CHAPTER 3
LITERATURE REVIEW

3.1 INTRODUCTION

In order to fully understand and appreciate the core competencies required by A&E nurses to manage life-threatening situations in the emergency care environment, a review of the relevant literature was undertaken. This would provide an overall picture of what is known about the topic nationally as well as worldwide, and would also reveal the existing knowledge gaps. This rationale for a literature review is supported by Burns and Grove (2001: 43).

As a background, and to support this research, it is essential to have a thorough understanding of A&E nursing worldwide.

3.2 GLOBAL PERSPECTIVE ON A&E NURSING

Illness has been part of human existence since the beginning of time. Before the art of writing had evolved, men and women were performing healing arts. The medicine man (doctor) was working side by side with a woman (nurse) who acted as midwife, caregiver and wise woman, and it was she who among other tasks, selected medicinal plants, prepared herbal concoctions and applied spider-web as a styptic to bleeding wounds (Masson 1985: 13).

Nursing involvement during wartime can be traced back to as early as 1451, when Queen Isabella of Spain is said to have been the first person to introduce camp hospitals, described as large tents where “decent women specially engaged for this purpose” were tending the injured (Masson 1985: 49-50). Since then nurses throughout the world have played important roles. (Masson 1985: 49-50). It is widely acknowledged that the origin of trauma care stem from military conflicts and battlefield experiences (McGinley 1999).
McQuillan, Von Rueden, Hartscoek, Flynn and Whalen (2002: 10) state that although no clear records exist, perhaps the first organised nursing effort focusing on battlefield injuries was pioneered during the Crimean War (1854), when Florence Nightingale, Lady Superintendent-in-chief of female nursing in the English General Military Hospitals, led a group of women in caring for war casualties for a period of approximately two years. In October 1861 Nightingale was asked by the United States Secretary of War for advice on setting up military hospitals for the Union Army and her suggestions were widely adopted throughout the Civil War (1861 – 1865).

In subsequent wars nurses have cared for the wounded on and off the battlefield, seeking new ways to manage the devastating injuries resulting from the ever-increasing power of weaponry. The knowledge gained from the experiences of the front-line nurses had provided valuable information in helping to understand trauma in the civilian life. Moving from the front line to the home front awakens us to the realities of our modern lifestyle (McQuillan et al. 2002: 10). It is therefore evident that although nurses worked within the emergency care environment since as early as 1451, it was not until much later that nursing was seen as a profession and A&E nursing as a clinical field of specialisation.

Despite international advancement in accident and emergency management of the severely injured patient, there are today still key deficits within the A&E nursing community in SA. The role of the A&E nurse within the emergency care environment has not been defined within the profession, and this keeps hindering the professional development and extension of the range of practice of these nurses. If one can delineate the core competencies of the A&E nurse, it will then be possible to advocate the use of A&E nurses within the emergency care environment, thus paving the way to role expansion and professional growth in this clinical field of specialisation. This problem does not seem to be unique to the South African A&E nurse, as A&E nurses are apparently struggling with the same dilemmas worldwide.
The researcher has limited this literature review to mainly three countries, the United States of America (USA), the United Kingdom (UK) and SA. This was motivated by the fact that A&E nursing as a profession originated in the USA in 1970, followed by the UK in 1972 (McKay & Thayre 1999: 489). A&E nursing within the South African context will be thoroughly investigated to provide a background for the research.

3.3 UNITED STATES OF AMERICA

3.3.1 Historical background
According to Trunkey (2000: 36-46) the development of systems for trauma care in the USA has, until recently, been linked to wars. During the Revolutionary War care was based upon European trauma principles, particularly those espoused by the Hunter brothers. Surgical procedures were limited mostly to soft tissue injuries and amputations. Then came the American Civil War and remarkable contributions were made regarding the development of systems for trauma care, and for the first time anaesthetics were used on a routine basis. World War I and World War II were noteworthy because of the contributions made by surgeons in the use of blood, and many lessons were learned regarding the treatment and care of wounds. After the Korean Conflict the discovery was made of the tremendous fluid shifts into the cell after severe haemorrhage shock. During the Vietnam War treatment of patients with shock was altered, resulting in better outcomes and less renal failure.

McKay and Thayre (1999: 489-491) state that during the Vietnam War in the 1960s, the military medical services achieved significant advances in the areas of urgent treatment and care, triage, initial interventions and transporting patients. The first shock trauma nurses, Elizabeth Scanlen and Jane Tarrant, pioneered the nurse’s role in the first two-bed shock/trauma research centre. Dr Cowley at the University of Maryland Hospital in Baltimore, Maryland, was in charge of this unit. In 1963 the University of Maryland received the first-of-its-kind grant from the National Research
Center to establish a centre for the study of trauma. This was followed by the opening in 1966 of another trauma unit in Chicago, the Cook Country Hospital (McQuillan et al. 2002: 15). The impetus for advancement of care during trauma continued through the 1970s and 1980s, due to the fact that the American public now expected and demanded the same raised standards of emergency treatment within their country (McKay & Thayre 1999: 489-491).

