

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The impact of violence, accidents and a negative lifestyle on the health care services in South Africa, as in the rest of the world, poses major problems for the individual, family, community and fiscus. The situation has been dramatically aggravated by the HIV epidemic. The challenge to public health care services is very important as emergency health care demands are outstripping the available capacities. All aspects of emergency health care services need to be assessed so that plans can be made to manage the services in the best possible way to ensure quality outcomes. The emergency nurse has a vital role to play in all sectors of this system. This role is not only applicable within the emergency room, which is the common perception, but also in the pre-hospital environment. Emergency nurses have served in this environment for many years and have an excellent history of providing education to pre-hospital health care providers. This is applicable in the South African context, where many emergency nurses have worked and are still working in the pre-hospital environment and where emergency nurses are involved in paramedic training.

Therefore the role of the emergency nurse needs to be explored and clarified so that their capacity, where the need for their services are overwhelming the existing capacity, can be enhanced and the delivery of care in the emergency health care environment improved. This chapter outlines issues related to in South Africa and reviews relevant available literature.

2.2 Emergency Nursing

Emergency nursing is a dynamic, clinical career that is responsive to changes in the emergency health care arena and nursing practice (Castledine, 1995:1279). It requires knowledge, skill and authority for autonomous professional decision making, about the assessment and management of the critically ill or injured patient, throughout all the phases of emergency care. According to Estelle MacPhail, a director of emergency services in Nashua (Newberry, 1998:3) “emergency nursing is the care of individuals of all ages with perceived or actual physical or emotional alterations of health that are undiagnosed or that require further interventions, it requires a unique blend of generalized and specialized assessment, intervention and management skills...and it may require minimal care or life support measures as well as patient and family education, referral and knowledge of legal implications,...is multidimensional, requiring knowledge of multiple body systems, disease processes, ...including processes unique to emergency nursing”. She further states that for optimal, quality care teamwork is essential between the nurse, physician, paramedics and technicians, where the initial pre-hospital management by the emergency medical services has a direct implication on the patients’ outcomes (Sheehy, 1998:4).

This emergency nurse is described as “a registered nurse who specializes in emergency care through advanced education and clinical experience in delivery of primary care to adult and paediatric patients” (Sheehy, 1998:5).

In the United States of America (USA), the Emergency Nursing Association (ENA) under the auspices of the American Nurses Association (ANA) is responsible for defining and establishing the scope of emergency nursing practice, used the framework of the ANA to develop the scope of practice and described it as follows (ENA, 1999:1-9):

- **“The core roles, behaviors and processes** i.e. The ENA describes the scope of practice as the assessment, analysis, nursing diagnosis, outcome identification, planning, implementation of interventions and evaluation of patients with diagnosed or undiagnosed emergency physical or psychosocial problems of varying complexity which can occur in hospitals, pre-hospital, in a military setting, clinics, ambulatory care centers, etc.
- **The dimensions** including the roles, responsibilities, functions and skills, i.e. those that evolve from a specific body of knowledge which includes the **scientific process, prioritization, emergency preparedness, stabilization and resuscitation, crisis intervention and provision of care in an uncontrolled environment**. It also includes roles with regard to patient care, research, management, education, consultation and advocacy.
- **The boundaries**, both internal and external with sufficient flexibility to change in response to identified needs i.e. the legislative control within and outside of the profession that is dynamic.
- **The intra-professional intersections** at the interface of emergency nursing with other professionals and governmental groups i.e. medicine, allied health professionals and pre-hospital care givers for the common purpose of addressing the health care needs of patients in the emergency care environment”.

The Emergency Nurses Association’s scope of practice could be used to inform the South African needs in emergency nursing practice. According to the Nursing Act, No 50 of 1978, as amended, one of the functions of the South African Nursing Council (SANC) is to define the Scope of Practice. This has been done for all registered nurses without specifications for clinical nursing specialists, which has led to a lack of clarity and

specificity for specialist nurses' educational requirements and clinical practice. The emergency nurses in the USA, developed their own Scope of Practice through their ENA. It meets the needs of the emergency nurse and can be reviewed by professional peers to ensure that it continues to meet them, enabling the specialist to function effectively and within a legal framework. According to Searle (2000:61), in 1986 at the Tel Aviv congress, the International Council of Nurses (ICN) urged national nursing associations to support the development of specialization and the professional associations to undertake their credentialing. As such, the importance of the role of the professional associations in the development of the specialist nurse is emphasized.

2.3 Need for Emergency Health Care Services in South Africa

2.3.1 ANC health care plan

The development of emergency nursing was in line with the ANC National Health Care Plan for South Africa (1994:33,37,38,56,83), which identified the development of emergency care as one of its priorities. In this regard it noted that:

- All communities must have access to emergency services that should be provided within a primary health care budget. Due to problems identified in rural areas staff at clinics and health care centers should also be developed with skills in emergency care. This indicated that already emergency care was identified as a part of primary health care and that all first line workers had to be appropriately trained.
- Health care personnel needed training in rescue work, disaster emergency care and care for victims of violence. Although emergency nurses are being trained to fulfill this role, their expertise is not adequately utilized in the pre-hospital environment. The small numbers of trainees and the lack of appropriate legislation impacts negatively on meeting this requirement.

2.3.2 Needs assessment

Violence, accidents and medical emergencies largely account for all the emergency departments throughout the country being overworked, over-utilized and overburdened. A trauma epidemic which is likely to continue is being experienced (Goosen, nd:1). The population statistics of midyear 2002 indicated that South Africa had an estimated population of 45,4 million (statssa.gov.za). The Violence and Injury Surveillance Consortium (2000:3,4,5,6) reported a study of all the state secondary and tertiary health care institutions in South Africa to identify how many trauma cases were seen annually and what proportion were due to traffic accidents, violence or other causes. More than 80% of the 60% of hospitals that responded treated trauma cases. It was estimated between 1.25 to 1.5 million trauma cases reported to state hospitals in 1999. These numbers are increasing annually. During the year of 1 April 2001 to 31 March 2002, 964,286 emergency patients were treated in the Gauteng Province alone, which has 28 hospitals that treat emergencies (Wastie: Gauteng Department of Health). Without considering all the variables, this translates to 94-patients per emergency room per day. Only one hospital has a dedicated trauma unit and three have academic status and are the tertiary care hospitals of the province (all private clinics have been excluded).

