the staff working in EMS centres that are closer to the training centre have an advantage over the staff working in more distant EMS centres. The participants indicated that travelling to attend training activities is a burden as it takes them away from their family and personal commitments, despite the allowance that is offered to them when they travel more than 80 kilometres from their workplaces. This is supported by Glaeser et al. (2000) as they identified that travelling distance was considered a primary barrier that inhibited EMS providers from attending continuing education. Also, in a qualitative study, Nawafleh (2014) identified that nurses in the peripheral regions of Jordan were not satisfied with their CPD activities because they were required to travel away from their regions to attend CPD, as most of these activities were held in the capital city, which was similarly identified by Santos (2012).

At the level of EMS centres, there were no *places* within the buildings of each EMS centre that could facilitate CPD. That is, there were no rooms or offices that were established

and equipped to enable teaching, learning, or searching for and sharing knowledge. Also, there were no libraries, bookshelves or simulation laboratories included within the EMS centres. Such *places* would provide the staff with zones inside their centres where they could engage in formal CPD without the need to travel to the training centre. The lack of such *places* indicates that there were no training activities easily accessible to the EMS providers within their local centres. This is because EMS centres were constructed without considering that formal CPD might take place inside these centres. Bjørk, Tøien and Sørensen (2013) detailed that the physical structures of a ward are a major factor that facilitates CPD opportunities, for example by designing rooms where healthcare providers from different backgrounds meet to discuss and exchange experiences and knowledge. Due to the lack of *places* that enabled easy access to formal CPD within the EMS centres, the staff did not have regular opportunities to participate in this process.

It is of interest to note that the main *places* that were identified to be available in all observed centres were the staff lounges. These lounges were established for staff to have their breaks and socialise with their colleagues. The infrastructures of the EMS centres were home-like places where staff could lie down, sleep or cook their food, rather than being professional *places*. These lounges were not equipped with teaching or learning facilities. The consequence was that these *places* fostered a culture of social activities and networking only rather than formal CPD, especially when staff had free time, as discussed earlier in this chapter. However, Nevalainen, Lunkka and Suhonen (2018) indicated that learning in healthcare workplaces is a social interaction but it needs shared physical spaces to occur, such as nurses' offices, where staff are able to exchange knowledge and experiences, and reflect on and discuss their practices.

6.4.2.6. The objects

The *objects* refers to the materials that are used to enable CPD to occur, for example, physical materials such as computers and projectors, financial resources, and learning materials such as textbooks and online databases or journals.

The current study showed that the training centre and the EMS centres had a significant lack of physical *objects* that facilitate high-quality CPD, such as computers, projectors or simulation facilities. Bjørk, Tøien and Sørensen (2013) highlighted that computers are essential *objects* that foster learning in workplaces. This is because computers enable staff to search literature and the internet and prepare presentations using the most up-to-date evidence-based peer-reviewed research. Abelsson et al. (2014) described training using simulation in their integrative literature review as a valuable method for training and educating pre-hospital EMS providers as they are trained under simulated conditions where treatment and/or assessment procedures, equipment or protocols are copied similar to reality. In a mixed-methods survey which involved Irish paramedics and advanced paramedics, Knox, Cullen and Dunne (2014) explained that simulation is an effective modern methodology for imparting knowledge in an interactive way, which is highly satisfying for participants. The lack of such state-of-the-art educational and training *objects* therefore prevented the EMS providers from accessing education materials and library facilities, all of which are crucial in facilitating CPD. This indicates that the CPD performed in the participating institution is traditional and does not keep up with contemporary practice.

There was no identified fund dedicated for the CPD of EMS providers. This is due to the lack of organisational strategic planning and policies for staff development. Such strategic planning and policies would commit the institution to investing in the development of EMS providers through CPD. Allocating a specific budget to support CPD was identified by

Coventry, Maslin-Prothero and Smith (2015), and Davis, White and Stephenson (2016) to be essential in assisting the continuing learning process of staff and preventing financial burdens, which were considered to be significant barriers to CPD. The current study identified that some *actors* incurred CPD expenses from their own pockets. Santos (2012) described the financial burden on nurses as one of the major barriers that inhibit their continuing learning due to either lack of reimbursement or the absence of a budget for education offered by employers. In addition, the lack of funding did not enable the participating institution to purchase the essential modern physical resources for CPD including access to databases and peer-reviewed journals. Peer-reviewed journals publish evidence-based learning resources that are essential for effective CPD.

The present study identified that the EMS providers were unable to access the latest evidence-based learning materials. This was because either the institution had no access to peer-reviewed journals, or the EMS providers had language barriers that prevented them from accessing such materials. The participating institution adopts the native Arabic as the official language in all communications, documentation and in delivering the 'protocols course', as was explained earlier in this chapter. Language is the fundamental means to gain and understand knowledge. Consequently, this barrier significantly inhibited the EMS providers from accessing healthcare-related learning and evidence-based resources, because the vast majority of these resources are provided in the English language. Furthermore, the official language for all aspects of health care in Saudi Arabia is English. Also, all healthcare programs and courses in Saudi Arabian universities are taught in the English language.

This finding is supported by literature related to non-English-speaking healthcare providers. The ethnographic study of Wickford, Edwards and Rosberg (2012) concluded that Afghan physiotherapists confront language barriers which impact on their learning for professional development. Khammarnia et al. (2015) conducted an analytical cross-sectional

study in the Iranian healthcare context; and Mahmoud and Abdelrasol (2019) conducted a descriptive study in the Egyptian healthcare context. Both studies found that nurses' lack of English language proficiency, as well as the use of English as the predominant language for journals, are obstacles that prevent nurses from employing evidence-based practice. The consequence of this in the current study was that independent CPD was challenging for EMS providers because they faced difficulties in finding Arabic language evidence-based learning resources.

6.5. Chapter summary

This chapter discussed the significant findings of the study. There were a few aspects of workplace culture that supported CPD for EMS providers. These included the intrinsic motivations of all *actors* as they had positive *feelings* towards the concept of CPD. These *feelings* enabled them to engage in informal CPD. However, there were many workplace culture barriers that impeded access to formal CPD for EMS providers. These barriers included some failures within the administrative system of the participating institution. These failures had many consequences for the provision of and attendance at effective formal CPD for EMS providers. In brief, the participants reported significant staff shortages which, in turn, resulted in a high workload and staff reported that they frequently felt exhausted during their work. This reduced their opportunities and enthusiasm to dedicate time for CPD. The time when all *actors* made an extra effort to schedule formal CPD was when EMS providers were due for a promotion, which occurred every four years. No policies were identified that supported the importance of CPD, with the consequence that insufficient human, financial and material resources were available for accessing formal CPD. Also, the participants encountered language barriers when they wanted to access contemporary evidence-based healthcare-related teaching and learning materials. The findings of this study are supported by the literature, globally and from diverse healthcare contexts. The framework of Spradley (2016b) has

provided a lens to discuss these aspects utilising the dimensions of the ethnographic social situation. The next chapter will provide an overall conclusion for this study.

Chapter 7: Conclusion

7.1. Introduction

In the final chapter, the insights from this ethnographic study are highlighted as well as the limitations of this study. Recommendations for organisational change and future research are also presented. This chapter concludes by providing a reflection from the researcher on the utilised research paradigm and methodology, the strengths of the study and the challenges encountered.

7.2. Major findings

This study set out to answer the question: How does the workplace culture of emergency medical services (EMS) professionals influence their continuing professional development (CPD)? The aim was to provide a deeper understanding of the influence of workplace culture on the CPD of EMS providers within a specific healthcare institution that provides EMS in a particular region in Saudi Arabia.

The conclusion of this study is relevant to the context in which it was undertaken, namely in a service within a region in Saudi Arabia. The study concluded that, even though the concept of CPD was valued across all participating groups, the workplace did not have sufficient supports in place to foster a culture that embraced formal CPD. This was due to the lack of integrated structures and systems that governed and promoted such behaviours across these participating groups. Also, the power relationships between different categories of *actors* within this environment significantly inhibited the provision of regular, sustainable and high-quality formal CPD to all EMS providers in the participating region. The geographical location of the participating region is distant from the central administration and this, along with the centralisation policy, was observed to contribute to marginalising this region from training resources and support. All of these issues may impact on the sustainable growth and evolution

of the EMS profession and the ability to deliver safe EMS practices to patients. This implies that patient safety and the quality of EMS care provided to the critically ill patients in the participating region could be compromised.

The *actors* in this study valued only the explicit and short-term advantages of CPD, such as achieving job promotions and professional registration. This attitude towards CPD was superficial and did not influence the wider workplace culture of EMS providers in the region to be supportive of formal CPD. There were many workplace culture barriers and challenges that significantly outweighed the supportive components of the culture. These barriers and challenges created small pockets of individual 'workarounds' by the *actors* to provide impromptu CPD, but they lacked the strategic leverage and power to influence formal approaches to CPD.

The study highlighted that valuing personal relationships and social networks was an important characteristic of the culture of the participating workplace. However, it had no influence on formal CPD. Based on the study's conclusion, further support is needed to formalise CPD for EMS providers to sustain this profession.

7.3. Recommendations

The recommendations suggested in this section are based on the study's findings interpreted in view of the relevant literature. These recommendations are presented in two sections. The first section provides recommendations for practice improvement and refinement. The second section provides recommendations further research.

7.3.1. Recommendations for practice improvement and refinement

Due to the complexity of the cultural issues identified by this study, a range of strategies need to be developed for practice improvement and refinement, all of which are equally important. This indicates that implementing a single recommendation will not guarantee a significant

improvement in the overall workplace culture to support CPD. The suggested recommendations are grouped into three areas: improving leadership and administrative processes, enabling accessible CPD, and ensuring CPD is sufficiently resourced.

7.3.1.1. Improving leadership and administrative processes

The EMS leadership should adopt a stronger and more supportive focus on CPD. This requires the development of a strategic plan, connected to a financial commitment to implementing that plan and clear lines of responsibility and accountability. For this to take place, it is recommended that the participating institution:

- Seek and apply for institutional accreditation, such as through the program of the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI). Being an accredited healthcare institution would encourage the participating institution to be aware of, and comply with, the CPD standards that are required by such an accreditation program.
- Reduce the centralisation of authority in the central administration. This would empower the regional administration and the training centre in the region to plan, design, implement and adopt the relevant administrative approaches to carry out local training activities that suit the needs of the EMS providers in the region.
- Design an integrated and consistent CPD system incorporated within the administrative systems and procedures. This system needs to present scope of practice and job descriptions through to a well-defined process to evaluate CPD outcomes. All staff groups should be aware of and clear about all details of this system.

7.3.1.2. Enabling accessible CPD

Steps should be taken to improve the English language competency of EMS providers to assist them to access contemporary international evidence-based healthcare resources. This could be achieved through practising and applying the contemporary evidence-based principles of teaching English as a foreign language or teaching English as a second language. It is also recommended that the participating institution:

- Diversify the approaches to formal CPD delivered to the EMS providers within their institution and allow them to attend diverse CPD modules at any approved and relevant organisations outside their institution. This would enable them to exchange their knowledge and experiences with other relevant healthcare providers in these external institutions.

- Enable, encourage and assist all *actor* groups to pursue academic education to gain academic degrees. This would expand their knowledge, skills and professional roles and responsibilities. Also, it would enable them to attain the minimum qualifications to practise healthcare professions in Saudi Arabia set out by SCFHS.

7.3.1.3. Ensuring CPD is sufficiently resourced

Time and materials should be dedicated for formal CPD regularly and frequently. Time for CPD could be scheduled on the duty roster of the EMS providers either on a monthly or on a yearly basis. Also, it is recommended that the participating institution:

- Staff the training centre and the EMS centres adequately with consideration to workload. Adequate staffing would lead to reasonable workloads, reduced exhaustion among staff, enough time, and staff being able to cover each other’s shifts. EMS centres

could employ staff who have the skills and competencies to deliver CPD inside their centres, either formally or informally.

- Provide and equip each EMS centre with infrastructure, modern technology and contemporary evidence-based learning materials that are appropriate to support CPD. This, in turn, would enable the EMS providers to undertake CPD inside their centres, either independently or engaging with other colleagues.

7.3.2. Recommendations for future research

This research highlights a number of issues for further studies to explore. Firstly, the study could be replicated in the same organisation but in other Saudi regional administrations closer to the central administration. Such research could explore the influence of geographical distances from the central administration on the availability of resources and support for formal CPD. Secondly, research could be conducted to compare the findings of this study with the wider community of EMS providers internationally. This is because different cultural backgrounds, workplace contexts and religious beliefs in different countries may play a crucial role in influencing access to CPD. Another study could assess and evaluate the professional competencies of EMS providers and the quality of EMS practices provided to the community in the participating region. Such research would provide findings relevant to patient safety and the quality of EMS care. It could be also valuable to study burnout and resilience of EMS providers in the participating region, because they frequently reported heavy workloads.

7.4. Limitations of the study

This study has a number of limitations. One of the main limitations of this study is the complete absence of female voices in the findings. This is because EMS is a male-exclusive profession in Saudi Arabia. Furthermore, collecting the data from a single and specific context may be considered a limitation. This implies that the findings of this study could not be generalised or

applied to other regional administrations. Focusing the study in a specific context enables this context to be studied more deeply, which is underpinned by the philosophy of focused ethnography approach. However, the study could be replicated as indicated earlier. In addition, the time available for ethnographic fieldwork and observations was limited due to the timeframe of the PhD program. However, the triangulation and saturation of data supported the findings. It might be also argued that the close engagement of the researcher with the participating groups might lead to bias. However, the researcher was mindful of this during all phases of data collection and analysis, using regular meetings with the supervisors to explore any potential bias.

7.5. Reflections on the research journey

7.5.1. Reflection on the research paradigm and methodology

Ethnography offers the philosophical underpinnings to understand cultures, which was the essence of this research. This research approach enabled entrance into the culture of the EMS providers in the participating region through observing, interacting with them and feeling their real-world experiences and practices. Therefore, it enabled the researcher to study this culture as an insider. The focused ethnography approach enabled studying CPD as a specific aspect of the broad area of workplace culture.

The ethnographic approach informed the entire process of this research. The ethnographic cultural dimensions in the framework of Spradley (2016b), a prominent ethnographic scholar, provided a lens to set out the *social situation* of the study and discuss the identified significant aspects of workplace culture. To provide a comprehensive data analysis, the thematic analysis steps of ethnographic data set out by Holloway and Galvin (2015) were chosen as the most relevant approach to be utilised along with the framework of Spradley (2016b).