Supported by their medical colleagues from the American College of Surgeons, two visionary A&E nurses working on opposite sides of the United States, namely Anita Dorr in New York and Judy Kelleher in California, acted as founders of the Emergency Nurses Association (ENA) in 1970. The foundation of the ENA was regarded as the origin of A&E nursing as speciality (McKay & Thayre 1999: 489). In 1971 the first trauma nurse coordinators were hired for a Level I trauma centre in Illinois.

It was not until the mid-1980s that the national ENA in the United States began a dialogue with A&E nurses in other parts of the world, mainly prompted by requests from overseas nurses for information and assistance (McKay & Thayre 1999: 489). According to McQuillan et al. (2002: 15) from this time onward A&E nursing developed rapidly:

- 1983 – A trauma nurse network was organised to provide a communication link for trauma nurses.
- 1989 – The Society of Trauma Nurses was formed.
- 1993 – The inaugural issue of the *Journal of Trauma Nursing* was published by the Society of Trauma Nurses (McQuillan et al. 2002: 15).

### 3.3.2 Education

Education for A&E nurses started with the Maryland state EMS system. It was established when a trauma coordinator position for training, designation and evaluation was created in 1975 (McQuillan et al. 2002: 15). In 1979 the Emergency Nurses Association (ENA) established a certification programme and the first certification examination was administered in July 1980 (McKay & Thayre 1999: 489). This was followed by an Advanced Trauma Life Support (ATLS) Course for nurses (pilot programme), which was taught in conjunction...
with a course for physicians in 1982 (McQuillan et al. 2002: 15). The Trauma Nursing Core Course (TNCC), started by the Emergency Nurses Association, followed in 1986 (McQuillan et al. 2002: 15). The Society of Trauma Nurses collaborated with the American College of Surgeons and ATLS Committees to provide the Advanced Trauma Care for Nurses Course in 2000 (McQuillan et al. 2002: 15). Presently, various programmes are available for A&E nurses to specialise in this clinical field.

3.3.3 Scope of practice

Scope of practice within the context of this study refers to what the A&E nurse can do as part of his/her role within the emergency care environment and delineates the boundaries of the professional activities and parameters of the A&E nurse (Hickey et al. 2000: 4).

One of the most frequently asked questions is: “What can A&E nurses do?” This question has been debated throughout the world. The researcher believes that the question should be answered by referring to the scope of practice of the A&E nurse. On the other hand, the scope of practice is linked to the core competencies required by A&E nurses to manage different scenarios.

This scope of practice is outlined by the Emergency Nurses Association (ENA), a professional organisation for the speciality of emergency nursing, recognising the role of the American Nurses Association (ANA) in defining the scope of practice for the nursing profession as a whole in the USA. The association focuses on defining the standards of A&E nursing, providing quality continuing education, supporting research within this clinical speciality and promoting the profession (ENA 1999a). The scope is broad and non-specific and it provides boundaries for A&E nurses. It contains elements regarding the practice environment, patient population, philosophy of care, educational preparation, practice arrangements, regulations and ethical considerations. It also declares that each state within the USA has the authority to regulate nursing practice through nursing practice acts. These
acts vary from state to state and therefore limit the practice of the A&E nurse (ENA 2000a; Curry 1994: 207).

The core statements by the ENA (1999a) regarding the scope of practice of the emergency nurse are quoted as follows:

- “it involves the assessment, analysis, nursing diagnosis, outcome identification, planning, implementation of interventions and evaluation of human responses to perceived, actual or potential, sudden or urgent, physical or psychosocial problems that are primarily episodic or acute, and which occur in a variety of settings”
- “may require minimal care to life-support measures; patient, family, and significant other education; appropriate referral and discharge planning; acknowledgement of legal implications”
- “emergency patients are people of all ages with diagnosed or undiagnosed problems of varying complexity”
- “emergency nurses interact with and care for individuals, families, groups and communities”
- “emergency nursing practice is independent and collaborative in nature”
- “the practice of emergency nursing also includes the delivery of compassionate, competent care to consumers through education, research and consultation”
- “emergency nursing occurs in hospital emergency departments, pre-hospital and military settings, clinics, health maintenance organisations, and ambulatory care centres; business, educational, industrial and correctional institutions; and other health care environments”
- “emergency care is also at the point of contact with consumers; where they live, work, play or go to school”