All the social problems that result from urbanization, substance and alcohol abuse, political unrest and lack of adequate facilities, which are major problems in South Africa, lead to an increase in violence, accidents and deaths. According to Goosen et al (2003:705), a Cape Town study showed that 60% of trauma patients had positive alcohol levels, 40% had recently used at least one illicit drug and in South Africa 76% of all interpersonal violence related deaths were shown to be alcohol related. The incidence of violent rape of babies

through to the aged is increasing and creating a special need within the emergency health care services.

According to Butchart & Peden (1997:1), injuries from violence and road accidents are a major contributor to the burden of disease in our country leading to an increase in the per capita injury rates, creating a disproportionate demand for trauma services. Clinical services at the primary level were overloaded with few trauma-trained personnel. The Department of Health's Year 2000 Goals: Objectives and indicators for South Africa had, as one of their goals, the provision of improved emergency medical services (Butchart & Peden, 1997:6), but no clarity of what this entails was indicated.

Furthermore the "brain drain" has left our country, especially the state services, with a shortage of medical doctors and paramedics capable of managing emergencies. The movement of these categories of emergency personnel to the private sector compounds the problem further as the majority of people in the country have access to a very small percentage of available emergency health services. At the end of 2002, there were only 426 Trauma and Emergency nurses registered with the SANC (many of these are not practicing as emergency nurses or are practicing outside the borders of South Africa). An HSRC (Human Science Research Council) study found that 18% of nurses registered with the SANC are not practicing (Venter, 2005:2) and no information is available regarding nurses working in other countries. South African registered emergency nurses are a sought after specialist nurse in other countries. Sefara (2003:3) stated that the Department of Health confirmed a shortage of 38 461 nurses and doctors and that the rural areas were the most affected.

Wherever there is a shortage of doctors and/or other ancillary health care workers, nurses attempt to provide the services that they normally would not, so that patients receive basic health care. This may require the performance of procedures that they have not been formally trained to do, which increases their workload and stress. As eloquently stated by ka Mzolo (2005:2) that “whilst others leave their posts nurses do not, they sweep the floors if cleaners do not, they do the social work when the social workers do not, they do the procedures of doctors when they are not available or do not”. According to the HSRC, 80% of nurses have increased workloads, with 60% being dissatisfied with their working environments (Venter, 2005:2). Nurses are with the patient 24 hours a day and unlike the other health care professions, they are the caregivers responsible for the co-ordination of the teams that provide health care and have direct patient care responsibilities. In the emergency care environment this is a very important factor, as the shortage of doctors in the emergency room (for various reasons) create huge problems, especially during the resuscitation phase. It is therefore essential that the nurses be adequately educated, trained and empowered to effectively manage patients as independent practitioners because of their significant role as part of the team of primary emergency health care providers.

2.3.3 Lack of educational preparation and supervision

The registered nurse who has completed a three or four-year diploma course has very little emergency management experience or theory to prepare her to work effectively in the emergency room. The emergency care module for this basic nursing course consists of basic life support and first aid, which is mostly done in the first year of study. This, coupled with the lack of role models and adequately trained and/or skilled supervisors (who have left the state hospitals or the country, or been promoted to management positions) makes it extremely difficult for non-specialist nurses to cope in this highly

specialized field. This was identified in the 1980's (see historical perspective below) and despite all efforts to develop appropriately trained nurses in South Africa, the need for more is consistently expanding, as the demands continue to outstrip the capacities. From the statistics and information above it is obvious that there are problems related to the provision of emergency health care services. This is evident in most emergency rooms where the nurses do not practice or know the basic principles of emergency health care. Verbal reports given by post-graduate emergency nursing students regarding how they functioned as registered nurses in the emergency rooms make this a major concern. In the First World countries like the USA and UK nurses working in emergency rooms must have the necessary emergency qualification and skills to allow them to work in that environment. According to Potter (1990:567), the ideal is an advanced specialist qualification that provides the necessary knowledge and skills, but the practical and financial constraints that exist necessitate a review of the system. This led to the development of short courses to equip nurses working in emergency rooms with the basic emergency health care skills.

South African health policies have changed with the focus being on primary health care in local clinics (Gauteng Department of Health, 2005:1). While most minor injuries could be treated at these clinics, the primary health care nurse does not focus on trauma or emergency management, but rather on chronic disease management. This leads to time delays as patients are transferred between institutions with inadequate levels of care rendered at the primary institute. This negatively affects survival in emergencies, as the principle of early intervention is not met. United States of America (USA) and the UK have developed what is called the emergency nurse practitioners that act as primary health care nurses in the emergency setting. These emergency nurse practitioners manage patients

with minor emergencies as autonomous practitioners and are able to initiate primary emergency interventions as well. They also collaboratively manage major emergencies as part of the multidisciplinary teams.

In the South African context, many patients are treated at level three or four and rural clinics or hospitals and need to be transferred to a level one facility for definitive care. The policy is that the patient should receive advanced life support (ALS) prior to transferral (Baker et al, 1999:2). However, a lack of doctors, adequately trained doctors, and adequately trained nurses has resulted in patients' reaching a level one facility without having received an adequate level of ALS. Patients' airways are not protected and maintained, fluid resuscitation is not adequately done, and they are not adequately immobilized. The care during transfer is also not optimal, as the nurses are not trained to manage patients during transfer. A typical example occurs when a patient with a head injury with a Glasgow Coma Scale (GCS) below eight who is not intubated and is transferred to a level one facility accompanied by a registered nurse. The nurse does not anticipate that the patient cannot maintain and protect his airway and therefore does not take any resuscitation equipment in the ambulance. Many patients complicate and by the time they get to the hospital have died. Too many of these incidents have occurred and seem to be accepted, as many of the level one hospitals also do not have appropriately trained personnel. Lack of training and supervision of appropriately trained personnel therefore creates legal and ethical dilemmas.