7.5.2. Strengths of the study

This research has a number of strengths. The major strength is the triangulation of data through utilising five data collection strategies informed by an ethnographic approach. These strategies were a questionnaire, field observation notes, workplace documents, focus groups and individual semi-structured interviews. There was also a triangulation of participants, places and times, which enabled a holistic and deep depiction of the researched phenomenon to be gained from different perspectives. Another major strength of this research was that each type of data supported the findings of the other data. This means that what was indicated by the participants in the questionnaire was noticed frequently during the field observations, and was further supported in the workplace documents and repeatedly expressed in the focus groups and individual interviews by all categories of participants. Another strength was that the researcher became deeply immersed in the data by documenting the field observation notes; conducting the focus groups and interviews; transcribing them verbatim; and reading the transcripts several times. This, in turn, ensured the richness and the integration of data and thus supported the reliability and the weight of the evidence.

Another area of strength is that all participants in all places engaged the researcher in their work and social lives and they considered him as part of the group. This assisted the researcher to live and experience their real-world practices. However, the researcher kept reminding the participants frequently about the research protocols and his role as a researcher.

7.5.3. Challenges

Although there were a number of strengths of this research, some challenges were encountered. A major challenge in undertaking this ethnographic study was the quantity of data collected throughout the field observations (using descriptive notes), document review and then the interviews. Some of this data had to be translated from English to Arabic and back to English.

This was very time consuming for the researcher. Furthermore, delivering the online questionnaire to all participants appropriately was challenging because there was poor communication between the administration and the EMS centres in the participating region. This was identified when the majority of participants notified the researcher during the initial field visits that they have not received any emails about an online questionnaire. This required the researcher to travel to all centres in the region to distribute the research recruitment materials. Travelling long distances to distribute the participation materials, recruit participants and perform the initial field visits was a challenge due to the great distances between the EMS centres scattered throughout the region. This included difficulty in finding accommodation for the researcher on each field visit. Another challenge was that data were collected at the busiest time of the year for the participating workplace, which was the holy month of Ramadan followed by the summer break. During Ramadan, some EMS providers in the region were deployed to work in Makkah (Mecca). During summer, a massive number of travellers visit the participating region because it is a famous tourist area due to its cool weather.

7.6. Final summary

This ethnographic study provides a rich and in-depth understanding of the Saudi Arabian EMS workplace cultural context and its influences on the CPD of EMS providers. The key message from this study is that such a workplace culture is not supportive of CPD to a great extent due to various aspects of the organisational culture and a lack of systems to support CPD. This poor support had a negative influence on the delivery and uptake of CPD by EMS providers. Since this is a major EMS-providing institution in the Saudi Arabian context, supporting CPD for EMS providers would influence the overall growth of the EMS profession nationally. This study provides managers and trainers, ranging from higher to lower levels of authority, deep insights about this phenomenon and thus can inform strategies, policies, systems and resources

for enhancing better CPD opportunities for EMS providers, which in turn will improve services to the community.

Appendices

Appendix 1: A copy of the bilingual questionnaire

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The influence of workplace culture on the continuous professional development of emergency medical services professionals in Saudi Arabia
تأثير ثقافة المنشأة على التطوير المهني المستمر لممارسي الخدمات الطبية الطارئة بالمملكة العربية السعودية

1. **Instructions** التعليمات

هذا استبيان مكون من ثلاثة أجزاء تم إنشاؤه لمعرفة سلوك ممارسي الخدمات الطبية الطارئة تجاه التطوير المهني المستمر. الجزء الأول يتكون من أسئلة وصفية, الجزء الثاني يتكون من تقييمك لعبارات لها علاقة بالتطوير المهني المستمر والجزء الأخير هو عبارة عن سؤالين مفتوحة في حال كنت ترغب في إضافة المزيد من الافكار عن التطوير المهني المستمر وعلاقته بالممارسة المهنية, الثقة بالنفس والرضا الوظيفي. الوقت المتوقع لاستكمال هذا الاستبيان هو أقل من 5 دقائق. يرجى الإطمئنان من أن البيانات ستكون مجهولة الهوية وأن الجزء المتعلق بالأسئلة الوصفية لن يتم تقديمه بطريقة من شأنها أن تفصح عن هويتك

This is a three-part questionnaire developed to explore the attitudes of Emergency Medical Professionals (EMS) towards Continuous Professional Development (CPD). The first part provides demographic data, the second one asks your opinions about statements related to CPD, and the last part is open ended questions to add further ideas about CPD and professional practice, self-confidence and job satisfaction. The approximate time of completing this questionnaire is less than 5 minutes. Please be assured that your anonymity is ensured and the demographic data section will not be presented in a way that may be used to identify you.

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2. **Part 1: Demographic questions** **الجزء الأول: الأسئلة الوصفية**

* 1.

In which centre are you working (please name the centre) (يرجى ذكر) **في اي مركز تعمل**
(اسم المركز الذي تعمل به)

* 2. **Gender الجنس**

- ذكر
  Male
- أنثى
  Female

* 3. **Educational level المستوى التعليمي**

- (دبلوم (معهد صحي
  Diploma
- (دبلوم (كلية صحية
  Associate degree
- بكالوريوس
  Bachelor degree
- ماجستير
  Master degree
- دكتوراه
  PhD
- (غير ذلك (يرجى التحديد
  Other (please specify)

* 4. **Professional level المستوى المهني**

- أخصائي خدمات طبية طارئة
  Paramedic
- أخصائي صحي من غير الخدمات الطبية الطارئة. مثلاً أخصائي تمريض أو غيره
  Non-paramedic healthcare specialist. For example nurse or any other healthcare specialist.
- فني إسعاف وطوارئ
  Emergency Medical Technician (EMT)
- فني صحي من غير الإسعاف والطوارئ. مثلا فني تمريض أو غيره
  Non-EMT healthcare technician. For example nurse or any other healthcare technician.
- (غير ذلك (يرجى التحديد
  Other (please specify)

* 5. **Years of experience عدد سنوات الخبرة**

- أقل من سنة
  Less than 1 year
- من سنة إلى أقل من 5 سنوات
  1 to less than 5 years
- من 5 سنوات إلى 10 سنوات
  5 to 10 years
- أكثر من 10 سنوات
  More than 10 years

* 6. **كم عدد ساعات التعليم والتطوير المهني المستمر التي أنت مُلزم لحضورها من قبل الهيئة السعودية للتخصصات الصحية بشكل سنوي؟**

How many CPD hours are you required to do by your regulator each year?

- (لا أعلم (يُرجى اختيار هذه الإجابة فقط إذا كنت لا تعلم عدد ساعات التطوير المهني المستمر المطلوبة منك, عدا ذلك يُرجى ذكر عدد الساعات
  I have no idea (please select this answer only if you do not know the number of CPD hours you are required to do, otherwise please mention the number of CPD hours)
- يُرجى ذكر عدد الساعات هنا
  Please mention the number of CPD hours in here

* 7.

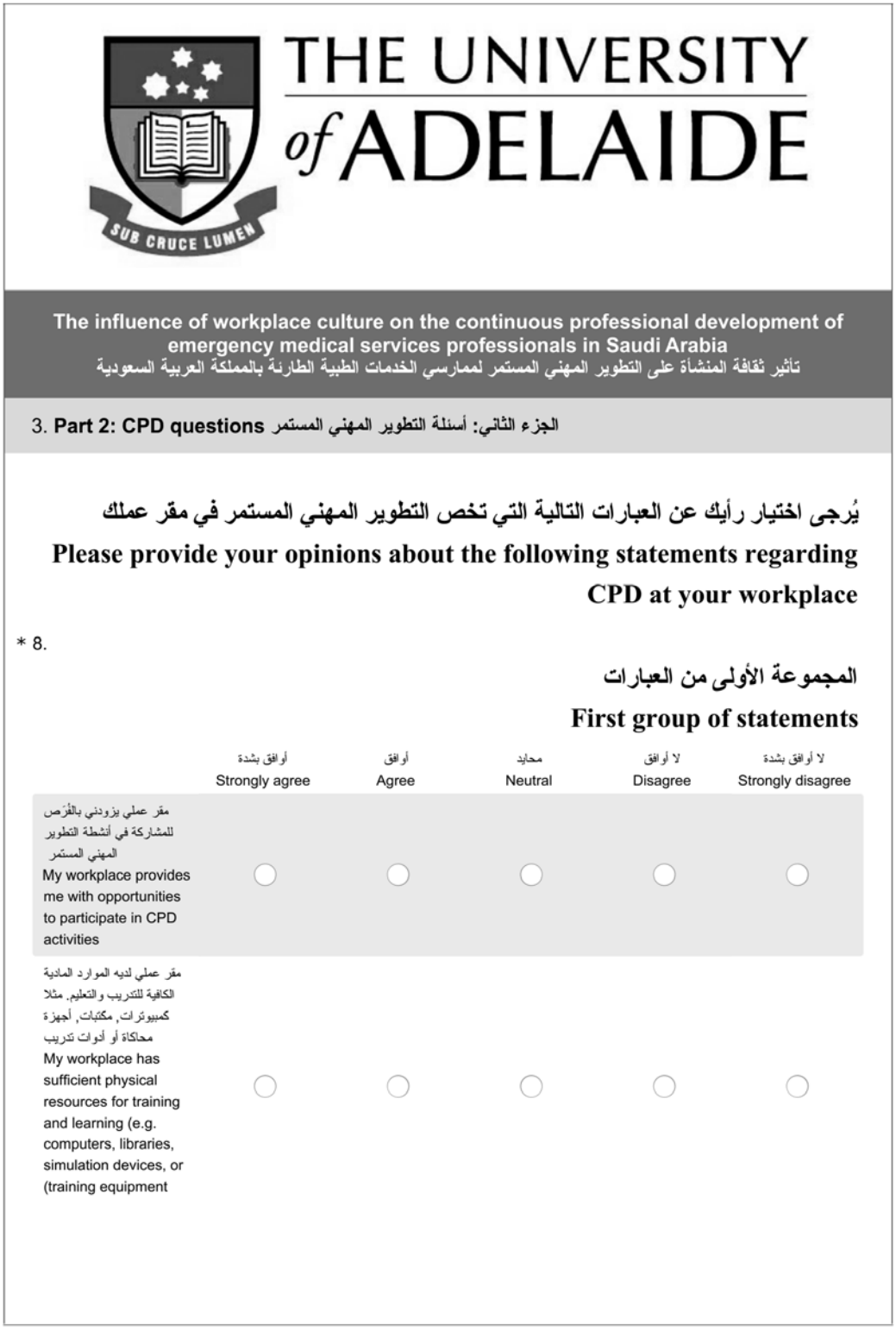
هناك العديد من أنشطة التطوير المهني المستمر يمكن تنفيذها عن طريق مختلف المنشأت. ما هي أنواع أنشطة التعليم والتطوير المهني المستمر التي حضرتها أو شاركت فيها العام الماضي وكم عدد المرات التي حضرت أو شاركت في تلك الأنشطة سواءً داخل مقر عملك أو خاجه, داخل المملكة العربية السعودية أو خارجها؟

There are a wide range of different CPD activities and programs can be applied by different institutions. What types of CPD activities have you participated in last year either inside your workplace, outside, national or international

	لم أشارك مطلقاً Never participated	من 1 إلى 5 مرات 1 – 5 times	من 6 إلى 10 مرات 6 – 10 times	أكثر من 10 مرات More than 10 times
محاضرات Lectures	○	○	○	○

	لم أشارك مطلقاً Never participated	من 1 إلى 5 مرات 1 – 5 times	من 6 إلى 10 مرات 6 – 10 times	أكثر من 10 مرات More than 10 times
وُرش عمل Workshops	○	○	○	○
مؤتمرات Conferences	○	○	○	○
كتابة مقالات ونشرها في صحف علمية Writing for journals	○	○	○	○
دراسة حالات Case studies review	○	○	○	○
أنشطة تدريبية وحلقات نقاش داخل مقر عملي Local training sessions and seminars within my institution	○	○	○	○
أنشطة تدريبية ميدانية Bedside training activities	○	○	○	○
مناقشة المستجدات في معلومات ومهارات وسلوكيات مهنة الخدمات الطبية الطارئة مع الزملاء أو مع طبيب الخدمات الطارئة Conversation with colleagues or EMS physician about updates of knowledge and/or skills and/or attitudes in my profession	○	○	○	○
تقييم الزملاء أو طبيب الخدمات الطبية الطارئة على أدائي وتزويدي بالملاحظات أو تقيمي لأداء زملائي وتزويدهم بالملاحظات Feedback from and/or to colleagues or EMS physician on performance	○	○	○	○
قراءة وأنشطة تعليم ذاتية Self-reading and learning activities	○	○	○	○
أنشطة تطوير مهني مستمر عن طريق الانترنت Online CPD activities	○	○	○	○

أنشطة أخرى (يرجى ذكرها وعدد مرات حضورها أو المشاركة فيها العام الماضي)
Other (please specify them and how many times you have attended or participated on them last year)



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3. **Part 2: CPD questions** **الجزء الثاني: أسئلة التطوير المهني المستمر**

يُرجى اختيار رأيك عن العبارات التالية التي تخص التطوير المهني المستمر في مقر عملك

Please provide your opinions about the following statements regarding CPD at your workplace

* 8.

المجموعة الأولى من العبارات

First group of statements

	أوافق بشدة Strongly agree	أوافق Agree	محايد Neutral	لا أوافق Disagree	لا أوافق بشدة Strongly disagree
مقر عملي يزودني بالفُرَص للمشاركة في أنشطة التطوير المهني المستمر My workplace provides me with opportunities to participate in CPD activities	○	○	○	○	○
مقر عملي لديه الموارد المادية الكافية للتدريب والتعليم. مثلا كمبيوترات, مكتبات, أجهزة محاكاة أو أدوات تدريب My workplace has sufficient physical resources for training and learning (e.g. computers, libraries, simulation devices, or (training equipment	○	○	○	○	○

	أوافق بشدة Strongly agree	أوافق Agree	محايد Neutral	لا أوافق Disagree	لا أوافق بشدة Strongly disagree
يوجد بمقر عملي مدربين لديهم الخبرة في عقد الأنشطة التدريبية سواء الرسمية وغير الرسمية My workplace has expert mentors to conduct either formal or informal CPD	○	○	○	○	○
مقر عملي لديه الموارد المالية الكافية للتطوير المهني المستمر My workplace has sufficient financial resources for CPD	○	○	○	○	○
أعباء تقديم الخدمات السريرية يعيقني عن المشاركة أو حضور أنشطة التطوير المهني المستمر My clinical workload inhibits my participation in CPD activities	○	○	○	○	○
مقر عملي لدية اشتراكات في مجلات علمية محكمة أو قواعد بيانات علمية My workplace has access to different scientific databases and academic journals	○	○	○	○	○
مقر عملي يدعم ثقافة القراءة وحب الاطلاع, و التعلم, ومشاركة المعلومات My workplace supports a culture of reading, learning and sharing knowledge	○	○	○	○	○
مقر عملي يقوم بعمل العديد من أنشطة التطوير المهني المستمر المختلفة كل سنة My workplace provides a variety of CPD activities per year	○	○	○	○	○
مقر عملي لديه سياسة أو سياسات تدعم حضور أنشطة التطوير المهني المستمر My workplace has policy/policies that support my attendance of CPD	○	○	○	○	○

* 9.