When evaluating the scope of practice for A&E nurses in the USA it seems that they too have the same problems as perceived in the UK and SA – a broad non-specific scope of practice, which is interpreted differently in each state. The actual scope of practice therefore varies considerably from state to state.
3.4 UNITED KINGDOM

3.4.1 Historical background
According to McKay and Thayre (1999: 489) the first A&E nursing group in the UK was established in 1972 at the Royal College of Nurses (RCN). Three prominent A&E nurses, Betty Hoy, Kate O’Hanlon, and Ethel Buckles, led 60 nurses throughout the UK to establish a speciality within the RCN in the early 1970s. With the help of Margaret Lee, a nursing practice advisor at the Royal College of Nursing, the Accident and Emergency Forum was established in 1972. The main issues debated at this forum included the need to develop specialist education courses for A&E nurses, effective implementation of triage and the need for legislation to mandate the use of seat belts in motor vehicles (McKay & Thayre 1999: 489).

The first International Accident and Emergency Conference held in association with the Accident and Emergency Nurses Forum of the Royal College of Nursing took place in London in 1985. A&E nurses from around the world had an opportunity to share experiences and explore differences and similarities regarding A&E nursing (McKay & Thayre 1999: 489). In 1995 the association developed the concept of integrating practice development, education, research and policy to create a faculty of emergency nursing. The ultimate aims were to establish levels of clinical competency and to develop a career pathway (Sowney 2000: 73).

3.4.2 Education
Like all developing specialities, sometimes the range of education and training opportunities can lead to some confusion with no clear pathway. In 1988 the Royal College of Surgeons in England examined the emergency management of patients with major injuries. A retrospective study of 1 000 trauma-related deaths highlighted that there were many deficiencies in trauma care, ranging from inappropriate initial resuscitation, to delays in providing definitive care to patients. As a result of this report, the Advanced Trauma Life Support Course, developed by the American College of Surgeons, was introduced in
the UK. This was specifically designed to teach doctors a concise approach to assessing and managing the multi-injured patient (Sowney 2000: 73; McGinley 1999). At present A&E nurses can attend the ATLS course, but do not receive recognition.

McGinley (1999) cites that although the role of A&E nurses is “difficult to identify” and “not explicit”, Lomas and Goodall (1994) states that A&E nurses form the backbone of the A&E departments and it is therefore important to educate nurses and specifically train them in this clinical field of speciality in order to improve the care of trauma patients. This view is supported by Sowney (2000: 73). In November 1990 the Trauma Nurse Core Course was imported from the United States, followed by the Advanced Trauma Nursing Course in February 1991. British nurses then started to state their beliefs and values regarding the specific management of trauma patients. Nurses were now trained within this clinical field (McGinley 1999).

In 1997 the Faculty of Emergency Nursing was launched. The faculty has two complementary aims, namely to develop nursing practice in a way that would ensure that patients receive the highest standards of care, and to assist A&E nurses in achieving their own professional goals. The faculty will therefore define standards of competence for A&E nurses, develop a core educational curriculum and focus on continual professional development (http://www.rcn.org.uk/faculty/emergencynursing/whyformed.php).

3.4.3 Scope of practice
In the UK A&E nurses are guided by the Scope of Practice and the Code of Professional Practice. Due to the fact that this scope of practice (see 3.3. – United States of America) is broad and non-specific, confusion arises regarding the professional boundaries – leaving nurses subject to conflict and a lack of clarity concerning legal accountability between the nursing and medical professions. Jones (1999: 59) states that improvements in practice are brought about by external pressures. In the UK such pressures are caused by the reduction in the availability of junior doctors, increasing workloads and the availability of multiprofessional education programmes.
Increasingly, A&E nurses have expanded their roles to encompass assessment, diagnosis, prescription of treatment and medication, and referral or discharge.

Carroll (2002) states that discrepancies, debates and arguments occur among academics, professional bodies and local health trusts as to the nature and expertise of levels of practice when it comes to specialist or advanced nursing practitioners. The NHS Executive and the UKCC have failed to provide adequate definitions and regulations regarding specialist and advanced practitioner roles. Carroll (2002: 33-35) states that Machin (1998) offered a suggestion that the advanced practice of nurses should be examined in three areas, including role adequacy associated with the level of practical knowledge and skills, role legitimacy associated with boundaries of practice, and role support with involvement in a range of levels of courses. The Faculty of Emergency Nursing should be in a position to see that all these areas are included in advanced practice A&E nursing.