The emergency management system should be an inclusive one. No facility should be left with personnel who cannot institute basic emergency management. There should be an exchange of personnel, open consultation and a mechanism of analysis and feedback which

is seen as educational and community outreach (Baker et al, 1999:2). Although this was planned for medical personnel, the same principle holds for nursing personnel, as the basic educational programmes for registration do not equip the nurse to provide ALS.

There is only one state nursing college providing a diploma course in emergency nursing, while the universities of Witwatersrand, Pretoria, Free State and Natal provide MSc or M Cur degree courses in this speciality. Private nursing colleges provide training in this field but the numbers are small and they remain within the private institutions that provide services to a very small percentage of the population. Inadequate numbers of emergency nurses are being trained to meet the demand exacerbating the workloads of those who are already in the service. This is especially significant in the public health care services where the poor, with all their social problems, have an increased need. It is said that R43, 955 billion is spent on 6,962 people in the private health sector whilst only R34, 513 billion is spent on 38,614 people in the state health sector (National Health Review:2003). This inequity of health care service provision leads to problems where access to appropriate services with appropriate staff is restricted and inadequate for the majority of people. It creates a cycle of need that cannot be met.

2.4 Historical Perspectives

According to Veise-Berry and Beachley (Cardona et al, 1994:3), traumatic injuries have been a recognized societal affliction since the time of Neanderthal man, however the incidence, magnitude, causes and mechanisms of injury have changed, owing to various societal, industrial and educational influences. Trauma that is occurring in epidemic proportions all over the world has created a necessity for trauma care systems to be developed to meet the health needs of people experiencing these injuries.

2.4.1 The USA experience

Military experiences across the world have led to advances in the care of critically injured persons, but it was only during World War One that the United States Research Council of the National Academy of Sciences produced objective data regarding the body's response to severe trauma and knowledge of "shock". During World War two, care of critically injured patients improved owing to the application of information obtained by the Medical Board for the Study of the Treatment of the Severely Wounded, which consisted of medical officers, nurses, technicians and support personnel who worked as the research team. This led to improved resuscitation practices, as physiological alterations due to trauma became better understood. Similar projects garnered knowledge about organ function and metabolic disturbances in shock and acute circulatory failure during the Korean and Vietnam Wars under more scientifically controlled conditions. Advances in field resuscitation, efficient transportation and aggressive treatment significantly reduced the mortality rate. Throughout these wars nurses realized that they were caring for patients who not only had physiological injuries but also scarring of the mind and spirit that had long-term effects. This knowledge has been very important for nursing as a caring profession (Cardona et al, 1994: 2-15).

The military experiences, together with scientific knowledge regarding human physiology, made it apparent that the current health care delivery systems needed to change. In 1966 the modern approach to emergency health care commenced in the USA. An EMS systems approach was developed and instituted where pre-hospital and inter-hospital situations required the development of appropriate educational programmes. The principle of taking the hospital to the patient, rather than wasting time getting the patient to the hospital, was initiated. Physician-supervised programmes for pre-hospital emergency medical

technicians (EMT), ambulance personnel and paramedics commenced. The improvement in pre-hospital care meant that more viable patients were reaching the hospitals but emergency care was not continued in hospitals (Cardona et al, 1994:10). Specialist units in hospitals were then developed to continue the high level of care given in the pre-hospital environment. Health care institutions that treated large numbers of traumatically injured patients developed the interdisciplinary team approach for physicians and nurses to use for the assessment, resuscitation and implementation of ALS and definitive care. Mortality and morbidity were found to decrease dramatically. As a result trauma specialization in nursing began. The complex requirements of trauma care provided an excellent model that was used to develop the basic health care delivery system and then expanded to include other types of medical emergencies.

2.4.2 The UK experience

In the United Kingdom (UK) emergency healthcare sprung from the need in their hospitals' casualty departments to care for patients with medical, surgical and traumatic injuries. In 1962 the Platt Report by the Standing Medical Advisory Committee recommended that casualty departments needed to change in function, to care for serious medical and surgical/traumatic emergencies (Dolan & Holt, 2000:2). At that stage the casualty departments were treating patients with all levels of acuity. Nurses working in these areas evolved with the changes in the departments and improved their knowledge and skills beyond those of the general nurse. In 1972 the Accident and Emergency Nursing Forum (now Accident and Emergency Nursing Association) was established and the first Accident and Emergency Nursing Course was developed in 1975. In 1994 this Association set out a document to clarify its position regarding the speciality and the role of the specialist nurse practitioner (Dolan & Holt, 2000:2-4).

2.4.3 The South African experience

In South Africa a similar situation was experienced. During the 1960's violence related injuries, together with social and industrial changes commensurate with those occurring internationally, caused an astronomical escalation in medical and traumatic emergencies. Surgery developed rapidly and the first heart transplant was done putting South Africa On the World stage. The 1970's to 1990's with their political challenges and strife saw an even greater escalation in violence-related emergencies. The capacity of every emergency room in every public hospital and clinic was over-extended. The needs created by this "trauma epidemic" saw a concomitant growth in the specialities of trauma and surgery. Medical practitioners and surgeons were challenged to find better ways of managing the emergency health services, as most emergency rooms catered for patients with both medical and traumatic/surgical emergencies. The "Bush War" in the Caprivi Strip (on the border between South Africa, South West Africa and Angola) gave the military health personnel huge learning experiences in the management of trauma and many of these doctors were deployed to work in the emergency rooms in the public hospitals. Together with surgeons working in the emergency rooms they introduced the trauma systems approach as in the USA. Pre-hospital EMT ambulance to paramedic courses was developed and the pre-hospital emergency services were greatly improved (Boffard interview:2005). As in the USA and UK, the emergency rooms lagged behind. The improved pre-hospital services meant that more viable patients were reaching the emergency rooms but the emergency care system broke down at that level. The interdisciplinary team approach to trauma care was introduced and led to the need for nurses to be developed in this speciality.