المجموعة الثانية من العبارات

Second group of statements

	أوافق بشدة Strongly agree	أوفق Agree	محايد Neutral	لا أوافق Disagree	لا أوافق بشدة Strongly disagree
المشاركة في أنشطة التطوير المهني المستمر بمقر عملي طورت من ممارستي المهنية (بمعنى أنها طورت من مهاراتي على تقديم خدمات طبية طارئة) Participating in workplace CPD improves my professional practice (i.e. improves my abilities to provide (EMS skilfully	○	○	○	○	○
المشاركة في أنشطة التطوير المهني المستمر بمقر عملي ساعدتني على تقديم خدمات طبية طارئة آمنة للمرضى. Participating in workplace CPD assists me to provide safer patient care	○	○	○	○	○
المشاركة في أنشطة التطوير المهني المستمر بمقر عملي هي مضيعة للوقت بدون فائدة. Participating in workplace CPD is a waste of time	○	○	○	○	○
المشاركة في أنشطة التطوير المهني المستمر بمقر عملي ساعدت في التخفيف من ضغوطات العمل. Participating in workplace CPD helps to reduce my workplace stressors	○	○	○	○	○
المشاركة في أنشطة التطوير المهني المستمر بمقر عملي ساعدت في تعزيز ثقتي بنفسي أثناء تقديم الخدمات الطبية الطارئة. Participating in CPD increases my self-confidence when providing EMS	○	○	○	○	○
المشاركة في أنشطة التطوير المهني المستمر بمقر عملي زادت من رضاي الوظيفي. Participating in workplace CPD increases my job satisfaction	○	○	○	○	○

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The influence of workplace culture on the continuous professional development of emergency medical services professionals in Saudi Arabia
تأثير ثقافة المنشأة على التطوير المهني المستمر لممارسي الخدمات الطبية الطارئة بالمملكة العربية السعودية

4. **Part 3: open-ended questions** الجزء الثالث: أسئلة مفتوحة

تم وضع هذه الأسئلة لمنحك الفرصة لإضافة أي تعليقات أخرى تود إضافتها

These questions were introduced to provide you an opportunity to add any more comments

10.

ما هي تعليقاتك على الوضع الحالي للتطوير المهني المستمر في مقر عملك وتأثيره على ممارستك المهنية؟

What are your comments on the current status of CPD in your workplace and how it influences your professional practice

11.

ما هي تعليقاتك على الوضع الحالي للتطوير المهني المستمر في مقر عملك وتأثيره على ثقتك بنفسك أثناء تقديم خدمات طبية طارئة؟

What are your comments on the current status of CPD in your workplace and how it influences your self-confidence when providing EMS

12.

ما هي تعليقاتك على الوضع الحالي للتطوير المهني المستمر في مقر عملك وتأثيره على رضاك الوظيفي؟

What are your comments on the current status of CPD in your workplace and how it influences your job satisfaction

Appendix 2: Invitation and reminder emails for phase 1 of data collection

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1. Invitation email to participate in piloting of the questionnaire:

Subject: Invitation to participate in piloting a questionnaire

Dear Saudi Red Crescent Authority member,

I am a PhD candidate at The University of Adelaide in South Australia. I am studying the influence of workplace culture on the continuous professional development (CPD) of emergency medical services professionals in Saudi Arabia. The overall aim of this study is to construct a deeper understanding about the influence of workplace culture on the continuous professional development (CPD) of Emergency Medical Services (EMS) professionals within a healthcare service in Saudi Arabia.

This study is approved from the Saudi Red Crescent Authority (SRCA) with approval number 60733 in 9/1/2017 and from the Human Research Ethics Committee (HREC) at the University of Adelaide (approval number H-2017-046).

If you are a non-physician healthcare professional provides EMS, I would like to invite you to participate in piloting the online questionnaire of this study. This questionnaire forms phase one of the study. To participate in this piloting please open this link (http://www.surveymonkey.com/r/ems-cpd-pilot) to access the questionnaire. The expected time to complete this survey will be less than 5 minutes. Once you finish answering the questionnaire click on "submit" to submit your questionnaire and exit the system. Please be advised that your consent to participate in this piloting is provided when you complete and submit the questionnaire.

Your kind participation in this piloting is highly appreciated. We will not gather any personal information that can identify you, and the demographic data section will not be presented in a way that could identify you at any stage of the study or any published papers in the future. Please be assured that your anonymity and confidentiality will be maintained.

If you need further information please refer to the attached Participant Information Sheet or please feel free to contact the research team members via the contact details below:

1. Associate Professor Lynette Cusack
   Principal supervisor, Associate Professor, Adelaide Nursing School
   Emil: lynette.cusack@adelaide.edu.au
   Telephone: +6183133593
   OR
2. Dr Philippa Rasmussen.
   Secondary supervisor, Senior Lecturer, Adelaide Nursing School
   Emil: philippa.rasmussen@adelaide.edu.au
   Telephone: +618313 3866
   OR
3. YOUSEF ALSHAHRANI
   Student researcher, Adelaide Nursing School

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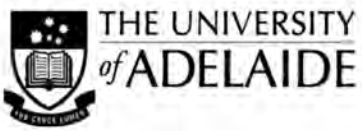

Emil: yousef.alshahrani@adelaide.edu.au
Mobile phone:

Thank you for your cooperation and we wish you all the best.

Associate Professor Lynette Cusack

Dr Philippa Rasmussen

YOUSEF ALSHAHRANI

THE UNIVERSITY of ADELAIDE

2. Invitation email to participate in the online survey (phase one):

Subject: Invitation to participate in a research project

Dear Saudi Red Crescent Authority member,

I am a PhD candidate at The University of Adelaide in South Australia. I am studying the influence of workplace culture on the continuous professional development (CPD) of emergency medical services professionals in Saudi Arabia. The overall aim of this study is to construct a deeper understanding about the influence of workplace culture on the continuous professional development (CPD) of Emergency Medical Services (EMS) professionals within a healthcare service in Saudi Arabia.

This study is approved from the Saudi Red Crescent Authority (SRCA) with approval number 60733 in 9/1/2017 and from the Human Research Ethics Committee (HREC) at the University of Adelaide (approval number H-2017-046).

If you are a non-physician healthcare professional provides EMS, I would like to invite you to participate in phase one of this study. This phase involves a short online survey. This survey includes demographic questions, opinions about statements related to CPD, and open-ended questions if you want to add more information about CPD. To participate in this survey please open this link (https://www.surveymonkey.com/r/ems-cpd) to access the questionnaire. The expected time to complete this survey will be less than 5 minutes. Once you finish answering the questionnaire click on "submit" to submit your questionnaire and exit the system.

Please be advised that your consent to participate in this study is provided when you complete and submit the questionnaire. Please note that the questionnaire will be open from 21/05/ 2017 until 09/06/ 2017 and you will not be able to access it after this date. Your kind participation in this study is highly appreciated. We will not gather any personal information that can identify you, and the demographic data section will not be presented in a way that could identify you at any stage of the study or any published papers in the future. Please be assured that your anonymity and confidentiality will be maintained.

If you need further information please refer to the attached Participant Information Sheet or please feel free to contact the research team members via the contact details below:

1. Associate Professor Lynette Cusack
   Principal supervisor, Associate Professor, Adelaide Nursing School
   Emil: lynette.cusack@adelaide.edu.au
   Telephone: +6183133593

   OR

2. Dr Philippa Rasmussen.
   Secondary supervisor, Senior Lecturer, Adelaide Nursing School
   Emil: philippa.rasmussen@adelaide.edu.au
   Telephone: +618313 3866

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OR

3. YOUSEF ALSHAHRANI
   Student researcher, Adelaide Nursing School
   Emil: yousef.alshahrani@adelaide.edu.au
   Mobile phone: +

Thank you for your cooperation and we wish you all the best.
Associate Professor Lynette Cusack
Dr Philippa Rasmussen
YOUSEF ALSHAHRANI

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3. Reminder email:

Subject: Invitation to participate in a research project

Dear Saudi Red Crescent Authority member,

We would like to remind you to participate in phase one of the PhD research project about the influence of workplace culture on the continuous professional development of emergency medical services professionals in Saudi Arabia. If you have participated previously, please ignore this email. The overall aim of this study is to construct a deeper understanding about the influence of workplace culture on the continuous professional development (CPD) of Emergency Medical Services (EMS) professionals within a healthcare service in Saudi Arabia.

This study is approved from the Saudi Red Crescent Authority (SRCA) with approval number 60733 in 9/1/2017 and from the Human Research Ethics Committee (HREC) at the University of Adelaide (approval number H-2017-046).

To participate in this study please open this link (https://www.surveymonkey.com/r/ems-cpd) to access the survey. This survey includes demographic questions, opinions about statements related to CPD, and open-ended questions if you want to add more information about CPD. The expected time to complete this survey will be less than 5 minutes. Once you finish answering the survey click on "submit" to submit your survey and exit the system. Please be advised that your consent to participate in this study is provided when you complete and submit the survey. Please note that the questionnaire will be open from 21/05/ 2017 until 09/06/ 2017 and you will not be able to access it after this date. Your kind participation in this study is highly appreciated. Please be assured that your anonymity and confidentiality will be maintained, and the demographic data section will not be presented in a way that could identify you at any stage of the study or any published papers in the future.

If you need further information please refer to the attached Participant Information Sheet or please feel free to contact the research team members via the contact details below:

1. Associate Professor Lynette Cusack
   Principal supervisor, Associate Professor, Adelaide Nursing School
   Emil: lynette.cusack@adelaide.edu.au
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   OR

2. Dr Philippa Rasmussen.
   Secondary supervisor, Senior Lecturer, Adelaide Nursing School
   Emil: philippa.rasmussen@adelaide.edu.au
   Telephone: +618313 3866

   OR

3. YOUSEF ALSHAHRANI
   Student researcher, Adelaide Nursing School
   Emil: yousef.alshahrani@adelaide.edu.au
   Mobile phone:

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Thank you for your cooperation and we wish you all the best in your studies.
Associate Professor Lynette Cusack
Dr Philippa Rasmussen
YOUSEF ALSHAHRANI

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Appendix 3: Participant information sheet for phase 1 of data collection[1]

PARTICIPANT INFORMATION SHEET

PROJECT TITLE: The influence of workplace culture on the continuous professional development of emergency medical services professionals in Saudi Arabia: An Ethnographic Study
HUMAN RESEARCH ETHICS COMMITTEE APPROVAL NUMBER: H-2017-046
PRINCIPAL INVESTIGATOR: Associate Professor Lynette Cusack
STUDENT RESEARCHER: Yousef Alshahrani
STUDENT'S DEGREE: Doctor of Philosophy

Dear Participant,

You are invited to participate in the research project described below.

What is the project about?
Continuous Professional Development (CPD) is essential for healthcare professionals to keep their knowledge, skills, attitudes and behaviours up-to-date, build self-confidence, maintain their professional registration, and assist them to deliver evidence-based healthcare. The literature has identified that the workplace culture can influence CPD of healthcare professionals. Moreover, the literature has identified that the Emergency Medical Services (EMS) is one of the most stressful workplace cultures. Taking part in this study will assist in providing a deeper understanding about the influence of the workplace culture on the CPD of EMS professionals in Saudi Arabia. Your kind participation is highly appreciated.

Who is undertaking the project?
This project is being conducted by Yousef Alshahrani. This research will form the basis for the Doctor of Philosophy degree (PhD) at The University of Adelaide under the supervision of Associate Professor Lynette Cusack and Dr Philippa Rasmussen.

Why am I being invited to participate?
You are invited because all non-physician healthcare professionals provide EMS with any speciality levels at the Saudi Red Crescent Authority (SRCA) in Aseer region are invited to participate.

What will I be asked to do?
You will be asked to complete a short online questionnaire. This questionnaire forms the first phase of PhD project. This questionnaire is introduced to explore whether or not CPD does make difference to your professional practice, self-confidence, and job satisfaction. You will not be asked to disclose any personal information. The questionnaire contains demographic questions, opinions about statements related to CPD, and an open-ended question if you want to add more information about CPD. Please be assured that your anonymity is ensured and the demographic data section will not be presented in a way that may be used to identify you.

How much time will the project take?
The time you may spend in completing this questionnaire will be less than 5 minutes. After submitting your questionnaire, there will be a second phase of the study that involve focus groups and interview and

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[1] Appendices 3 to 7, 11 and 5 to 6 are available in Arabic from the researcher.

you can participate in this phase if you are interested. More details about the second phase will be sent to you after the researcher will complete this phase.

Are there any risks associated with participating in this project?
The anticipated burden on you by participating in this study is the time you spend in answering the questionnaire. This can be managed by providing you three weeks period of time to answer this questionnaire according to your free time. You will be offered an option to save and continue the questionnaire at a later date within these three weeks to ensure the flexibility of completing this questionnaire. You will not need more than 5 minutes to answer this questionnaire. Your participation is entirely voluntary. You will be anonymous and no one will be able to identify you at any stage of this study including the research team members.

What are the benefits of the research project?
Undertaking this study will provide a clearer understanding of how the workplace culture influences the CPD of EMS professionals in Saudi Arabia. This in turn may assist in identifying any aspects of the workplace culture that needs to be reviewed and apply appropriate solutions, strategies, policies or protocols; while maintaining and developing the positive aspects. This approach may contribute to improving clinical confidence and job satisfaction among EMS professionals.

Can I withdraw from the project?
Participation in this project is completely voluntary. You are free to answer or ignore the questionnaire without any implications for you personally or professionally. Please be advised that your information cannot be withdrawn once they are submitted, because you are anonymous and no one will be able to withdraw your information.

What will happen to my information?
Please be assured that your data will be anonymous and will not be able to be identified throughout the research period. Your information will be accessed by members of the research team members only. A statistician at the University of Adelaide may also have access to the data to assist or provide advice on the quantitative analysis. Your information will be saved based on the policy of the University of Adelaide for five years.

Who do I contact if I have questions about the project?
For more information or details about the study please do not hesitate to contact:

1. Associate Professor Lynette Cusack
   Principal supervisor, Associate Professor, Adelaide Nursing School
   Emil: lynette.cusack@adelaide.edu.au
   Telephone: +61 8 8313 3593

2. Dr Philippa Rasmussen.
   Secondary supervisor, Senior Lecturer, Adelaide Nursing School
   Emil: philippa.rasmussen@adelaide.edu.au
   Telephone: +61 8 8313 3866

3. Yousef Alshahrani
   Student researcher, Adelaide Nursing School
   Emil: yousef.alshahrani@adelaide.edu.au
   Mobile phone:

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at the University of Adelaide (approval number H-2017-046). If you have questions or problems associated with the practical aspects of your participation in the project, or wish to raise a concern or complaint about the project, then you should consult the Principal Investigator. If you wish to speak with an independent person regarding a concern or complaint, the University's policy on research involving human participants, or your rights as a participant, please contact the Human Research Ethics Committee's Secretariat on:

Phone: +61 8 8313 6028

Email: hrec@adelaide.edu.au

Post: Level 4, Rundle Mall Plaza, 50 Rundle Mall, ADELAIDE SA 5000

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If I want to participate, what do I do?