3.5 SOUTH AFRICA

3.5.1 Historical background

In SA the first hospital had been established in 1652 in the Cape with the settlement of Jan van Riebeeck. It was not, however, until the arrival of the settlers from Britain in 1820 that nursing was properly introduced in this country (Masson 1985: 98). The South African War (Anglo-Boer War) in 1899-1902 had a tremendous impact on nurses and this could be seen as the start of accident and emergency nursing within the country. Although not recognised as professionals, nurses found themselves closer to the front lines than ever before, living in tents and overwhelmed not only by victims of war, but also confronted with enteric and typhoid fever (Masson 1985: 99). This was followed by influences from World War I and World War II, economic recessions, droughts, the introduction of the apartheid policy and the establishment of the Government of National Unity. These factors all shaped
the practice of nurses and midwives, but the main factors moulding these professions, came from within the professions (Searle & Pera 1997: 9).

According to Masson (1985: 98-99) the Order of St Thomas the Martyr sent Sister Emma and five associates, of which one was the famous Henrietta Stockdale, to found an Anglican nursing and teaching order at Bloemfontein. Searle and Pera state (1997: 10) that Henrietta Stockdale was the pioneer of trained nursing from as early as 1883, and until the present day nursing education has been the vital force in moulding the individual nurse. On 1 October 1914 a professional nurses association, the South African Trained Nurses Association, was established – to be replaced by the South African Nursing Association in 1944. The Association contributed immeasurably to the development of practice standards, norms and values of the profession. In 1922 post-basic nursing courses were introduced and presented at university level as early as 1935. These were followed by the introduction of baccalaureate degrees in nursing in 1955 and master’s and doctoral degrees from 1967 (Searle & Pera 1997: 10).

As no literature could be found regarding the origin of A&E nursing in SA the researcher decided to conduct personal and telephonic interviews to gather first-hand information on the subject from A&E nurses within the country (see 3.5.2 - Education).

3.5.2 Education

3.5.2.1 Educating A&E nurses
The following data regarding the origin of A&E nursing as a postgraduate clinical specialisation in SA was gathered during personal and telephonic interviews with A&E nurses who had been involved in A&E nursing over a long period.

The need to start A&E programmes arose from the fact that registered nurses working in Level I hospitals realised that patients were not adequately stabilised in peripheral hospitals (Levels II, III and IV) before being transported to tertiary hospitals for further treatment. The main aim was therefore to
educate nurses working in peripheral hospitals and in rural and remote areas to stabilise the critically ill patient before transportation. Appropriate education would lead to decreased patient morbidity and mortality.

According to the ENA (2000a: 377) trauma care facilities are characterised as follows:
- A Level I trauma centre provides the most sophisticated care if managed as an acute and tertiary centre
- A Level II centre provides initial definitive trauma care with the ability to transfer to a Level I centre
- Level III and IV centres commensurate with local resources regarding their commitment to trauma care
- This is therefore also regarded as the appropriate environment for the development of this nursing discipline in the SA context.

The first A&E course was started by Rosa Sneggons in the Groote Schuur Hospital, Cape Town, in 1978/79 (Sneggons 2001). This programme encompassed both medical and trauma emergencies. Following soon, a programme was started at the Johannesburg General Hospital in 1986, presented by Rosa Sneggons and mainly aimed at trauma emergencies and the management of the severely injured patient (Delgety 2001; Toubkin 2001 & Doubell 2001). Yvonne Delgety and Vanessa Doubell later presented this programme. Both these programmes were not listed with the SANC.

In February 1992 a six-month programme, presented by Emmerentia Jansen van Rensburg, was started at the H F Verwoerd Hospital (now called the Pretoria Academic Hospital). This was the first programme to be listed with the SANC and was mainly aimed at the management of the trauma patient (Jansen van Rensburg 2001 & Thompson 2003). In 1996 the Rand Afrikaans University started a year programme in cooperation with Netcare. Glenda Mellet was the lecturer presenting the theory and Inge Tully was in charge of the practica accompaniment (Doubell 2001). This programme covered both accidents and emergencies managed within the emergency environment.
After these breakthroughs more programmes followed at various tertiary institutions. This field of study is presently registered with the SANC as a post-basic clinical speciality, mainly pertaining to the management of both accidents and emergencies. This is due to the fact that most A&E units not only manage trauma patients, but in accordance with the scope of A&E nursing practice, also have a mandate to care for a wide spectrum of patient populations and conditions.

3.5.2.2 Outcomes-based education

Across the world students and lecturers have been dissatisfied with education and training and came to the conclusion that it was ineffective and irrelevant (Malan 1997: 2). The initiatives of Sir Keith Joseph, the Secretary of State for Education and Science in the UK, led to a paradigm shift in education. The shift was towards outcomes-based teaching and learning within the education systems of first and third-world countries (Malan 1997, 2-3).