Professor Boffard is a leading surgeon and Trauma specialist in South Africa. He was a prominent leader in the establishment of the Trauma Systems and the trauma speciality and, as such, played an important role in the development of the EMS and trauma casualty care at Johannesburg Hospital. It was because of this involvement that he motivated and assisted with the development of the Trauma and Emergency Nursing Science Course at Johannesburg Hospital. He was interviewed for his perspectives on emergency nursing, past and present.

In 1985 a twelve-month post-basic certificate course in Trauma and Emergency Nursing Science was developed at Tygerberg Hospital in collaboration with a hospital in Britain (discussion with Ms Fourie). Ms Fourie, a registered nurse who had specialized in Operating Theatre nursing was sent to Britain where she received the necessary training to introduce the first South African training programme in trauma and emergency nursing. She developed the course and it was registered with the South African Nursing Council (SANC) in 1987. In 1986 a similar project commenced at Johannesburg hospital where a similar need to improve the management of trauma patients had been identified. A six-month certificate programme in Trauma and Emergency Nursing was developed after consultation with the staff of Tygerberg hospital. Its development was spearheaded by Professor Boffard (Boffard interview:2005) who, in collaboration with Ms R Sneggans (a registered intensive care nurse), started the first course in Trauma and Emergency Nursing Science. The course was subsequently developed to a twelve-month diploma course in 1998. Nurses who were trained in intensive care nursing were utilized in the emergency rooms and flight services. It has been recognized that they needed specialist training to assist them to function optimally in the emergency arena, as they had been uncomfortable working in an “unstable” emergency care environment (Boffard interview:2005) both in

the pre-hospital environment and the emergency room. They had previously not been adequately trained to understand and manage the special demands associated with trauma/emergency patients in these environments. The services rendered in the pre-hospital environment and in the emergency room were closely related and continuity was necessary. Thus nurses needed to work in both environments in order to understand and manage their patients in a continuum of care to improve the patients' outcomes. The importance of the cycle of emergency care was noted and a specialized Trauma intensive care unit was established through the motivation of Mrs. Lange, a very pro-active hospital chief matron at Johannesburg hospital (Boffard interview:2005). This gave rise to the development of the emergency nurse specialist. Emergency specialist nurses were and are being educated and trained to work in all phases of the emergency care cycle, pre-hospital environments, emergency rooms, intensive care units and wards. The interdisciplinary and collaborative nature of emergency healthcare meant that all the major role players, paramedics, nurses and medical practitioners had, to know how to care for emergency patients in all the phases of emergency care and therefore, had to work in both the pre-hospital environment, emergency room and intensive care unit. It was also essential that the complete team could perform all the emergency functions so that, in the absence of one member, another could fulfill his/her role (Boffard interview:2005).

Currently Degree, Masters and Doctoral degree programmes in emergency nursing are available at most of the universities. However, insufficient numbers of nurses are trained, due to financial and social constraints and a lack of clinical training facilities. Some medical schools have also developed a postgraduate specialty in Emergency Care, apart from surgery. With the political changes that took place after 1994 all the sectors of emergency health care education, training and practice have undergone changes and an

exodus of trained emergency personnel had a negative impact on training and service delivery. However, we appear to be turning the tide and opportunities for improvement exist.

A Trauma and Emergency Nursing Society (TENS) was established in 1997. This society was very active and produced a book that contained the emergency nursing care protocols. From this society a concerned group of emergency nurses was formed who tried to clarify the position of nurses working in the pre-hospital environment. However, with the changes in the health care system and health education during the late 1990's, the society became inactive.

2.5 Recent global developments impacting on the role of the emergency nurse

2.5.1 Need for Autonomous Practitioners

Due to the acuity of the patients' needs, the time constraints and the technological aspects involved, the multi-disciplinary team approach based on evidence-based practice, is used for the assessment and care of patients. Members of the emergency health care team have overlapping roles but also those unique to each professional. This team approach often creates the expectation or need to practice outside of one's professional boundaries of practice in the interest of the patient. It is more apparent when some members of the team are not available, or do not have the necessary competencies and/or the patient load overreaches the capacity. When one team member is not able to fulfill an expected role, another must be able to do so (Boffard interview:2005) as an autonomous practitioner. The emergency nurse must therefore, have the necessary knowledge to make sound judgments on which autonomous practice is based. Hardy and Conway, as quoted in Searle (1985),

state that one's autonomy is constrained by the social and professional environment in which one practices (Searle, 2000:167). It is essential that the emergency nurse should know the roles of the profession and be able to determine when practice extends beyond those roles. This is important, as accountability accompanies autonomy and the practitioner (emergency nurse) will be accountable for the professional judgements and interventions made, as an interdependent autonomous practitioner (Searle, 2000:167).

Emergency care departments are busy areas where the shortage of nurses and doctors leads to a lack of personnel to manage the emergency patients and as a lack of adequate supervision. Where the increasing demand for emergency care, caused by increasing violence and accident related injuries, combines with emergency medical conditions associated with westernization, such as cardiac disease, asthma, diabetes mellitus and poisonings. The emergency health care environment becomes potentially hazardous and chaotic. It requires knowledgeable personnel who are skilled in emergency health care and can provide optimal care, to prevent this situation and deterioration in service provision. Higgins (2003:30) suggests that the emergency nursing professionals' services must be evaluated in this regard in order to meet the ever-increasing demand for emergency services. The author mentions the need to consider the autonomy, empowerment, expanding roles and future development of emergency nurses so as to make the emergency services more accessible to patients requiring the emergency service (Higgins, 2003:26), and protect the safety of patients and personnel. According to Higgins (2003:27), approximately 60% of patients requiring emergency health care could effectively be managed, discharged and/or referred by the emergency nurse. According to Searle (2000:167), the implementation of role functions is the real testing ground for autonomous, accountable practice. Emergency nurses need to be adequately educated and skilled to meet

the demands of the emergency health care services. This requires emergency nurses to have the appropriate knowledge, skills and framework clearly identifying their roles as advanced specialist nurses and the authority to carry them out.