If you are interested to participate in this research, just open the (URL) of the questionnaire in the email that you have received to access the questionnaire. Once you finish answering, click "submit". The survey will remain open for three weeks only from receiving it. After one week from receiving the invitation email, you receive an email to remind you about the participation in the study. At the end of the third week from receiving the invitation email, the survey will be closed automatically and you will not be able access it.

Yours sincerely,

Associate Professor Lynette Cusack

Dr Philippa Rasmussen

Yousef Alshahrani

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Appendix 4: Invitation letter for phase 1 of data collection

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VOLUNTEERS NEEDED FOR RESEARCH PROJECT

Dear Saudi Red Crescent Authority member,

I am a PhD candidate at The University of Adelaide in South Australia. I am studying the influence of workplace culture on the continuous professional development (CPD) of emergency medical services professionals in Saudi Arabia.

This study is approved from the Saudi Red Crescent Authority (SRCA) with approval number 60733 in 9/1/2017 and from the Human Research Ethics Committee (HREC) at the University of Adelaide (approval number H-2017-046).

If you are a non-physician healthcare professional provides EMS, I would like to invite you to participate in this study. You are invited to complete a short online survey which will be sent to your email. This survey forms phase one of this PhD project. This survey includes demographic questions, questions related to CPD, and open-ended questions if you want to add more information about CPD. Participation is entirely voluntary. Please be assured that if you do not wish to participate, you will not be affected in any way. Please be advised that once you submit your survey, it cannot be withdrawn because you are anonymous.

Participants can be: Saudi or non-Saudi, male or female, Arabic or English speakers. The time you may spend in completing this questionnaire will be less than 5 minutes. Your informed consent will be implied when you submit the questionnaire.

We will not gather any personal information that can identify you, and the demographic data section will not be presented in a way that could identify you at any stage of the study or any published papers in the future. Please be assured that your anonymity and confidentiality will be maintained. You will find more information about the study in the attached participant information sheet.

If you have any inquiries please contact the researcher via the contact details below. Your kind participation in this study is highly appreciated.

Yours sincerely,

Yousef Alshahrani
PhD candidate
Phone:
E-mail: yousef.alshahrani@adelaide.edu.au

Appendix 5: Poster for phase 1 of data collection

Appendix 6: Data collection guide for phases 2 and 3 of data collection

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Data collection tool for focus groups, observations, workplace documents and individual interviews

1. Cues for focus group questions (these question are flexible to changed based on the group discussion)

Objectives	Questions cues	Targeted group
Roles and responsibilities	Please tell me a little bit about your job. How do you see your role? (Schostak et al. 2010, p. 124)	All groups
	– As an educator	All groups
	– As a learner	EMS professionals
	– As an organiser of CPD	Education staff
	– As a policy and decision-maker of CPD	Administrative staff
	Do you have an opportunity to attend CPD programs? Do you feel supported to attend CPD? How?	EMS professionals
	Do you feel that you are motivated to participate in CPD	EMS professionals
	Do you think that your workplace environment is supportive for CPD? How?	All groups
	Do you think that the nature of your responsibilities enables you to participate in CPD?	EMS professionals
	Can you please tell me how could you motivate the EMS staff to participate in CPD?	Administrative and education staff
Attitudes towards learning and CPD	How important do you think CPD is for EMS professionals? Why?	All groups
	What is the purpose of CPD? Do you think that CPD is a good idea for you/EMS staff? Why? (Knox, Dunne, Cullen & Dunne 2015, p. 3). (E.g. renewing registration with the SCFHS, etc.)	All groups
	Do you think that CPD activities and programs that you have attended/planned/decided are sufficient for your/your EMS staff professional improvement? Are they really improving you/your staff professionally?	All groups
	What is the best way that you like to learn, Can you give me an example of your most significant learning experience? How do you define effective CPD for yourself? (Schostak et al. 2010, p. 124)	EMS professionals
	How do you see yourself facilitating the learning of others? How do you see formalised CPD provision addressing learning needs? What stops you from being able to engage in CPD/Learning/Reflection (Schostak et al. 2010, p. 124). (E.g. workload, Job satisfaction, etc.)	Education staff and EMS professionals
	What problems have you experienced in completing CPD? (Knox et al. 2015, p. 3)	All groups
	In your workplace context, please tell me about the culture of reading/learning/curiosity)	All groups

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Resources	Please tell me about the resources you have for CPD? What are they?	All groups
	Do you think they are sufficient? Why? If not sufficient what can you do?	All groups
	How they are utilised?	All groups

2. Cues for observations:

- The results of the focus group and document analysis will guide the method of observations.
- Unstructured observations.
- **Observe and write descriptive notes** of the fieldwork related to CPD: spending time in the fieldwork with participants; working with them as a volunteer.
- **observe and write notes** about the resources for CPD (physical, such as libraries, labs, manikins, experts and trainers, books and computers – financial – online and other resources related to CPD) – observe the status of these resources (are they in a good condition or not– are they up-to-date or old resources – are they seem to be used or not)
- **Observe and write notes** about CPD in the daily practice of EMS professionals by attending some shifts – attend some training sessions to observe and write notes how CPD activities are delivered – observe and write notes about how staff teach each other (informal CPD).

3. Workplace documents:

- Organisational structure: the type of organisation – the position of education and CPD in the organisational structure.
- Job description, scope of practice, policies, protocols and decisions (where the learning, education and CPD located in the job description)
- Budget: review and analyse the budget specified for CPD and how it is utilised
- Resources: review and analyse the resources of the CPD – what are they.
- Planned CPD activities: are there records for CPD activities – number of CPD activities per year/month – what are they – how they are applied – who provide these activities (are there experts in the EMS field) – who are the attendants.

4. Interview questions will be finalised after analysing the data obtained from focus groups.

References

Knox, S, Dunne, S, Cullen, W & Dunne, CP 2015, 'A qualitative assessment of practitioner perspectives post-introduction of the first Continuous Professional Competence (CPC) guidelines for emergency medical technicians in Ireland', *BMC emergency medicine*, vol. 15, no. 11.

Schostak, J, Davis, M, Hanson, J, Schostak, J, Brown, T, Driscoll, P, Starke, I & Jenkins, N 2010, *The Effectiveness of Continuing Professional Development: Final Report*, College of Emergency Medicine, Manchester Metropolitan University, Federation of Royal Colleges of Physicians, London.

Appendix 7: Invitation email for phase 2 and 3 of data collection

THE UNIVERSITY of ADELAIDE

Subject: Invitation to participate in a research project

Dear Saudi Red Crescent Authority member,

I am a PhD candidate at The University of Adelaide in South Australia. I am studying the influence of workplace culture on the continuous professional development (CPD) of emergency medical services professionals in Saudi Arabia.

This study is approved from the Saudi Red Crescent Authority (SRCA) with approval number 60733 in 9/1/2017 and from the Human Research Ethics Committee (HREC) at the University of Adelaide (approval number H-2017-064).

If you are an administrative in a decision-making position, education and professional development staff, or a non-physician EMS professional, I would like to invite you to participate in this study. You are invited to participate in two focus groups, one with professionals who have same background as you and the other will be a mix of administrative, education and professional development staff, and EMS professionals. These activities form phase two of the PhD project. After attending a focus group you will be further invited to participate in an interview to explore your views in more detail. Participation is entirely voluntary. Please be assured that you may withdraw at any time without any consequences to your role in the organisation.

Participants can be: Saudi or non-Saudi, male or female, or Arabic or English speakers. The duration of each focus group will not exceed 90 minutes and the duration of the interview will not exceed 60 minutes. Your informed consent will be obtained before participating in any focus groups or interview.

We will not gather any personal information that can identify you, and your real name will not be declared at any stage of the study or any published paper in the future. Please be assured that your anonymity and confidentiality will be maintained. You will find more information about the study in the attached participant information sheet.

If you are interested to participate, please contact the researcher via the contact details below for further details about participation. Your kind participation in this study is highly appreciated.

Yours sincerely,

Yousef Alshahrani
PhD candidate
Phone:
E-mail: yousef.alshahrani@adelaide.edu.au

Appendix 8: Participant information sheet for phase 2 and 3 of data collection

PARTICIPANT INFORMATION SHEET

PROJECT TITLE: The influence of workplace culture on the continuous professional development of emergency medical services professionals in Saudi Arabia: An Ethnographic Study
HUMAN RESEARCH ETHICS COMMITTEE APPROVAL NUMBER: H-2017-046
PRINCIPAL INVESTIGATOR: Associate Professor Lynette Cusack
STUDENT RESEARCHER: Yousef Alshahrani
STUDENT'S DEGREE: Doctor of Philosophy

Dear Participant,

You are invited to participate in the research project described below.

What is the project about?
Continuous Professional Development (CPD) is essential for healthcare professionals to keep their knowledge, skills, attitudes and behaviours up-to-date, build self-confidence, maintain their professional registration, and assist them to deliver evidence-based healthcare. The literature has identified that the workplace culture can influence CPD of healthcare professionals. Moreover, the literature has identified that the Emergency Medical Services (EMS) is one of the most stressful workplace cultures. Taking part in this study will assist in providing a deeper understanding about the influence of the workplace culture on the CPD of EMS professionals in Saudi Arabia. Your kind participation is highly appreciated.

Who is undertaking the project?
This project is being conducted by Yousef Alshahrani. This research will form the basis for the Doctor of Philosophy degree (PhD) at The University of Adelaide under the supervision of Associate Professor Lynette Cusack and Dr Philippa Rasmussen.

Why am I being invited to participate?
You are invited because administrative staff at any managerial level, education and professional development staff, and non-physician EMS professionals with any speciality levels at the Saudi Red Crescent Authority (SRCA) in Aseer region are invited to participate.

What will I be asked to do?
This part forms the second phase of the PhD project. You will be asked to participate in focus group discussion with a group of individuals who have the same professional background as you to discuss the influence of your workplace culture on the CPD. You will then be given another chance to participate in a further focus group with a group of individuals who have different professional backgrounds, i.e. administrative staff, education and professional development staff, and non-physician EMS professionals. After focus group, you will be given a chance to independently express your views about the influence of your workplace culture on the CPD by taking part in an interview. Please be advised that the focus group and the interviews will be audio-recorded via two recording devices for the purpose of research only. If you are not happy to be recorded, please notify the researcher. Your fieldwork will be observed and the researcher will write some descriptive notes and may take some photos for the purpose of the study only.

Please be assured that you and your institution will not be identified, and any feature or characteristic that might lead to any identification will be deleted from notes and obliterated from the photos. Please be advised that these notes and photos will only be used for research purposes. Please be assured that you and your institution will be anonymous and no one will be able to identify you at any stage of this research.

How much time will the project take?
The proposed time for each focus group discussion will not exceed 90 minutes and the interview time will not exceed 60 minutes.

Are there any risks associated with participating in this project?
The anticipated burden on you by participating in this study is the time you will spent in the focus groups and interview, as you will be participating in two focus groups and one semi-structured interview. To mitigate this burden, the schedule of the focus groups and interviews will be flexible based on the time that suites you. The researcher will discuss the appropriate time of each focus group with you and with your administration to avoid interfering with any work, family or social commitments. You and your group will be given an opportunity to schedule the time of your focus group discussion. Also you will be given an opportunity to schedule the time of your semi-structured interview based on your preferred time.

What are the benefits of the research project?
Undertaking this study will provide a clearer understanding of how the workplace culture influences the CPD of EMS professionals in Saudi Arabia. This in turn may assist in identifying any aspects of the workplace culture that needs to be reviewed and apply appropriate solutions, strategies, policies or protocols; while maintaining and developing the positive aspects. This approach may contribute to improving clinical confidence and job satisfaction among EMS professionals.

Can I withdraw from the project?
Participation in this project is completely voluntary. If you agree to participate, you can withdraw from the study at any time up until the submission of the thesis. Please be advised that your data in the focus group discussion cannot be withdrawn because it will not be possible to identify you. You are free to choose whether or not to participate in this study or withdraw at any time with no implications for you personally or professionally.

What will happen to my information?
Please be assured that your data will be anonymous and will not be able to be identified throughout the study. Your real name will not be identified and you will be given a code, for example, participant A or participant B. Your information will be accessed by the research team members only. The results of your data will be used for a PhD thesis, and journal paper/s may be published. Your information will be saved based on the policy of The University of Adelaide for five years.

Who do I contact if I have questions about the project?
For more information or details about the study please do not hesitate to contact:

1. Associate Professor Lynette Cusack
   Principal supervisor, Associate Professor, Adelaide Nursing School
   Emil: lynette.cusack@adelaide.edu.au
   Telephone: +61 8 8313 3593

2. Dr Philippa Rasmussen.

Secondary supervisor, Senior Lecturer, Adelaide Nursing School
Emil: philippa.rasmussen@adelaide.edu.au
Telephone: +61 8 8313 3866

3. Yousef Alshahrani
Student researcher, Adelaide Nursing School
Emil: yousef.alshahrani@adelaide.edu.au
Mobile phone: +

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at the University of Adelaide (approval number H-2017-046). If you have questions or problems associated with the practical aspects of your participation in the project, or wish to raise a concern or complaint about the project, then you should consult the Principal Investigator. If you wish to speak with an independent person regarding a concern or complaint, the University's policy on research involving human participants, or your rights as a participant, please contact the Human Research Ethics Committee's Secretariat on:

Phone: +61 8 8313 6028

Email: hrec@adelaide.edu.au

Post: Level 4, Rundle Mall Plaza, 50 Rundle Mall, ADELAIDE SA 5000

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If I want to participate, what do I do?

If you are interested to participate please contact the researcher on +966504736882.

3

Appendix 9: Invitation letter for phase 2 and 3 of data collection

THE UNIVERSITY of ADELAIDE

VOLUNTEERS NEEDED FOR RESEARCH PROJECT

Dear Saudi Red Crescent Authority member,

I am a PhD candidate at The University of Adelaide in South Australia. I am studying the influence of workplace culture on the continuous professional development (CPD) of emergency medical services professionals in Saudi Arabia.

This study is approved from the Saudi Red Crescent Authority (SRCA) with approval number 60733 in 9/1/2017 and from the Human Research Ethics Committee (HREC) at the University of Adelaide (approval number H-2017-046).