A paradigm shift in the form of outcomes-based education and training has now also taken place in SA. The new South African Qualifications Act states that all education and training should be outcomes-based and its primary aim is to ensure that SA will become an international economic role player through the augmentation of a culture of lifelong learning (Olivier 1998: ix & 1).

The development of a national, outcomes-based qualifications framework was accomplished to create lifelong learners, integrate theoretical and practical learning, and teach what is relevant to the learner and country in an accessible and flexible manner (Malan 1997, 3). The South African Qualifications Authority (SAQA) describes the requirements for qualifications, outlines procedures and stipulates rules that regulate assessment as incorporated in the National Qualifications Framework (NQF). It rests on the premise that standards should be nationally prescribed, but that the learning content and processes should be determined regionally, locally or institutionally (Malan 1997: 4). This framework also provides means to enable the person, which in this case is the A&E nurse, to achieve nationally recognised and internationally comparable qualifications (Olivier 1998: 1).
Outcomes-based learning is learning where the process is learner-driven and the outcomes will be derived from the job description and will be influenced by the context (Malan 1997: 2 - 3). Outcomes-based learning reflects the belief that the best way to get where you want to be, is to first know where you want to go – and once the goal has been determined, strategies can be implemented to achieve the goal (Olivier 1998: 20; Van der Horst & McDonald 2001: 5). The core competencies integrated into the outcomes-based education are the different areas of learning that include knowledge, skills, values and attitudes (Malan 1997: 19).

As in other countries, educational programmes developed in SA have been based on beliefs associated with the role of A&E nurses in the emergency care environment, and the various programmes differ in content. This view is supported by Cole and Ramirez (1999: 547).

According to Van der Horst & McDonald (2001: 3) learners should take responsibility for their own learning. This statement implies that nurses practising within the emergency care environment should prescribe the learning outcomes for the A&E nurse. A&E nurses have acquired insight, clinical experience and expertise within their profession and although curricula exist for the training of A&E nurses, there is no concurrence with reference to the research topic.

According to Van der Horst & McDonald (2001: 4) developing an outcomes-based curriculum offers many advantages that could be implemented during the training of the A&E nurse:

- Careful planning is vital for successful teaching, thereby ensuring that the educator knows what the A&E nurse perceives as vital knowledge, skills, values and attitudes required to manage patients in life-threatening situations. With a clear purpose, the educator can plan and select the appropriate content and prepare this component of the curriculum.
- A&E nurses will know what is expected of them in theory as well as in the emergency care environment and how to measure their own achievements.
Educational institutions will be able to monitor the learner’s progress in terms of specific learning achievements.

Outcomes-based education means that there should be proper and effective management and strategic planning for achieving results based on outcomes. The educator should determine the knowledge, skills, values and attitudes the learner (in this case the A&E nurse) needs on completion of a specific section of work (Van der Horst & McDonald 2001: 13).

3.5.3 Scope of practice

The professional-ethical responsibilities of the registered nurse in SA are empowered and authorised by the scope of practice set out in Regulation R.2598 (Regulation R.2598, 1984) and Regulation R.387 (Regulation R.387, 1985). Both the scope of practice and the regulations relating to the acts and omissions indicate that, above all, nursing should be characterised by righteousness towards the patient, and such righteousness should encompass competence, integrity and compassion (Searle & Pera 1997: 273).

The view of leaders in the nursing profession is that a scope of practice could never be defined by means of detailed acts and procedures, but by means of broad concepts that will allow for the professional development of the A&E nurse (Searle & Pera 1997: 186). The fact that the scope of practice, including the proposed new scope of practice, is written in such a manner that it does not restrict the continual developing of the nursing profession and does not set any boundaries to the extent to which each of the stated acts or procedures can be performed, provides certain dilemmas for the A&E nurse working within the emergency care environment. It seems that A&E nurses in SA are experiencing the same problems as their fellow nurses in the UK and USA.

According to Muller (1998: 83) the primary professional responsibility for which the nurse can be held liable, is the maintenance of the patient’s health status, which will also include the health status of the patient during a life-threatening situation. If the nurse neglects to carry out the prescribed
professional responsibilities and such negligence is harmful to a patient, disciplinary actions by the SANC can be taken in terms of the rules set out by the acts and omissions (Regulation R.387, 1985).

The legislation regarding nursing empowers the A&E nurse to practise her profession in any type of health care setting, for the parameters of such a practice are competence, authority, responsibility, accountability, independent decision-making, collaboration, facilitation, advocacy, nursing diagnosis, planning of nursing interventions and recording (Searle & Pera 1997: 192). Defining the scope of practice of the A&E nurse is difficult, due to the fact that the development of the profession is not stagnant, but a written scope of practice sets standards that help to regulate practice (ENA 1999a).