The need for an autonomous practitioner dictates a need for defined roles and the latitude to act according to the needs of the emergency situation. Studies done by Chang et al (1999:230) and Burgess (1992:302) showed that emergency nurses who were adequately trained and then given expanded roles with autonomy, found their job more satisfying and rewarding and their self esteem, confidence, competence, knowledge and skills increased. To cope with the needs in South Africa this has to be investigated as a viable option, as many nurses are already autonomously practicing beyond their scope of practice, in an unofficial capacity in small emergency rooms with only general practitioner back up, with no formal training (Meek et al., 1995:177).

The professional risks attached to autonomous decision-making with or on behalf of the patient have important legal implications that must be considered (Crimson, 1995:1322). Autonomous practitioners are directly accountable to the judicial system, irrespective of the employers' rules and policies and are guided by the Scope of Practice and the Acts and Omissions which define the roles and functions of the professional (Broderick, 2001:46). Autonomous practice is based on the supposition that nurses are entrusted to provide a range of activities which they understand, must always be able to account for giving reasons for actions taken (Broderick, 2001:1), with the professional maturity to defend their practice and actions.

2.5.2 Nurse Practitioners in Emergency Care

The introduction of the emergency nurse practitioner in the UK and USA was an evolutionary process resulting from societal and professional needs. It presented challenges, particularly at the interface of primary and secondary care. The nurse practitioner is a specialist emergency nurse, who assumes more responsibility and plays a greater role than usual in primary health care. Procedures normally performed by medical practitioners were performed by nurse practitioners as nurses not as medical practitioners, in level one-trauma centres to institutions in rural clinics (Johnson, 1999:510). This practice was less likely to occur in the major emergency rooms as most patients seen in the rural clinics were often referred to major emergency departments by the emergency nurse practitioner. This nurse practitioner role was developed to assess and treat patients attending emergency rooms either as an alternative to a doctor or where no doctor was available (Read et al, 1992: 1466).

Dudley as quoted in Cole et al. (2004:2) described some of the benefits of using the nurse practitioner as increased cost effective quality care, reduced doctor contact time with non-urgent patients and increased patient satisfaction. The dimensions or roles of this nurse practitioner are the same as in the Scope of Practice of any emergency nurse specialist in an environment where the acuity levels and patient volumes fluctuate. Emergency nurse practitioners must have the knowledge skills and authority to make autonomous decisions about assessment, diagnoses (including doing the necessary diagnostic tests), to provide definitive treatment for prearranged conditions and to discharge or refer patients (Potter, 1990:586). As such, this requires the nurse practitioner to have an extensive knowledge of clinical management strategies, preferably obtained at graduate level through courses, which include physical examination, advanced physiology, pharmacology, advanced

diagnostic and therapeutic skills and the speciality content of emergency health care (Cole et al, 2004:3). Standards of Practice encompassing professional and clinical aspects were developed and approved by the board of directors of the ENA to enable this emergency nurse specialist to practice as an autonomous practitioner. Standards of Practice direct the clinical practice of the emergency nurse practitioner but do not prescribe the management (Cole & Ramirez, 2001:2). Certification requirements of this practitioner, differs with and between each practitioner, in order to meet local needs.

The roles of the emergency nurse practitioner encompass the principles of caring and cure to provide an autonomous holistic approach. Research has shown that the introduction of this practitioner reduced patient waiting times by 50%. Unoccupied nursing time was also reduced indicating that nursing resources were better utilized (Burgess, 1992:302). Crinson (1995:1324) showed that only 40 % of their study indicated the potential for holistic care, whilst a quarter recognised the possibility for legal problems when implementing autonomous care by a nurse practitioner. A longitudinal study by Hayden et al (1982) about the nurse practitioners' practice showed that their level of autonomy influenced their job selection and satisfaction. Two-thirds of the practitioners saw new patients whilst three-quarters saw follow-up patients alone or in consultation with a doctor. Patients, people in the community, clinical support personnel and staff nurses supported their role, whilst supervisory nurses and doctors were resistant, but physicians' acceptance improved over time and when they dealt with the less complex illnesses (Hayden et al, 1982:295). This study showed that although they had the autonomy to plan and implement their practice, they had less authority to make the ultimate decision in patient care. Their desire for role autonomy, credibility and new knowledge and skills motivated them for this role

development. Lack of experience and confidence were inhibitors, as was health care provider resistance (Hayden et al, 1982:299).

Within the South African context, the current Scope of Practice (Searle, 2000:122), makes it compulsory for nurses to assess, diagnose, plan and implement care activities as independent practitioners. However this is done under the supervision of a medical practitioner, whether directly or indirectly through protocols. Primary health care nurses are allowed to prescribe and manage as nurse practitioners within clear guidelines and protocols with very little reference to medical practitioners. The emergency nurse could be developed to fill a similar role in the emergency care environment in order to meet the expanding needs for emergency health care, especially in the rural clinics. The aim should be to improve patient care and not just to perform functional medical tasks that would detract from the fundamentals of nursing (Castledine, 1995:1279). According to Read et al (1992:1469) if this is to be considered as an option national training programmes with accreditation need to be developed, assurance provided that nurse practitioners could actually practice and would not be diverted to doing other tasks. Clear protocols would have to be developed and correctly constituted which could be monitored and audited.