If you are an administrative in a decision-making position, education and professional development staff, or a non-physician EMS professional, I would like to invite you to participate in this study. You are invited to participate in tow focus groups, one with professionals who have same background as you and the other will be a mix of administrative, education and professional development staff, and EMS professionals. These activities form part two of the PhD project. After attending a focus group you will be further invited to participate in an interview to explore your views in more detail. Participation is entirely voluntary. Please be assured that you may withdraw at any time without any consequences to your role in the organisation.

Participants can be: Saudi or non-Saudi, male or female, Arabic or English speakers. The duration of each focus group will not exceed 90 minutes and the duration of the interview will not exceed 60 minutes. Your informed consent will be obtained before participating in any focus groups or interview.

We will not gather any personal information that can identify you, and your real name will not be declared at any stage of the study or any published paper in the future. Please be assured that your anonymity and confidentiality will be maintained. You will find more information about the study in the attached participant information sheet.

If you are interested to participate, please contact the researcher via the contact details below for further details about participation. Your kind participation in this study is highly appreciated.

Yours sincerely,

Yousef Alshahrani
PhD candidate
Phone:
E-mail: yousef.alshahrani@adelaide.edu.au

Appendix 10: Poster for phase 2 and 3 of data collection

Appendix 11: Consent form for focus groups and individual interviews

Human Research Ethics Committee (HREC)

CONSENT FORM

1. I have read the attached Information Sheet and agree to take part in the following research project:

Title:	The influence of workplace culture on the continuous professional development of emergency medical services professionals in Saudi Arabia: An Ethnographic Study
Ethics Approval Number:	Approval number by Saudi Red Crescent Authority (SRCA) number 60733 and approval number by Human Research Ethics Committee (HREC) at The University of Adelaide number H-2017-046

2. I have had the project, so far as it affects me, fully explained to my satisfaction by the research worker. My consent is given freely.

3. Although I understand the purpose of the research project it has also been explained that involvement may not be of any benefit to me.

4. I have been informed that, while information gained during the study may be published, I will not be identified and my personal results will not be divulged.

5. I understand that I am free to withdraw from the project at any time.

6. I agree to the interview being audio/video recorded. Yes ☐ No ☐

7. I have been informed that the workplace will be observed by the researcher and some photos might be taken without identifying me or my institution.

8. I am aware that I should keep a copy of this Consent Form, when completed, and the attached Information Sheet.

9. I would like to participate in an interview. Yes ☐ No ☐

Participant to complete:

Name: _____Signature: _____ Date: _____

Researcher/Witness to complete:

I have described the nature of the research to _____
(print name of participant)

and in my opinion she/he understood the explanation.

Signature: _____Position:_____ Date: _____

2013_consent_form_for_professionals_only

Appendix 12: Ethics approval from the University of Adelaide

THE UNIVERSITY of ADELAIDE

RESEARCH SERVICES
OFFICE OF RESEARCH ETHICS, COMPLIANCE AND INTEGRITY
THE UNIVERSITY OF ADELAIDE

LEVEL 4, RUNDLE MALL PLAZA
50 RUNDLE MALL
ADELAIDE SA 5000 AUSTRALIA

TELEPHONE +61 8 8313 5137
FACSIMILE +61 8 8313 3700
EMAIL hrec@adelaide.edu.au

CRICOS Provider Number 00123M

11 April 2017

Associate Professor Cusack
Adelaide Nursing School

Dear Associate Professor Cusack

ETHICS APPROVAL No: **H-2017-046**

PROJECT TITLE: **The influence of workplace culture on the continuous professional development of emergency medical services professionals in Saudi Arabia: an ethnographic study**

The ethics application for the above project has been reviewed by the Low Risk Human Research Ethics Review Group (Faculty of Health and Medical Sciences) and is deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* involving no more than low risk for research participants. You are authorised to commence your research on **11 Apr 2017**.

Ethics approval is granted for three years and is subject to satisfactory annual reporting. The form titled *Annual Report on Project Status* is to be used when reporting annual progress and project completion and can be downloaded at http://www.adelaide.edu.au/research-services/oreci/human/reporting/. Prior to expiry, ethics approval may be extended for a further period.

Participants in the study are to be given a copy of the Information Sheet and the signed Consent Form to retain. It is also a condition of approval that you **immediately report** anything which might warrant review of ethical approval including:

- serious or unexpected adverse effects on participants,
- previously unforeseen events which might affect continued ethical acceptability of the project,
- proposed changes to the protocol; and
- the project is discontinued before the expected date of completion.

Please refer to the following ethics approval document for any additional conditions that may apply to this project.

Yours sincerely,

Sabine Schreiber
Secretary, Human Research Ethics Committee
Office of Research Ethics, Compliance and Integrity

THE UNIVERSITY of ADELAIDE

RESEARCH SERVICES
OFFICE OF RESEARCH ETHICS, COMPLIANCE AND INTEGRITY
THE UNIVERSITY OF ADELAIDE

LEVEL 4, RUNDLE MALL PLAZA
50 RUNDLE MALL
ADELAIDE SA 5000 AUSTRALIA

TELEPHONE +61 8 8313 5137
FACSIMILE +61 8 8313 3700
EMAIL hrec@adelaide.edu.au

CRICOS Provider Number 00123M

Applicant:	Associate Professor L Cusack
School:	Adelaide Nursing School
Project Title:	The influence of workplace culture on the continuous professional development of emergency medical services professionals in Saudi Arabia: an ethnographic study

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The University of Adelaide Human Research Ethics Committee
Low Risk Human Research Ethics Review Group (Faculty of Health and Medical Sciences)

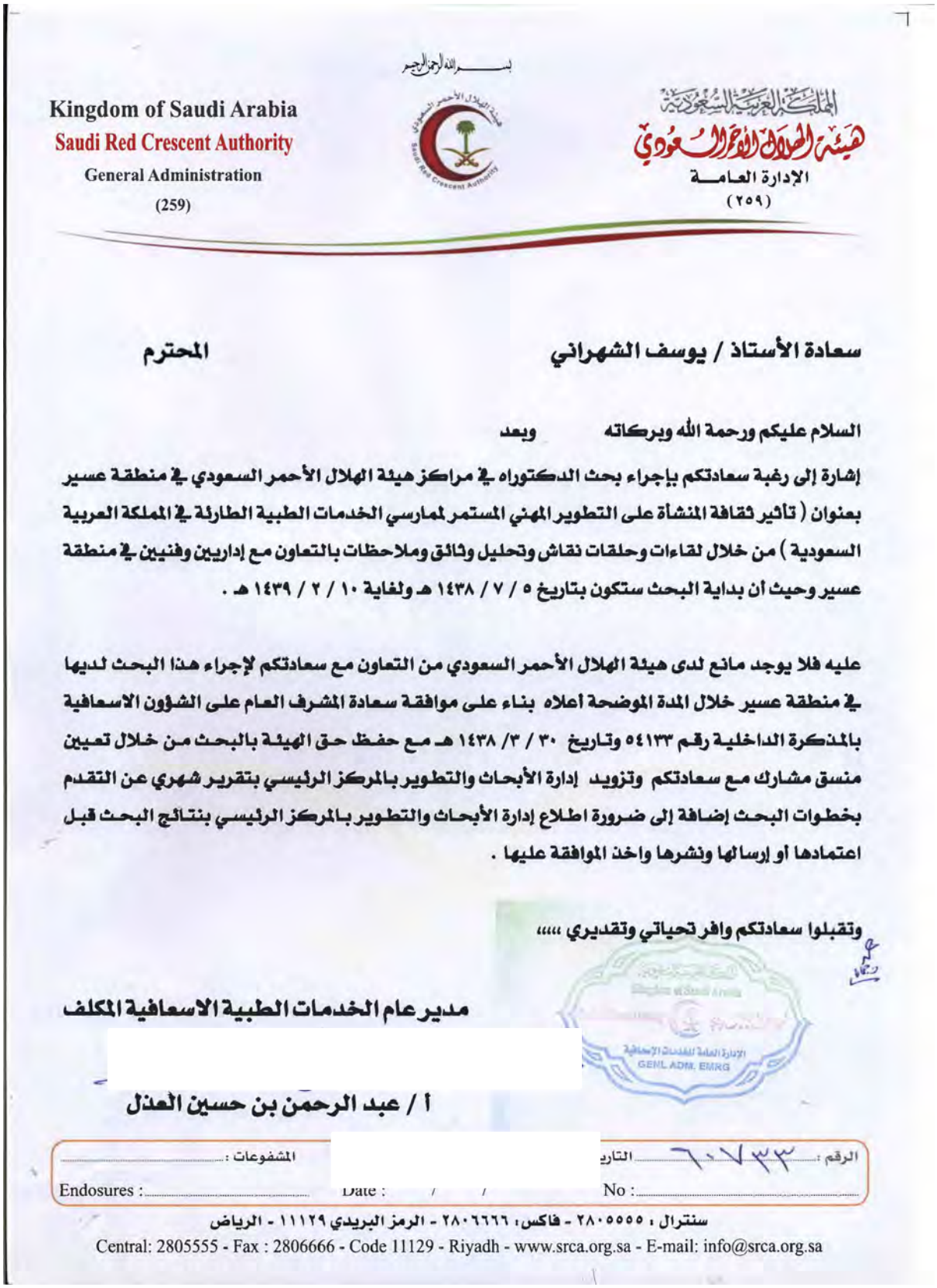
ETHICS APPROVAL No: H-2017-046 App. No.: 0000022244

APPROVED for the period: 11 Apr 2017 to 30 Apr 2020

Thank you for your response, dated 10.04.17, to the matters raised. It is also noted that this project involves PhD student Yousef Alshahrani.

Sabine Schreiber
Secretary, Human Research Ethics Committee
Office of Research Ethics, Compliance and Integrity

Appendix 13: Approval from the participating institution



بسم الله الرحمن الرحيم

Kingdom of Saudi Arabia
Saudi Red Crescent Authority
General Administration
(259)

المملكة العربية السعودية
هيئة الهلال الأحمر السعودي
الإدارة العامة
(٢٥٩)

سعادة الأستاذ / يوسف الشهراني المحترم

السلام عليكم ورحمة الله وبركاته وبعد

إشارة إلى رغبة سعادتكم بإجراء بحث الدكتوراه في مراكز هيئة الهلال الأحمر السعودي في منطقة عسير بعنوان (تأثير ثقافة المنشأة على التطوير المهني المستمر لممارسي الخدمات الطبية الطارئة في المملكة العربية السعودية) من خلال لقاءات وحلقات نقاش وتحليل وثائق وملاحظات بالتعاون مع إداريين وفنيين في منطقة عسير وحيث أن بداية البحث ستكون بتاريخ ٥ / ٧ / ١٤٣٨ هـ ولغاية ١٠ / ٢ / ١٤٣٩ هـ .

عليه فلا يوجد مانع لدى هيئة الهلال الأحمر السعودي من التعاون مع سعادتكم لإجراء هذا البحث لديها في منطقة عسير خلال المدة الموضحة أعلاه بناء على موافقة سعادة المشرف العام على الشؤون الاسعافية بالمذكرة الداخلية رقم ٥٤١٣٣ وتاريخ ٣٠ / ٣/ ١٤٣٨ هـ مع حفظ حق الهيئة بالبحث من خلال تعيين منسق مشارك مع سعادتكم وتزويد إدارة الأبحاث والتطوير بالمركز الرئيسي بتقرير شهري عن التقدم بخطوات البحث إضافة إلى ضرورة اطلاع إدارة الأبحاث والتطوير بالمركز الرئيسي بنتائج البحث قبل اعتمادها أو إرسالها ونشرها واخذ الموافقة عليها .

وتقبلوا سعادتكم وافر تحياتي وتقديري ،،،،

مدير عام الخدمات الطبية الاسعافية المكلف

أ / عبد الرحمن بن حسين العذل

الرقم : ٦٠٧٣٣ التاريخ : المشفوعات :

No : Date : / / Endosures :

سنترال : ٢٨٠٥٥٥٥ - فاكس : ٢٨٠٦٦٦٦ - الرمز البريدي ١١١٢٩ - الرياض

Central: 2805555 - Fax : 2806666 - Code 11129 - Riyadh - www.srca.org.sa - E-mail: info@srca.org.sa

Appendix 14: Bilingual confidentiality agreement with the transcriber

Confidentiality Agreement

I _____(transcriber name)_____ of _____(institution name) _____

agree to:

- Not discussing, disclosing or transferring any data provided to me by the researcher/research team to any party outside the research team members.
- Store all provided data in a password-protected computer during my work.
- Return all electronic or hard data to the researcher/research team after competing my work.
- Deleting all data from my computer after completing my work and sending the transcribed data to the researcher/research team.

Signature: _____

Date: _____

اتفاقية سرية المعلومات

أنا _____ في محل _____

أقر بأن:

- لا أناقش أو أفصح عن أو أقوم بنقل البيانات التي استلمتها من الباحث إلى أي طرف خارج فريق البحث.
- أقوم بتخزين البيانات التي استلمتها في كمبيوتر محمي بكلمة سرية أثناء عملي عليها.
- أقوم بإعادة جميع البيانات سواءً الإلكترونية أو الصلبة إلى الباحث بعد الانتهاء من عملي عليها.
- أقوم بمسح جميع البيانات من الكمبيوتر الخاص بي بعد الانتهاء من عملي عليها وإرسال البيانات التي قمت بنسخها إلى الباحث.

التوقيع: _____

التاريخ: _____

Appendix 15: Selected workplace documents

Note: Document numbers are the codes obtained from the sticky notes as explained in Section 4.9.2.1

Document 10: Regulations for nominating staff for national or international scholarships

Kingdom of Saudi Arabia
Saudi Red Crescent Authority
General Administration

المملكة العربية السعودية
هيئة الهلال الأحمر السعودي
الإدارة العامة

ضوابط الترشيح للابتعاث الخارجي والإيفاد الداخلي

أولا : الضوابط :

١. على كل مرشح للتفرغ الدراسي تحقيق ضوابط وشروط وزارة الخدمة المدنية المحدثة بتعميم سعادة أمين عام لجنة تدريب وابتعاث موظفي الخدمة المدنية رقم ٣٨٧٨٩ وتاريخ ٤/ ١٤٣٣/٨هـ بالإضافة الى الشروط الخاصة بالهيئة .

٢. أن تكون الدراسة في التخصصات التي تخدم عمل احتياجات هيئة الهلال الأحمر السعودي .

٣. أن تكون الدراسة بجامعة أو كلية أو معهد موصى ومعترف بها من قبل وزارة التعليم العالي سواء في الداخل او الخارج .

٤. الحصول على موافقة خطية من مرجع عمل المرشح بإكمال الدراسة على أن لا تؤثر على سير عمله .

٥. أن لا يتجاوز عمر المرشح (٣٠) سنة للإداريين و (٣٠) سنة لفنيي الإسعاف .

٦. ان لا يكون قد صدر بحقه أي قرار طبي يعفيه من العمل الميداني لمدة لا تزيد عن (٦) ستة أشهر خلال (٢) السنتين الماضيتين من تاريخ ترشيحه ، ويستثنى من ذلك (التقارير الطبية الناتجة عن التنويم والعمليات الجراحية) .