3.6 ROLES AND DUTIES OF A&E NURSES

The current literature on the roles and duties of A&E nurses internationally is discussed. The sub-headings cover the philosophy of care, the emergency care environment and the role of the A&E nurse.

3.6.1 Philosophy of care

The philosophy of care regarding the A&E nurse as described by Cole, Ramirez and Luna-Gonzales (1999) is applicable to the South African environment. This perspective states that all patients who enter the emergency care environment are assumed to have a life-threatening illness or condition, irrespective of the initial chief complaint or reason for seeking care. It is therefore expected from the A&E nurse to use a blend of medical and nursing knowledge. Medical knowledge is used to diagnose and prescribe medical interventions, such as medication or to perform a procedure. All these interventions are then incorporated into a nursing care plan for the patient. As part of the nursing care plan, the A&E nurse may for example educate patients regarding their condition and treatment, discuss preventative measures, address effective means of self-care when discharged and assist patients with adapting to changes in lifestyle necessitated by the condition or
treatment. This philosophy is also applicable to the management of life-threatening conditions.

3.6.2 Emergency care environment

The practice environment of the A&E nurse is very wide: The A&E nurse provides health care to individuals, families and communities in a variety of settings, including – but not limited to – emergency departments, urgent care centres and pre-hospital environments (Cole et al. 1999). As the role of the A&E nurse continues to evolve, new practice settings will emerge (Cole et al. 1999).

A&E nurses provide emergency care in a variety of settings, ranging from a Level I emergency care unit to rural and remote sites. A&E nurses are assuming increasingly more responsibilities in providing health care, and many skills and procedures that were once performed only by physicians are now being performed by A&E nurses (ENA 1999a). According to the ENA (2000) A&E nurses are currently underutilised due to the fact that there is a lack of awareness of their abilities. This is also applicable to the SA context.

The role of the A&E nurse in the pre-hospital environment, including both ground and air emergency care, has been well documented. In addition A&E nurses have a long history of providing education to pre-hospital care workers (ENA 1998). The ENA (1998) stated that A&E nurses practising within this environment, should not be required to obtain a qualification other than the A&E nursing qualification, as this qualification should be adequate.

The problems regarding the SA A&E nursing context stipulated by Geyer (see 1.2 – Background to the research problem) were seen as potential problems in the USA as well. The ENA (1998) also stated that focused education and subsequent maintenance of specifically pre-hospital knowledge and skills must be a prerequisite for these nurses and that they should be regulated by State Boards of Nursing and seek recognition by the state EMS agencies for A&E nurses as unique providers of emergency care in the pre-hospital
environment. According to a position statement by the ENA it seems that A&E nurses in the USA experience the same problems as A&E nurses in SA:

- EMS agencies regulate the practice of the pre-hospital environment.
- Registered nurses who practise in the pre-hospital environment are required by law to function under a pre-hospital credential rather than under a nursing licence.

Limited use is made of A&E nurses in the pre-hospital environment in the UK, where there is a paramedic system based on specialised training. In Sweden, however, A&E nurses have been used effectively within this environment where a paramedic and an A&E nurse work as a combination team (Suserud & Haljamäe 1997: 145). In SA nurses are working in the pre-hospital environment as flight nurses and as first responders. However, when A&E nurses are acting as first responders, they are expected to obtain a qualification within this environment and then work according to these protocols and not within the scope of practice applying to the registered nurse (Regulation R. 2598, 1984).

Other roles for nurses within the pre-hospital environment in the UK include clinical manager, auditor, trainer and first responder. It is therefore evident that both clinical and non-clinical roles are included (Crouch & Hodgetts 2000: 64 - 67). A&E nurses working within the pre-hospital environment as part of the ambulance team, may derive a number of benefits from this role, including a broader clinical perspective, a different underpinning knowledge and the ability to use a "protocol-free" judgement (Crouch & Hodgetts 2000: 64).

3.6.3 Role of the A&E nurse

Accidents and emergencies continue to occur in epidemic proportions in our society as well as throughout the world, and the A&E nurse has a vital role in delivering health care within this environment. Despite this, little is known about the activities of A&E nurses in the emergency care environment, nationally and internationally (Cole & Ramirez 2000: 455).
A review of the literature revealed minimal information about the role of A&E nurses in emergency care departments (Cole & Ramirez 1999: 547). Tye (1997: 364) states that the role of the A&E nurse within the emergency care environment is rapidly developing in the UK, and the extended role has recently been a subject of increasing attention. This statement is consistent for A&E nurses in the USA and SA.