The SANC has developed a Scope of Practice for all registered nurses with no distinction for a specialist nurse. All nurses have the role of developing a nursing care plan and implementing and evaluating care, whilst specialist nurses are expected to do so at an advanced level which is commensurate to their education and training (Searle, 2000:57). Thus no differential categorization is made between a specialist nurse and a specialist nurse practitioner. According to Searle (2000:138), the registered nurse is a nurse practitioner who has the competence, authority, responsibility and accountability for

independent decision-making, collaboration, advocacy, nursing diagnosis, planning of nursing care and institution of that care. A nurse practitioner is one who practices the profession of nursing. According to Davies, (Crinson, 1995:1321) a nurse practitioner is one who has “the knowledge and authority to make autonomous decisions regarding a patient’s care and is totally accountable for their actions”. It appears that this holds true for the specialist nurse as well, eradicating another category of nurse who becomes the practitioner. Jones states that for the first time the UKCC in 1992 placed the boundaries of professional accountability in the hands of individual practitioners (Crinson, 1995:1321). This has been the situation in South Africa since the Nursing Act was developed. These factors need to be considered when articulating the unique contribution that the emergency nurse can make to society. An opportunity is also created through professional role clarification, for emergency nurses to meet the professional and societal needs of the country. However it must be remembered these expanded roles must not be adopted for the sole purpose of undertaking doctor-devolved tasks. Neither should it detract from holistic nursing care (Crinson, 1995:1322). Expanding roles requires an expansion in accountability, which requires additional educational preparation with the extension of the scope of practice (Broderick, 2001:28).

2.5.3 Evidence –Based Practice/ Protocol Based Care

Evidence-based practice is the utilization of the best available scientific evidence, which enables nurses to make sound clinical decisions and move away from practice based on opinions (Thomson et al. 2000:164,172). The science and art of modern day nursing have multiple roles and functions that draw from a variety of bio-physical-social-educational and managerial sciences to support a dynamic nursing science. As science grows it causes a concomitant expansion of nursing practice. Despite being evidence-based practice,

nursing is more than just the implementation of procedures. It requires a nurse who is knowledgeable, competent, concerned, compassionate and caring to provide holistic care (Searle, 2000: 3,121).

Emergency nursing as a science is also based on evidence-based practice. The American ENA's Mission states that "emergency nursing includes a defined and evolving body of knowledge based on research" (ENA E mail secretariat@ trauma-nursing, nd:1). According to Bonell (1999:19), for the justification of professional and legal implications, evidence- based practice should be the required scientific reasoning and this in turn, is what accountability should be based on.

From current best evidence clinical guidelines and protocols are developed to enable nurse practitioners to render high quality, cost-effective care in improving patient management. Protocols are stepwise decision-making instruments for specific care processes. They involve the acquisition of knowledge, skills and attitudes that should be applied in each given situation (Thomson et al. 2000:169). During the resuscitation phase of emergency care implementing these clinical protocols is especially important to avoid wasting time and reduce variations in health care and for more effective teamwork, but they are also of great value throughout all the phases of emergency health care. Moreover it can assist emergency nurses who do not have medical practitioners working with them 24 hours a day to manage their patients as independent, autonomous nurse practitioners. The development and use of clinical protocols requires critical cognitive abilities, clinical expertise and research capabilities, which are part of specialist nurse training. In collaboration with the multidisciplinary team these can be developed and put into practice (Hewitt-Taylor, 2004:50).

Clinical protocols should not replace clinical decision-making, but facilitate the process, as guidelines must be flexible enough to provide for variations in clinical conditions which the specialist nurse should be capable of handling as an autonomous practitioner (Hewitt-Taylor, 2004:49). The specialist nurse has a knowledge and experiential base beyond that of the speciality that will influence the professional judgment of the autonomous practitioner. This can lead to legislative concerns if the professional chooses not to follow the clinical protocols (Hewitt-Taylor, 2004:50). However as autonomous practitioners who are accountable for their decisions, they must be able to demonstrate that the decisions and actions taken were in the patients' best interest (Boffard interview:2005). Clinical protocols are guidelines and do not eradicate the responsibility of autonomous decision-making.

The pre-hospital emergency health care personnel function autonomously according to their level of training as stated in Regulation 1379 of the South African Medical and Dental Council. It specifies the acts or omissions with respect of, which disciplinary steps may be taken by a professional board and the council (ALS Practitioner Protocols, 2003:113). Pre-hospital emergency health care personnel may institute actions outside of the protocols in emergencies when a more senior professional is not available. This is similar to the regulations controlling the activities of the registered nurse, which indicate that professional judgment must be used in conjunction with the protocols. Emergency nurses in hospitals also use protocols but not to the same extent as in the pre-hospital emergency services. An opportunity exists for this to be extended to emergency nurses working in the level 3, 4 and rural clinics where they already act as primary response health care providers. They are using clinical protocols but a lack of legislative support or clarity excludes them from using it to act as autonomous practitioners, especially in the

pre-hospital services. This could either have a negative impact on the training of the emergency nurse or could be utilized in a positive manner to develop the specialist to work smarter, increase access and improve the emergency health care services.

2.6 Factors impacting on emergency nursing in South Africa

2.6.1 SA Perspective / Regulations and Scope of Practice

The multidimensionality of this clinical specialist nurse described above, could be problematic if the emergency nurse does not know the boundaries and role expectations of practice. The SANC has the authority to define the scope of practice for all registered and enrolled nurses, including all categories of specialist nurses currently on the register (R2598 of 1984 as amended). The emergency nurses have very specific roles relevant to their practice and the general Scope of Practice for a registered nurse does not adequately guide the specialist nurse. The professional nurse is entrusted to carry out a range of care activities as an autonomous practitioner (Broderick 2001:1) but these are not specified for each specialist, which creates problems in education and practice. The emergency nurse is educated and trained on an advanced level of care but not allowed to practice at that level as the employers or other health care professionals do not have clarity regarding the scope of practice of the emergency nurse.

According to Broderick (2001: xvi) as nursing practice expands (and the nurse is entrusted with a wider range of care activities) so does the level of accountability, but the author queries whether the implications of these are really understood. According to Searle (2000:63), specialization increases the role expectations of practitioners and they are therefore held accountable at a higher level than the registered nurse lacking specialist education and training.