٧. أن يكون لدى أي مرشح فحص طبي حديث يثبت لياقته الطبية للعمل .

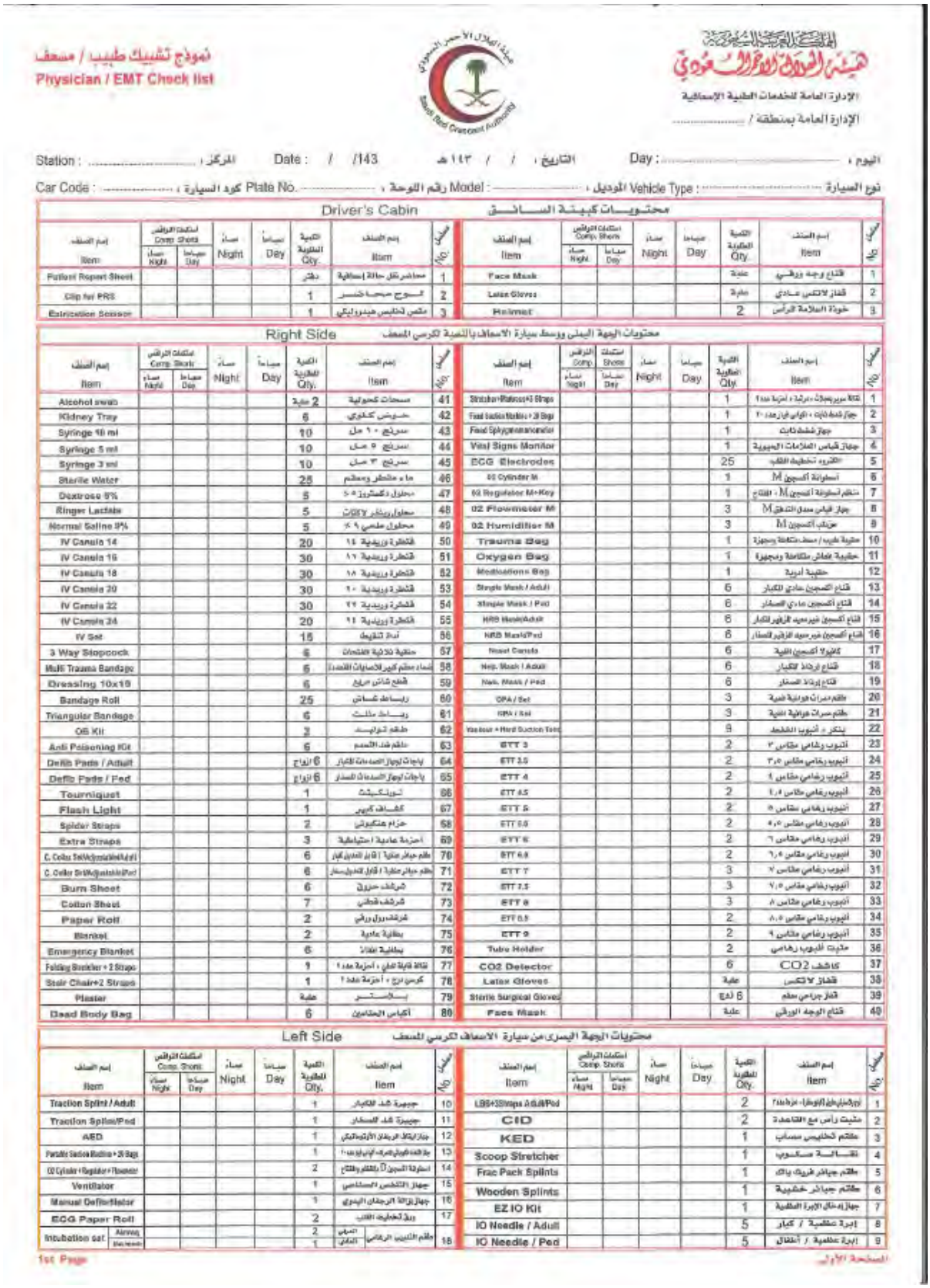
٨. اجتياز المرشح لاختبار التوفل TOEFL على ألا تقل الدرجة عن (٣٥٠) أو اختبار الـ IELTS على الا تقل الدرجة عن (٥) أو امتحان معهد الأدارة على ألا تقل الدرجة عن (٨٠)

١٠- أن يحقق طالب الإبتعاث أو الإيفاد (٧٥) درجة كحد أدنى في (نموذج الترشيح للإبتعاث الخارجي أو الإيفاد الداخلي) لدراسة طلبه ، **(مرفق النموذج).**

الرقم : ..... التاريخ : / / المشفوعات :
No.: ..... Date: / / Endosures :

سنترال : ٢٨٠٥٥٥٥ - فاكس : ٢٨٠٦٦٦٦ -الرمز البريدي ١١١٢٩ - الرياض
Central: 2805555 - Fax : 2806666 - Code 11129 - Riyadh - www.srca.org.sa - E-mail: info@srca.org.sa

Document 15: The official checklist for inspecting the ambulance vehicles for medical supplies and mechanical status



نموذج تشييك طبيب / مسعف
Physician / EMT Check list

الهيئة العربية السعودية للهلال الأحمر
هيئة الهلال الأحمر السعودي
الإدارة العامة للخدمات الطبية الإسعافية
الإدارة العامة بمنطقة / .....

Station : ..... المركز : Date : / /143 التاريخ : / / ١٤٣ هـ Day : ..... اليوم :

Car Code : ..... كود السيارة : Plate No. ..... رقم اللوحة : Model : ..... الموديل : Vehicle Type : ..... نوع السيارة :

Driver's Cabin محتويات كبينة السائق

No.	Item	Qty.	Night	Day	Comp. Shorts Night	Comp. Shorts Day	Item	No.
1	Face Mask	عبوة					Patient Report Sheet	1
2	Latex Gloves	عبوة					Clip for PRS	2
3	Helmet	2					Extrication Scissor	3

Right Side محتويات الجهة اليمنى ووسط سيارة الاسعاف بالنسبة لكرسي المسعف

No.	Item	Qty.	Night	Day	Comp. Shorts Night	Comp. Shorts Day	Item	No.
1	Stretcher+Mattress+3 Straps	1					Alcohol swab	41
2	Fetal Suction Machine + 2 Bags	1					Kidney Tray	42
3	Fetal Sphygmomanometer	1					Syringe 10 ml	43
4	Vital Signs Monitor	1					Syringe 5 ml	44
5	ECG Electrodes	25					Syringe 3 ml	45
6	O2 Cylinder M	1					Sterile Water	46
7	O2 Regulator M+Key	1					Dextrose 5%	47
8	O2 Flowmeter M	3					Ringer Lactate	48
9	O2 Humidifier M	3					Normal Saline 9%	49
10	Trauma Bag	1					IV Canula 14	50
11	Oxygen Bag	1					IV Canula 16	51
12	Medications Bag	1					IV Canula 18	52
13	Single Mask / Adult	6					IV Canula 20	53
14	Single Mask / Ped	6					IV Canula 22	54
15	NRB Mask/Adult	6					IV Canula 24	55
16	NRB Mask/Ped	6					IV Set	56
17	Nasal Canula	6					3 Way Stopcock	57
18	Neb. Mask / Adult	6					Multi Trauma Bandage	58
19	Neb. Mask / Ped	6					Dressing 10x10	59
20	OPA / Set	3					Bandage Roll	60
21	NPA / Set	3					Triangular Bandage	61
22	Yankauer + Hard Suction Tube	1					OB Kit	62
23	ETT 3	2					Anti Poisoning Kit	63
24	ETT 3.5	2					Defib Pads / Adult	64
25	ETT 4	2					Defib Pads / Ped	65
26	ETT 4.5	2					Tourniquet	66
27	ETT 5	2					Flash Light	67
28	ETT 5.5	2					Spider Straps	68
29	ETT 6	2					Extra Straps	69
30	ETT 6.5	2					C. Collar Sm/Med/Adult	70
31	ETT 7	3					C. Collar Med/Large/Ped	71
32	ETT 7.5	3					Burn Sheet	72
33	ETT 8	3					Cotton Sheet	73
34	ETT 8.5	2					Paper Roll	74
35	ETT 9	2					Blanket	75
36	Tube Holder	2					Emergency Blanket	76
37	CO2 Detector	6					Folding Stretcher + 2 Straps	77
38	Latex Gloves	علبة					Stair Chair+2 Straps	78
39	Sterile Surgical Gloves	6 أزواج					Plaster	79
40	Face Mask	علبة					Dead Body Bag	80

Left Side محتويات الجهة اليسرى من سيارة الاسعاف لكرسي المسعف

No.	Item	Qty.	Night	Day	Comp. Shorts Night	Comp. Shorts Day	Item	No.
1	LBB+3Straps Adult/Ped	2					Traction Splint / Adult	10
2	CID	2					Traction Splint/Ped	11
3	KED	1					AED	12
4	Scoop Stretcher	1					Portable Suction Machine + 2 Bags	13
5	Frac Pack Splints	1					O2 Cylinder+Regulator+Flowmeter	14
6	Wooden Splints	1					Ventilator	15
7	EZ IO Kit	1					Manual Defibrillator	16
8	IO Needle / Adult	5					ECG Paper Roll	17
9	IO Needle / Ped	5					Intubation set Laryngoscope / Blades	18

1st Page

الإدارة العامة للخدمات الطبية الإسعافية

الإدارة العامة بمنطقة / ....

نموذج تشييك طبيب / مسعف

Physician / EMT Check list

Station : ______________ المركز :   Date : / /143   ١٤٣ / / هـ التاريخ :   Day : ______________ اليوم :

Car Code : __________ كود السيارة : Plate No. __________ رقم اللوحة : Model : __________ الموديل : Vehicle Type : __________ نوع السيارة

Oxygen Bag (تشييك حقيبة الإنعاش (البند رقم ١ من الصفحة الأولى))

إسم الصنف Item	استهلاك الورديات Comp. Shorts مساء Night	استهلاك الورديات Comp. Shorts صباحاً Day	مساء Night	صباحاً Day	الكمية المقررة Qty.	إسم الصنف Item	مسلسل No.
O2 Cylinder D+ Key F regulator					1	أسطوانة أوكسجين D بالمنظم والمفتاح	1
O2 Simple Mask / Adult					1	قناع أوكسجين عادي للكبار	2
O2 Simple Mask / Ped					1	قناع أوكسجين عادي للصغار	3
NRB Mask / Adult					1	قناع أوكسجين غير معيد الزفير للكبار	4
NRB Mask / Ped					1	قناع أوكسجين غير معيد الزفير الكبار	5
Nasal Canule					1	كانيولا أوكسجين أنفية	6
Neb. Mask / Adult					1	قناع إرذاذ للكبار	7
Neb. Mask / Ped					1	قناع إرذاذ للصغار	8
Intubation Kit+Wire+Magill F.					1	طقم تنبيب رغامي : المنظار + جفت ماجيل	9
Spare Batteries					1	بطاريات احتياطية لمنظار التنبيب	10
Airtraq / set					1	طقم التنبيب الرغامي المرئي	11
Tube Holder					2	مثبت أنبوب رغامي	12
CO2 Detector					2	كاشف CO2	13
ETT 3					1	أنبوب رغامي مقاس ٣	14
ETT 3.5					1	أنبوب رغامي مقاس ٣،٥	15
ETT 4					1	أنبوب رغامي مقاس ٤	16
ETT 4.5					1	أنبوب رغامي مقاس ٤،٥	17
ETT 5					1	أنبوب رغامي مقاس ٥	18
ETT 5.5					1	أنبوب رغامي مقاس ٥،٥	19
ETT 6					1	أنبوب رغامي مقاس ٦	20
ETT 6.5					1	أنبوب رغامي مقاس ٦،٥	21
ETT 7					1	أنبوب رغامي مقاس ٧	22
ETT 7.5					1	أنبوب رغامي مقاس ٧،٥	23
ETT 8					1	أنبوب رغامي مقاس ٨	24
ETT 8.5					1	أنبوب رغامي مقاس ٨،٥	25
ETT 9					1	أنبوب رغامي مقاس ٩	26
KY Jelly					1	جل مزلق	27
Syringe 5 ml					1	سيرنج مقاس ٥ مل	28
Syringe 10 ml					1	سيرنج مقاس ١٠ مل	29
Bandage Roller					1	رباط شاش ١٠ سم	30
Plaster					1	بلاستر	31
Latex Gloves					3 زوج	قفاز لاتكس	32
OPA / Set					1	طقم ممرات فمية	33
NPA / Set					1	طقم ممرات أنفية	34
Manual Portable Suction					1	جهاز شفط إفرازات متحرك يدوي	35
Yankeur+suction Tube					1	ينكر + أنبوب الشفط	36
Stethoscope					1	سماعة طبيب	37
BVM / Adult					1	قناع مثبتة بصمام للكبار (أمبوباك)	38
BVM / Ped					1	قناع مثبتة بصمام للصغار (أمبوباك)	39
BVM / INF					1	قناع طبية بصمام للرضع (أمبوباك)	40
Face Mask					5	القناع الوجه الورقي	41

Trauma Bag (تشييك حقيبة الطبيب / المسعف (البند رقم ١٠ من الصفحة الأولى))

مسلسل No.	إسم الصنف Item	استهلاك الورديات Comp. Shorts مساء Night	استهلاك الورديات Comp. Shorts صباحاً Day	مساء Night	صباحاً Day	الكمية المقررة Qty.	إسم الصنف Item	مسلسل No.
1	Pulse Oximeter					1	جهاز قياس نسبة الأكسجين بالدم	1
2	Gluco Check Device					1	جهاز قياس نسبة السكر بالدم	2
3	Gluco Check Strips					علبة	أشرطة تحليل السكر	3
4	Gluco Check Needles					علبة	واخزات جهاز تحليل السكر	4
5	Stethoscope					1	سماعة طبيب	5
6	Sphygmomanometer / Adult					1	جهاز قياس ضغط الدم للكبار	6
7	Sphygmomanometer / Ped					1	جهاز قياس ضغط الدم للصغار	7
8	Pen Light + Spare Batteries					1	كشاف فحص + بطاريات احتياطية	8
9	Tongue Depressor					علبة	خافض لسان	9
10	Aural Thermometer					1	ميزان حرارة الأذن	10
11	Tourniquet					1	تورنكيت (العاصبة)	11
12	Latex Gloves					12 زوج	قفاز لاتكس عادي	12
13	Surgical Scissor					1	مقص جراحي	13
14	Trauma Scissor					1	مقص ضمادات	14
15	Ring Cutter					1	قاطع خواتم	15
16	Window Punch					1	ثاقب زجاج	16
17	Bandage Roll					10	رباط شاش	17
18	Non-Sterile Dressing 10X10 cm.					2	قطع شاش مربع ١٠ × ١٠	18
19	Triangular Bandage					3	رباط مثلث	19
20	Plaster					2	بلاستر	20
21	Alcohol Swab					علبة	مسحات كحولية	21
22	Normal Saline 9%					1	محلول ملحي ٩ ٪	22
23	Ringer Lactate					1	محلول رينجر لاكتات	23
24	Dextrose 5 %					1	محلول دكستروز ٥٪	24
25	Sterile Water					5	ماء مقطر معقم	25
26	IV Set					5	أداة تنقيط	26
27	Syringe 3 ml					5	سيرنج ٣ مل	27
28	Syringe 5 ml					5	سيرنج ٥ مل	28
29	Syringe 10 ml					5	سيرنج ١٠ مل	29
30	IV Canula 14					5	قسطرة وريدية ١٤	30
31	IV Canula 16					5	قسطرة وريدية ١٦	31
32	IV Canula 18					5	قسطرة وريدية ١٨	32
33	IV Canula 20					5	قسطرة وريدية ٢٠	33
34	IV Canula 22					5	قسطرة وريدية ٢٢	34
35	IV Canula 24					5	قسطرة وريدية ٢٤	35
36	3 Way Stopcock					6	حنفية ثلاثية الفتحات	36
37	Needle decompration						إبرة إزالة الريح الصدرية	37
38	Pocket Mask					1	قناع جيب	38
39	Anti Poisoning Kit					2	طقم ضد التسمم	39
40	Triage Cards					25	بطاقات فرز	40
41	Multi Size C Collar					1	جبيرة رقبة قابلة التعديل	41
	Multi Trauma Bandage					1	شاش ستر الإصابات الكبيرة (الضمة)	42

اسم وتوقيع مدير المركز
Station Manager / Name & Signature

اسم وتوقيع المسعف
EMT Name & Sign.