Cole et al. (1999: 547-550), an American author, believes that A&E nurses should be able to –

- assess, diagnose and treat patients of all ages with conditions ranging from urgent to non-urgent
- order and interpret diagnostic tests, as well as perform diagnostic and therapeutic non-invasive and invasive procedures for these patients
- determine the disposition of emergency department patients

Cole et al. (1999) state that various authors believe that the initial role of A&E nurses resulted from a need for health care providers to deliver care to a growing number of patients with non-urgent problems who sought health care in rural emergency departments. This need has evolved into a need for A&E nurses who can provide high-quality and cost-effective care to persons who seek health care for urgent, non-urgent or emergent conditions in a variety of emergency care environments, including emergency departments.

In SA the A&E nurse is an essential member of the health care team, reflecting the needs of the hospital and surrounding community in his/her role and functions. One finds that in some small community hospitals A&E nurses function without full-time physician coverage, but in the larger hospitals they have full-time coverage of a physician that can vary from a specialised trauma surgeon to a general practitioner (a GP in most of the cases). Although their environments may differ, the roles of A&E nurses are similar, except that some are required to perform their activities under the direct supervision of the physician, while others are not directly accountable to the physician.
According to Searle (2000: 175 - 176) modern professional nursing is both a science and an art. It not only includes a motivational force of compassion, empathy, concern, sympathy and love for one’s fellow human beings, but also scientific knowledge and skills. Searle (2000: 163-164) states that the professional nurse has an expressive and an instrumental role. The instrumental role is concerned with the acquisition of knowledge about the patient’s health condition. Thereafter that knowledge should be used to search for solutions to the problem, and then for planning and implementing specific nursing interventions. Following scientific grounds to resolve the problem, remains the foundation throughout. The expressive role is concerned with the establishment and maintenance of an extensive and therapeutic intervention and is system integrating, providing total well-being of the patient. This role is therefore aimed at reducing the patient's tension by accepting the person as he is and then supporting him through basic nursing care.

It is further important to identify his health needs correctly, to obtain appropriate assistance from other members of the health team and finally to carry out the therapeutic intervention and nursing care in the right manner. Inefficiency and negligence in the expressive role will give nurses a poor image, for it is the particular interpretation of the expressive role that has given nursing its distinctive character. The changing role of the professional nurse, with so much more emphasis being placed on the instrumental role, will have a deleterious effect on the image of nursing in the future.

Nursing is not merely concerned with knowledge and skill performance when managing a patient, but should also include the caring role to ensure its distinctive character. Nurses must provide individualised nursing care and guard against the nursing process becoming so problem-orientated that the needs of the patient are no longer identified.

Both these roles are therefore applicable to the A&E nurse and will have to be incorporated in the education of these nurses – not only teaching knowledge and skills, but also addressing values and attitudes in the curricula and
ensuring that these nurses are able to function independently within the emergency care environment.

Searle (2000: 168-169) also states that the A&E nurse has a dependent, independent and interdependent function on behalf of his/her patient. The dependent function of the nurse is related to obeying the law that authorises his/her practice as well as common and relevant statutory laws. The A&E nurse can only function as a nurse if he/she is registered and is dependent on the law to be a nurse and perform certain functions.

The independent function relates to a profession separate from that of medicine and the A&E nurse must therefore have an independent function from the doctor. The independent function of the nurse has four aspects which relates to the following:

- The factors inherent in nursing assessment, diagnosis, treatment and care.
- The manner in which the nurse carries out his/her duties as a registered nurse – regardless whether these are independent or interdependent functions – being responsible and accountable for his/her actions and not holding the doctor accountable for them.
- Only the A&E nurse can decide whether he/she has the knowledge and competence, and whether the act would be legally and/or ethically permissible for him/her to practise or carry out on his/her own.
- He/she has a duty to act responsibly within the parameters of his/her scope of practice, the legal and ethical constraints and his/her own level of competence (except in an emergency) – this duty forming the basis of his/her accountability.

The interdependent function refers to teamwork between health professionals and one must remember that a common goal must be reached. There are certain actions needed in the treatment of a patient that can only be authorised legally by a registered medical practitioner. In no way should this particular aspect make the nurse subordinate to the other practitioners, but due recognition and attention should be given to the functions of the other practitioners when attending the patient. These functions therefore have to be
spelled out: “Whether the doctor is the leader of a health care team or not, the registered nurse is personally accountable for her professional acts of omission and commission” (Searle 2000: 173).

Although A&E nurses strive to extend their roles, there could be a potential risk of performing a medical substitute role – carrying out medically delegated technical tasks (Tye 1997: 364-370). Such an issue lies, however, not within the scope of this research. When managing a life-threatening situation, potentially life-saving and split-second decisions must be taken on the spot and advanced life-support procedures performed without losing precious time or considering medico-legal implications.