The registered nurse is an independent practitioner accountable for her acts and omissions according to the South African regulations regarding the Acts and Omissions (R387 Of 1985 as amended), in respect of which the SANC may take disciplinary steps. It lacks specific guidelines of responsibility for the specialist nurse. Items related to emergency care which are identified in a general way pertain to prevention, assessment, monitoring, treatment and rehabilitation of patients who require emergency care: doing what the nurse can to save the patients' lives or prevent deterioration in health status and management of medical and surgical emergencies.

The scope of practice cannot list each nursing act expected from registered nurses due to their multiple roles and combinations of roles. Therefore the scope of practice is interpreted with the Acts and Omissions and regulations, which are left open-ended for flexibility, as task-listed regulations are narrow and confines practice (Searle, 2000:117). However, in an environment where grey areas exist between professions, specialization requires advanced levels of practice and changing conditions and technology, this adds to the lack of clarity for practice.

The Scope of Practice and regulations do not specifically state what the nurse should do. An example is the supervision and maintenance of a supply of oxygen: should the nurse provide oxygen via a mask or be able to intubate (Searle, 2000:126,131,132)? The emergency nurse goes beyond that if the patient has a tension pneumothorax. Should he/she insert an intercostal drain? Stating that the nurse must do what he/she is competent to do does not clarify the knowledge and level of skills that must be developed. Appropriate guidelines are needed for educators or some will teach the students to insert an intercostal drain whilst others will not. The present guidelines are open to subjective

interpretation and the scope of practice is too wide. This becomes critical in the motivation for the emergency nurse to work in the pre-hospital environment and implement procedures in the capacity of a specialist nurse within the hospital. Other health care professionals may see these overlapping roles being performed as part of their domain of functions. This creates problems for emergency nurses when motivating for clinical experiential opportunities and for practice.

According to Searle (2000:111) a nurse must do whatever she can in an emergency within his/her level of knowledge and competence. A registered nurse should be able to perform basic life support. Part of this requirement is defibrillation. Very few registered nurses know how and when to use the defibrillator (observation of registered nurses coming to do post-basic nursing courses). This indicates how a lack of clarity affects practice. Without clarity of role functions or Scope of Practice, emergency nurses are open to exploitation where they must act in response to the emergency situation, but has no defined role. Possible confusion in the rest of the team in the pre-hospital and emergency room about the emergency nurses' role functions can create a problem for the effective functioning of the emergency health care team, leading to possible litigation and place patients and the emergency nurse at risk.

Neades (2002:11) notes a lack of understanding of the nurse, of the depth of responsibility and accountability that is attached to the new roles expected of the specialist and therefore, acceptance of roles that may not be correct. The author therefore suggests that the solution is to develop a national framework for emergency nursing practice, which is based on evidenced-based care with clinical expertise. Justification of professional and legal implications through evidence-based practice should be the required scientific reasoning

which accountability should be based on. In the emergency health care environment there is no room for accountability confusion or blurring of roles and boundaries. Thus what the nurse is held accountable for should be clarified.

According to Broderick (2001:51) the professionally mature nurse must be ready to defend all practice and actions emanating from commitment to competency and practice with a high standard of care. This requires knowledge of role expectations, which are the fundamental activities the nurse is accountable for and which should be clarified in the scope of practice. According to the International Council of Nurses (ICN) professional associations should undertake accreditation of specialists in nursing (Searle, 2000:61). Moreover, this emphasizes the importance of the development of the scope of practice for a nursing specialization to be based on the expected level of knowledge, experience and skills. Professional peers should therefore develop this.

When developing a scope of practice the boundaries within which the nurse should practice should be clarified. Searle (2000:117,119) points out that it can take place in hospitals, clinics, homes of patients, school health services, operating rooms, occupational health services, aviation, ambulances and military services. The pre-hospital setting is not clarified in the Scope of Practice, which is problematic for emergency nurses.

2.6.2 Current Conflict

A project was undertaken prior to the year 2000 by a group of concerned emergency care nurses involved in pre-hospital emergency care and training. Under the auspices of the SANC the emergency nurses identified a need to expand and/or clarify the role of the emergency nurse, as trained emergency care or intensive care nurses who were working in

that environment were experiencing many problems in the pre-hospital environment. Discussions and negotiations took place between this group and members of the Health Professions Council of South Africa (HPCSA). Ultimately the emergency nurses were informed that if they were to continue working in the pre-hospital environment, they had to have dual registration with the SANC and with the Emergency Care Board of the Health Professions Council which required that, as a minimum, they had to do the Basic Ambulance Assistance course (Concerned Nurses documents, nd:1). The emergency nurses found this unacceptable and incongruent as their nursing qualifications enabled them to practice at a much higher level. It also meant that two different regulating bodies, with conflicting regulations, would control them. It appears that the country's need or that of the patients was not the priority. It was rather that of professional "protectivism".

The following similarities exist between the scope of practice of the emergency medical **ALS practitioner** (South Africa, ALS Practitioner Protocols, 2002) and what is expected of **the emergency nurse**:

- identification of the needs of a person in an emergency care situation;
- evaluation of this person with due regard for the safety of the patient and health care worker;
- the rescue of that person from a potentially hazardous situation;
- the provision of emergency care to persons who need it;
- prevention of further injury to the above;
- transportation of patients to where definitive care can be delivered.