اسم وتوقيع الطبيب / المسعف
Physician / EMT Name & Sign.

Shift / الفترة

Day / فترة الصباح

Night / فترة المساء

2nd Page   الصفحة الثانية

المملكة العربية السعودية
هيئة الهلال الأحمر السعودي
الإدارة العامة للخدمات الطبية الإسعافية
الإدارة العامة بمنطقة /.....
(٢٥٩)

نموذج تشييك السائق
Driver Check List

اليوم : ..... Day : ..... التاريخ : / / ١٤٣ هـ Date : / /143 المركز : ..... Station :

نوع السيارة : ..... Vehicle Type : ..... الموديل : ..... Model : ..... رقم اللوحة : ..... Plate No.: ..... كود السيارة : ..... Car Code :

☐	غير نظيفة Not Clean	☐	نظيفة Clean	نظافة السيارة الخارجية Exterior Look	☐	غير موجود Not Available	☐	موجود Available	مفتاح السيارة الاساسي Basic Key of the Vehicle
☐	غير نظيفة Not Clean	☐	نظيفة Clean	نظافة السيارة الداخلية Interior Look	☐	غير موجود Not Available	☐	موجود Available	مفتاح السيارة الاحتياطي Spare Key of the Vehicle
☐	اقل من ٢٥٪ Less Than 25%	☐	٢٥٪ 25 %	٥٠٪ 50 %	☐	٧٥٪ 75 %	☐	١٠٠٪ 100 %	كمية الوقود Fuel level

صورة لهيكل السيارة من الخارج من جميع الاتجاهات

الجانب الأيمن للسيارة
Right side of Vehicle

الجانب الأيسر للسيارة
Left side of Vehicle

الواجهه الأمامية للسيارة
Front of Vehicle

الواجهه الخلفيه للسيارة
Back of Vehicle

مسلسل	فحص السيارة	الفترة الصباحية		الفترة المسائية	
		سليم	غيرسليم	سليم	غيرسليم
١	الهيكل الخارجي				
٢	زجاج السيارة				
٣	المرايا الجانبية				
٤	مساحات الزجاج				
٥	الأنوار التحذيرية (السفتي)				
٦	الأصوات التحذيرية (الونان)				
٧	الأنوار الأمامية				
٨	الأنوار الخلفية				
٩	الكشافات الجانبية اليمنى				
١٠	الكشافات الجانبية اليسرى				
١١	إطارات الدواليب الأربعة				
١٢	الفرامل				
١٣	زيت المحرك				
١٤	زيت القير				
١٥	زيت الدركسيون				
١٦	زيت الفرامل				
١٧	سائل الريدتير				
١٨	سائل مساحات الزجاج				
١٩	التكييف الداخلي				
٢٠	بطاريات السيارة				
٢١	المثلث وأسلاك الاشتراك				
٢٢	طفاية الحريق عدد ٢				
٢٣	الإطار الإحتياطي				
٢٤	العفريتة ومفتاح العجل				
٢٥	الجهاز اللاسلكي الثابت في السيارة				
٢٦	الجهاز اللاسلكي اليدوي + الشاحن				

اسم وتوقيع مدير المركز
Station Manager / Name & Signature

اسم وتوقيع السائق
Driver / Signature

اسم وتوقيع المسعف
EMT / Signature

Shift / الفترة

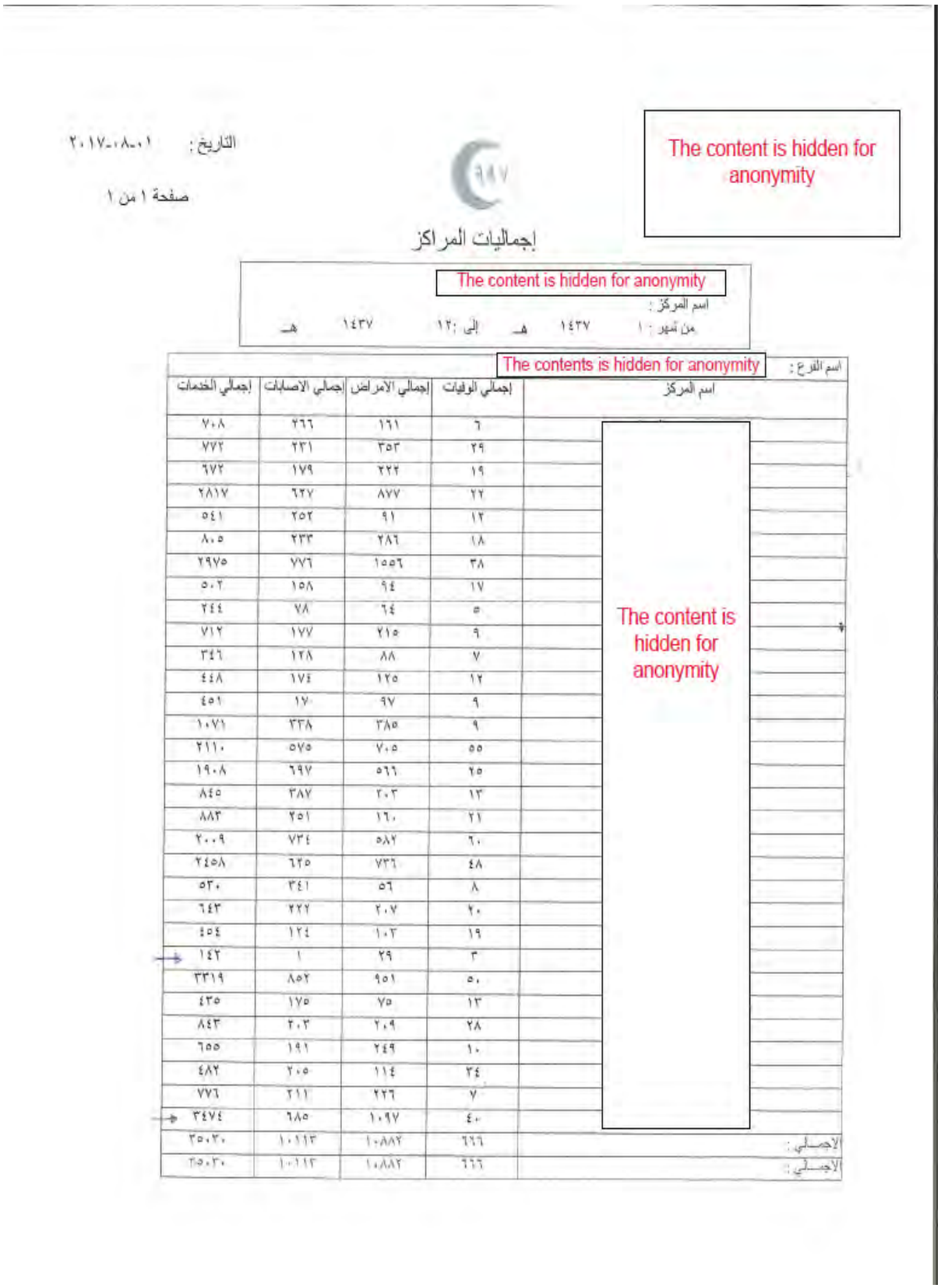
Day / فترة الصباح

Night / فترة المساء

3rd Page

الصفحة الثالثة

Document 16: The statistical report for the total number of the cases that were attended by all EMS centres in the region in 1437 AH (October 2015 – October 2016)



التاريخ : ٢٠١٧-٠٨-٠١

صفحة ١ من ١

The content is hidden for anonymity

إجماليات المراكز

The content is hidden for anonymity

اسم المركز :

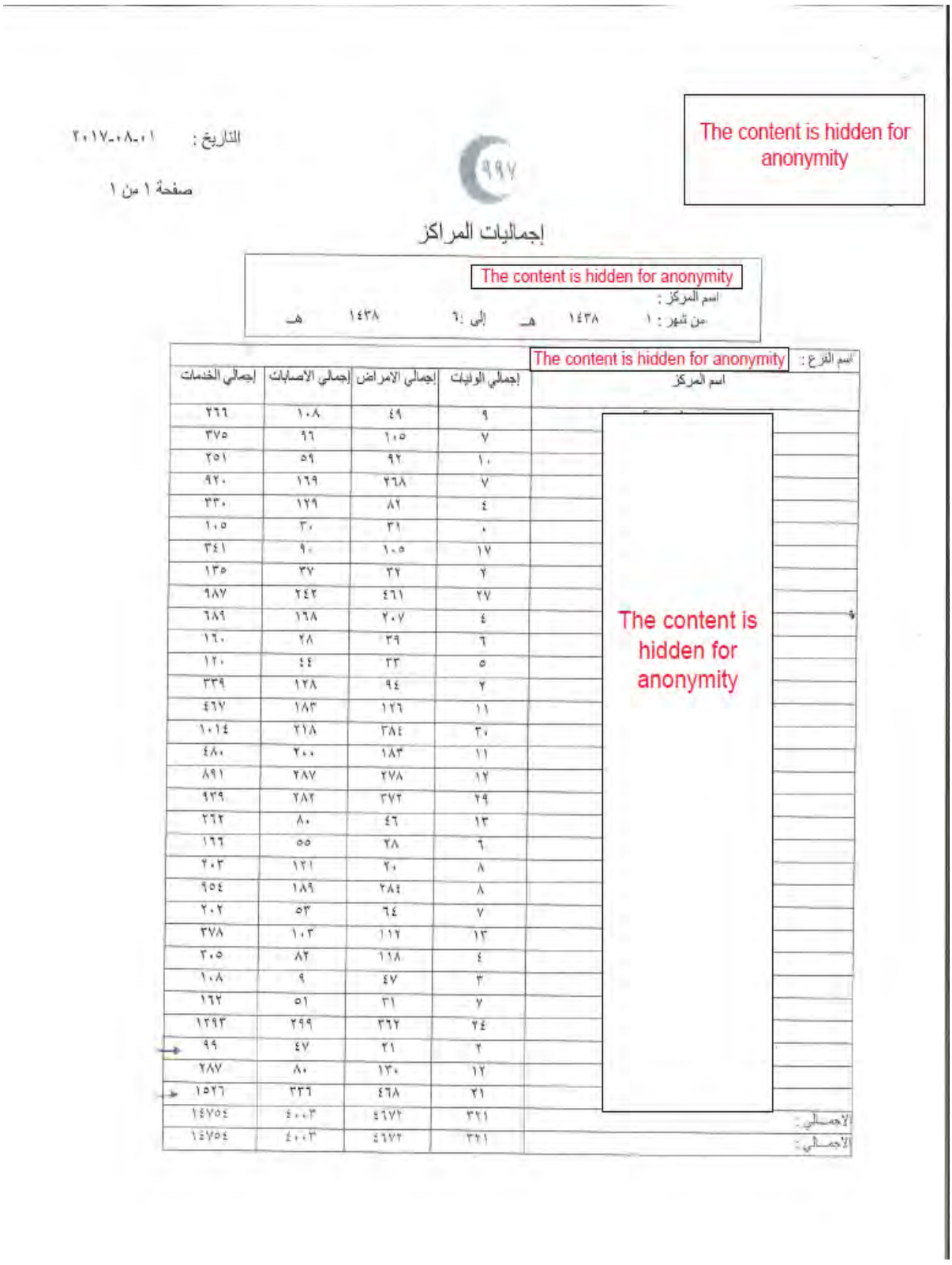
من شهر : ١ ١٤٣٧ هـ إلى : ١٢ ١٤٣٧ هـ

The contents is hidden for anonymity

اسم الفرع :

اسم المركز	إجمالي الوفيات	إجمالي الأمراض	إجمالي الاصابات	إجمالي الخدمات
The content is hidden for anonymity	٦	١٩١	٢٦٦	٧٠٨
	٢٩	٣٥٣	٢٣١	٧٧٢
	١٩	٢٢٢	١٧٩	٦٧٢
	٢٢	٨٧٧	٦٢٧	٢٨١٧
	١٢	٩١	٢٥٢	٥٤١
	١٨	٢٨٦	٢٣٣	٨٠٥
	٣٨	١٠٥٦	٧٧٦	٢٩٧٥
	١٧	٩٤	١٥٨	٥٠٢
	٥	٦٤	٧٨	٢٤٤
	٩	٢١٥	١٧٧	٧١٢
	٧	٨٨	١٢٨	٣٤٦
	١٢	١٢٥	١٧٤	٤٤٨
	٩	٩٧	١٧٠	٤٥١
	٩	٣٨٥	٣٣٨	١٠٧١
	٥٥	٧٠٥	٥٧٥	٢١١٠
	٢٥	٥٩٦	٦٩٧	١٩٠٨
	١٣	٢٠٣	٣٨٧	٨٤٥
	٢١	١٦٠	٢٥١	٨٨٣
	٦٠	٥٨٢	٧٣٤	٢٠٠٩
	٤٨	٧٣٦	٦٢٥	٢٤٥٨
	٨	٥٦	٣٤١	٥٣٠
	٢٠	٢٠٧	٢٢٢	٦٤٣
	١٩	١٠٣	١٢٤	٤٠٤
	٣	٢٩	١	١٤٢
	٥٠	٩٥١	٨٥٢	٣٣١٩
	١٣	٧٥	١٧٥	٤٣٥
	٢٨	٢٠٩	٢٠٣	٨٤٣
	١٠	٢٤٩	١٩١	٦٥٥
	٣٤	١١٤	٢٠٥	٤٨٢
	٧	٢٢٦	٢١١	٧٧٦
	٤٠	١٠٩٧	٦٨٥	٣٤٧٤
الاجمالي :	٦٦٦	١٠٨٨٢	١٠١١٣	٣٥٠٣٠
الاجمالي :	٦٦٦	١٠٨٨٢	١٠١١٣	٣٥٠٣٠