To provide care and alleviate suffering is the very heart of the nursing profession, and true to this image the A&E nurse is committed to apply his/her special skills, knowledge, values and attitudes in a life-threatening situation. In line with several previous studies, the researcher considers clinical competence to be the most important aspect of nurse caring behaviour (Baldursdottir & Jonsdottir 2002: 67).

3.7 BOUNDARIES OF THE PRACTICE (CORE COMPETENCIES) OF A&E NURSES IN LIFE-THREATENING SITUATIONS IN THE EMERGENCY CARE ENVIRONMENT

The A&E nurse must practise within the professional boundaries as outlined by regulations and furthermore be aware of the legal liability and ethical responsibility for the delivery of patient care. He/she must continually maintain professional accountability (ENA 2001). The boundaries set by the ENA (1999b) were the only source of information regarding this topic that the researcher was able to obtain.

These boundaries are explained as being both external and internal. The external boundaries include legislation, regulations, demands made by the society expecting quality emergency care, the economic climate of the
country, health care delivery trends and resources available. The internal boundaries include forces that fall within the professional practice of nursing, e.g. the American Nurses Association’s guidelines for practice, quality improvement activities and institutional and departmental policies and procedures.

ACLS, PALS and ATLS, three international courses available for doctors, paramedics and A&E nurses, were used as the backbone for setting the boundaries. All three courses can be attended by A&E nurses, but only ACLS and PALS issue the A&E nurse with a care provider certificate, proving that he/she has successfully completed a course. The ATLS course, for unknown reasons, issues only an attendance certificate – despite protest from the side of nurses passing the examination.

The extensive grey area between the work of the nurse and that of the doctor is recognised by the Medical, Dental and Supplementary Health Service Professions Act of South Africa (Searle 2000: 175). The existence of this area is obvious when it comes to the management of life-threatening situations.

In order to qualify for ACLS and PALS certificates, the knowledge and skills required from doctors, paramedics (whose protocols are based on these courses) and A&E nurses must be of equal standard. One would therefore presume that the knowledge and skills provided to patients in life-threatening situations by these three practitioners should also be on the same level and should be provided by doctors, paramedics and A&E nurses.

The role of the A&E nurse in a life-threatening situation should therefore not be underestimated. It is evident from a qualitative study done by Hughes (1988) that experienced A&E nurses are frequently advising junior doctors regarding areas of diagnosing and treatment, without formal recognition (Tye 1997: 364-370). It is also a fact that courses applying to life-saving skills in an emergency situation are at times presented to medical practitioners and paramedics by A&E nursing specialists.
It is, however, important to delineate the boundaries. According to Searle (2000: 176) the law imposes certain limits on all registered health professionals. In the case of A&E nurses, it is essential to realise that –

- they are dependant on the laws and regulations authorising their practice
- they cannot perform professional acts for which they are not adequately trained

3.8 CONCLUSION

It is evident that trauma is seen as an entity on its own in the USA, but in the UK trauma is seen as part of Accident and Emergency Medicine. The researcher believes that within the South African context one cannot separate trauma from other medical emergencies, as all these emergencies are treated within the emergency care environment, whether this is in a pre-hospital or hospital environment.

From the literature review it is also evident that in order to deliver competent, compassionate and high-quality care it is essential to state the core competencies required by A&E nurses to manage non-urgent and life-threatening situations in the emergency care environment. This will promote the profession and elicit recognition and acceptance of A&E nurses from other health team members. This research therefore aims to provide recommendations regarding the core competencies required by A&E nurses to manage life-threatening situations in the emergency care environment.

A&E nurses should be recognised as an autonomous field of speciality within the nursing profession, with an independent scope of practice that stipulates the core competencies that may be used by A&E nurses in life-threatening situations. It can be stated that A&E nurses can be held responsible for their acts and omissions, when their core competencies used during life-threatening situations in their professional practice are supported by both the A&E nurse and SANC and promulgated as official regulations.
Debate and argument surrounding the issues of knowledge, skills, role preparation and educational requirements are ongoing throughout the USA, UK and SA, partly due to the fact that literature addressing the issue is limited and inadequate throughout the world. This researcher established that no similar research studies have been undertaken or published so far within the SA context or internationally, and that little is known regarding the topic.

In SA there is much disagreement between academics, professional bodies and A&E nurses as to what the nature and expertise levels of practice are and should be. The researcher aims to clarify these issues by defining the emergency care environment as perceived by A&E nurses and by determining the core competencies required by A&E nurses to manage life-threatening situations in this environment. Recommendations will then be provided as to which core competencies should be included in the curricula.

In the following chapter the research results and analysis will be discussed in detail.