Document 17: The statistical report for the total number of the cases that were attended by all EMS centres in the region in the first six months of 1438 AH (October 2016 – March 2017)



التاريخ : ٢٠١٧-٠٨-٠١

صفحة ١ من ١

The content is hidden for anonymity

إجماليات المراكز

The content is hidden for anonymity

اسم المركز :

من شهر : ١ ١٤٣٨ هـ إلى : ٦ ١٤٣٨ هـ

The content is hidden for anonymity اسم الفرع :

اسم المركز	إجمالي الوليدات	إجمالي الامراض	إجمالي الاصابات	إجمالي الخدمات
The content is hidden for anonymity	٩	٤٩	١٠٨	٢٦٦
	٧	١٠٥	٩٦	٣٧٥
	١٠	٩٢	٥٩	٢٥١
	٧	٢٦٨	١٦٩	٩٢٠
	٤	٨٢	١٢٩	٣٣٠
	٠	٣١	٣٠	١٠٥
	١٧	١٠٥	٩٠	٣٤١
	٢	٣٢	٣٧	١٣٥
	٢٧	٤٦١	٢٤٢	٩٨٧
	٤	٢٠٧	١٦٨	٦٨٩
	٦	٣٩	٢٨	١٦٠
	٥	٣٣	٤٤	١٢٠
	٢	٩٤	١٢٨	٣٣٩
	١١	١٢٦	١٨٣	٤٦٧
	٣٠	٣٨٤	٢١٨	١٠١٤
	١١	١٨٣	٢٠٠	٤٨٠
	١٢	٢٧٨	٢٨٧	٨٩١
	٢٩	٣٧٢	٢٨٢	٩٣٩
	١٣	٤٦	٨٠	٢٦٢
	٦	٢٨	٥٥	١٦٩
	٨	٢٠	١٢١	٢٠٣
	٨	٢٨٤	١٨٩	٩٥٤
	٧	٦٤	٥٣	٢٠٢
	١٣	١١٢	١٠٣	٣٧٨
	٤	١١٨	٨٢	٣٠٥
	٣	٤٧	٩	١٠٨
	٧	٣١	٥١	١٦٢
	٢٤	٣٦٢	٢٩٩	١٢٩٣
	٢	٢١	٤٧	٩٩
	١٢	١٣٠	٨٠	٢٨٧
	٢١	٤٦٨	٣٣٦	١٥٢٦
الاجمالي :	٣٢١	٤٦٧٢	٤٠٠٣	١٤٧٥٤
الاجمالي :	٣٢١	٤٦٧٢	٤٠٠٣	١٤٧٥٤

Document 18: The item that presents the financial instructions for training and CPD

◈ مكافأة خارج الدوام الرسمي (بند المكافآت ٢٠١):

١. طلب من الرئيس المباشر بطبيعة العمل وأسماء العاملين المراد تشغيلهم خارج الدوام.
٢. موافقة صاحب الصلاحية .
٣. أصل قرار التكليف مذكور فيه أسماء المكلفين ومراتبهم ورواتبهم وعدد أيام التكليف وساعات التكليف اليومية والتوضيحات الضرورية للتكليف .
٤. إقرار من الرئيس المباشر بإنهاء العمل المطلوب.
٥. نموذج إدخال بيانات أمر اعتماد صرف من إدارة شئون الموظفين.
٦. أصل المسير موقع عليه من المسئولين في شئون الموظفين.

◈ صرف الانتداب (بند المصاريف السفرية ٢٠١)، (بند مخصصات الإبتعاث والتدريب للانتداب المتعلق بالتدريب):

١. أصل قرار الانتداب من صاحب الصلاحية مذكور فيه أسماء المنتدبين وجهة الانتداب وعدد أيام الانتداب.
٢. موافقة صاحب الصلاحية من الإدارة العامة لانتداب التدريب والإبتعاث.
٣. أصل شهادة انهاء مهمة.
٤. إرفاق بطاقة حصر الانتداب.
٥. نموذج إدخال بيانات أمر اعتماد صرف من إدارة شئون الموظفين.
٦. أصل المسير موقع عليه من المسئولين في شئون الموظفين.

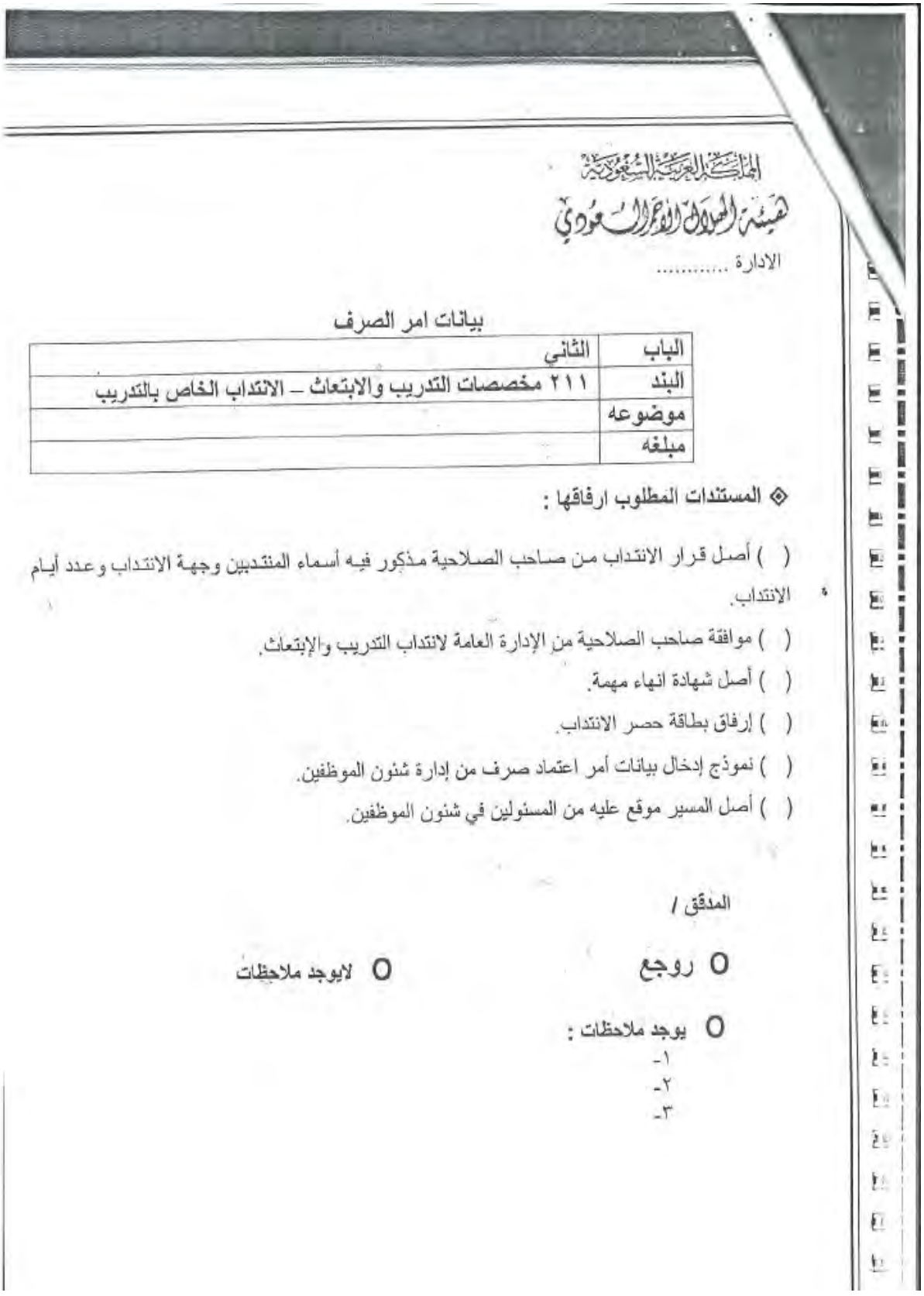
◈ صرف بدل تذاكر السفر (بند النقل الشخصي ٢٠٣):

١. أصل قرار التعويض من مدير عام الإدارة للمنطقة.
٢. خطاب من المتعاقد بصرف التعويض عن قيمة التذاكر.
٣. إرفاق صورة الإقامة وصور الجواز مع وجود ختم الخروج والدخول من وإلى المملكة.
٤. في حالة السفر على حسابه الخاص يرفق كعوب التذاكر.
٥. إرفاق صورة العودة من الإجازة.
٦. إرفاق تسعيرة الخطوط السعودية أو النقل الجماعي.
٧. احتساب ٥٠% من قيمة التذاكر عن أربعة تذاكر له وعائلته بحد أقصى.
٨. في حالة عدم سفره خارج المملكة يرفق خطاب من المتعاقد يثبت فيه تمتعه بالإجازة في داخل المملكة.
٩. نموذج إدخال بيانات أمر اعتماد صرف من إدارة شئون الموظفين.
١٠. أصل المسير موقع عليه من المسئولين في شئون الموظفين.

◈ صرف بدل سكن للأطباء السعوديين (بند إيجار الدور ٢٠٥):

١. أصل عقد إيجار السكن.
٢. كرت التأدية للموظف.
٣. طلب من الموظف بصرف بدل السكن.
٤. أصل المسير موقع عليه من المسئولين في شئون الموظفين.

Document 19: The form of the administrative requirements for assignment allowance



المملكة العربية السعودية

هيئة الصواريخ الفضائية السعودية

الادارة .....

بيانات امر الصرف

الباب	الثاني
البند	٢١١ مخصصات التدريب والابتعاث – الانتداب الخاص بالتدريب
موضوعه	
مبلغه	

◈ المستندات المطلوب ارفاقها :

( ) أصل قرار الانتداب من صاحب الصلاحية مذكور فيه أسماء المنتدبين وجهة الانتداب وعدد أيام الانتداب.

( ) موافقة صاحب الصلاحية من الإدارة العامة لانتداب التدريب والإبتعاث.

( ) أصل شهادة انهاء مهمة.

( ) إرفاق بطاقة حصر الانتداب.

( ) نموذج إدخال بيانات أمر اعتماد صرف من إدارة شئون الموظفين.

( ) أصل المسير موقع عليه من المسئولين في شئون الموظفين.

المدقق /

O روجع

O لايوجد ملاحظات

O يوجد ملاحظات :

-١

-٢

-٣

Document 20: The tentative organisational structure chart

Document 21: The curriculum and details of 'Prince Naif' training program

جدول المقرر العلمي والعملي لدورة الإسعافات الأولية – برنامج الأمير نايف

اليوم	الموضوع	التوقيت	المدرب
اليوم الأول (محاضرات)	١) مقدمة عن نظام الخدمات الطبية الطارئة وتفعيله مع مقدمة عن تشريح وفيزيولوجيا الجسم البشري.	٩,٠٠ – ٩,١٥	
	٢) الفحص الأولي .	٩,١٥ – ٩,٢٥	
	٣) الطوارئ الطبية :	٩,٢٥ – ٩,٥٠	
	• تنفسية .		
	• قلبيـــة .		
	• السكري.		
	• السكتة الدماغية .		
	• الصرع .		
	• الربو الشالع .		
	راحـــــــــــة	٩,٥٠ – ١٠,١٠	
	٤) الإنعاش القلبي الرئوي .	١٠,٠٠ – ١٠,٥٠	
	• توقف القلب .		
	• توقف التنفس .		
	• الغصة(الاختناق بجسم أجنبي) .	١٠,٥٠ – ١١,٠٠	
	منـاقشـــــــة	١١,٠٠ – ١١,١٠	
	راحـــــــــــة	١١,١٠ – ١١,٣٥	
	٥) الطوارئ البيئية .		
	• الطوارئ الحرارية .		
	• الغرق والغرق الوشيك .	١١,٣٥ – ١١,٥٠	
	٦) التسمم والحروق .	١١,٥٠ – ١٢,٠٠	
	٧) النزيف والكسور .		
اليوم الثاني (تطبيق عملي)	١) الإنعاش القلبي الرئوي .	٩,٠٠ – ٩,٤٥	
	٢) الغصة (الاختناق بجسم أجنبي).	٩,٤٥ – ١٠,٣٠	
	٣) تجبير الكسور .	١٠,٣٠ – ١٠,٥٠	
	راحـــــــــــة	١٠,٥٠ – ١١,٠٠	
	٤) اختبـــار.	١١,٠٠ – ١٢,٠٠	
	• نظري .	٢٠ دقيقة	
	• عملي.	٤٠ دقيقة	

ب) آليات الإعلان :

يتم الإعلان في كافة وسائل الإعلام المحلية التقليدية المقروءة والمرئية والمسموعة ، بالإضافة لموقع الهيئة الرسمي ووسائل التواصل الاجتماعي الحديثة ، ووسائل العرض الحديثة وخاصة الالكترونية، والنشرات الورقية ، و مخاطبة الجهات الحكومية والمؤسسات والشركات ورقياً والكترونياً ، على أن يحتوى الإعلان المعلومات التالية:

- موعد وتاريخ بدء الدورات بكل المناطق والمحافظات: الدورات مستمرة وطوال العام صباحية ومسائية.
- كيفية الالتحاق بالدورة:الاتصال هاتفياً بالرقم ٩٢٠٠٢٢٧٧٦ أو بالتسجيل الالكتروني قريباً.
- مكان إقامة الدورات: بمراكز ووحدات التدريب التابعة لفروع الهيئة بكل المملكة وللجنسين.
- للاستفسار : ٠١١٤٥٣٠١١٦ / تحويلة ١١٧/١١٦/١١٥ فاكس / لا يوجد .
- البريد الإلكتروني الرسمي لليرنامج : firstaid@srca.org.sa
- مدة الدورة ست ساعات (على يومين بمعدل ثلاث ساعات يومياً أو يوم واحد حسب الطلب).
- لغة الدورة : العربية والإنجليزية حالياً .

ج) تعبئة النموذج الخاص بالدورة :

سواء عبر التسجيل الالكتروني أو الورقي وحسب طريقة التواصل مع الهيئة ، ويستكمل الطلب من قبل قسم التسجيل إذا كان التواصل عن طريق الهاتف المجاني الموحد.

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