Despite these similarities and the emergency nurses' previous education and experience, serious attempts to get recognition for the nurse as part of the emergency health care team

have been unsuccessful. Coupled with this is the lack of consideration with regard to legislation regarding Recognition of Prior Learning (RPL). It became necessary for emergency nurses to motivate the SANC to develop appropriate courses and legislation so that emergency nurses would be empowered to work in the pre-hospital environment as part of the emergency care team, but as nurses, without having to register with the Emergency Care Board as a BAA or EMT-Basic. Despite numerous negotiations this has been unsuccessful, as no new regulations have been drafted (Concerned nurses documents, n.d.: 3-7). A lack of clarity regarding the Scope of Practice has hindered attempts for negotiations with the HPCSA. An interesting development in this regard is taking place in Sweden. According to Suserud et al (2003:13), emergency nurses have entered the pre-hospital emergency health care services and one of their goals is that by 2005 every ambulance should be staffed with at least one emergency nurse. This indicates their progressive thinking in the utilization of the multi-skilled emergency nurse.

Despite the initial intention that emergency nurses be trained to work in the pre-hospital environment as part of the emergency care team (Boffard interview:2005), the system is breaking down and the team approach is being affected negatively. This has major implications for both the pre-hospital environment and the emergency rooms, as the good work started in the pre-hospital environment is then broken down in the emergency rooms and the situation is regressing to the way in which patients were managed prior to 1986.

2.6.3 Need for a Framework

Post basic emergency nursing students were interviewed with regard to their reasons for doing the emergency nursing science course. The main reasons given were the competency and effectiveness of registered emergency nurses to cope with the great demands placed on

them and the desire to meet the need resulting from the lack of, and/or inappropriate training of medical practitioners, nurses and paramedics. The increasing need for emergency care requires careful, and innovative consideration of ways to overcome problems in all state hospitals where patient waiting times are not acceptable and the quality of care is not optimal. Neades confirms this, by describing a similar situation in the UK and pointing out that the emergency nurses' role is very important in this regard (2002:11).

According to Neades (2002:11) there is a desperate need to develop a framework for the practice of emergency nursing. Her concern about the lack of clear regulatory guidance on standards for education and clinical practice in Scotland, which has lead to services developing their own roles, is applicable within the South African context. Marsden (2003:26), states that the UK also lacks nationally agreed-upon practice guidelines and minimum educational standards to facilitate specialist-nursing practice. The author undertook a study of emergency nurses to gain a 'snapshot' of education and related issues of emergency nurses. Although the sample was small ($n = 38$), important information was elicited. One of the questions asked related to the benefits of their courses. Most stated that the knowledge gained enhanced skills, clinical judgment and confidence. A high morale, the result of job satisfaction and a higher level of functioning, was also achieved. This indicates that the emergency nurse practices at a higher level, despite not having agreed-upon practice guidelines. The author concluded "it was necessary to develop a coherent educational strategy to provide nurses with appropriate knowledge and skills to carry out roles at an advanced level to be linked with a coherent development of new roles" (Marsden, 2003:31). It was noted that the educational development of emergency nurses required a framework for practice to enable safe and effective practice. This underlines the

need to identify what the role of the emergency nurse should be, so that appropriate educational strategies can be developed.

The international move towards peer group role clarification and the development of an appropriate scope of practice for the emergency nurse is a step towards ensuring that nursing practice is scientifically sound, thus enhancing the principle of best practice. This requires emergency nurses to identify their roles clearly and ensure that they are regularly revised according to the needs of the individuals, their families and the community. As emergency health care needs varies from one situation to the next, not all the roles needed to meet these needs can be anticipated. Therefore sufficient flexibility should be built in and it should rather be seen as a living framework.

2.6.4 Educational Preparation

With the increasing demand for emergency health care and the dynamic nature of the speciality the demands on the emergency nurse are ever increasing. Changes in nursing practice are often due to external pressures, which Jones (1999:59) indicates are caused by the decreasing numbers of doctors, increasing workloads in and outside of emergency departments and the availability of multi-professional education. A similarity is noted within the South African context. Public health care institutions experience a lack of medical support and emergency medical services. A more dismal situation is experienced in peripheral or rural areas. The registered nurse is often the primary-care giver, and as such, is also responsible for the inter-hospital transfer of patients. These nurses need an educational programme that will enable them to meet the needs of the community that they serve. As in the UK this is a contentious issue, due to the overlap with the emergency medical services. The fact remains that there is a crisis within the emergency health care

services and a solution needs to be found. There is no danger of the nurses' replacing the EMS personnel. Collaborate functioning as a team who can support one another and in so doing meet the needs of the country is needed. Jones (1999:59) mentions that emergency nurses do not see their role as being confined to the emergency room and the paramedics also work in the emergency rooms and can assist when a need arises. This provides an opportunity for interdisciplinary and multidisciplinary training and education where this team can be developed to provide emergency health care services, whether in an emergency room or in the pre-hospital environment. The possibilities need to be evaluated. As in the UK, multidisciplinary education and training could be the answer to this problem.

Contextual issues confronting emergency care, varying levels of patient acuity and the expectations of patients regarding short waiting times for access to care, advocate that emergency nurses should be able to fulfill roles that will expedite the care of patients. Evidence is required to support the clarification and development of these roles (Chang et al, 1999:261) that will impact on education and training. Only if what is needed is known, can the appropriate mechanisms be put in place.

Nurses are multi-skilled and have knowledge and skills beyond those required in the emergency care environment. Nurses make up the largest number of health care workers, will be found in every part of the country and as with primary health care workers the emergency nurse could be developed to manage emergencies in any situation both in and outside the hospital. The expanded education and training of nurses to meet the emergency health care needs of the country needs careful deliberation, as according to the Skills Development Act 97 of 1998 (2002:4), provision should be made to develop education and training to meet the economic and social needs of the country. According to the South

African qualifications Framework (SAQA) Act 58 of 1995, the South African Nursing Council (SANC) is an Education and Training Qualification Authority (ETQA). Together with the community and emergency health care role players these statutory bodies must play a pro-active role in ensuring the development of appropriate emergency health care courses and legislation that is appropriate to meet the educational and practice needs of the emergency nurse and the country.

The Gauteng Nursing Colleges draft Policy (2002:3), regarding the Recognition of Prior Learning based on the SAQA Act, a policy framework has been developed for recognition of prior learning. One of the aims of this framework is to “facilitate access to, and mobility and progression within education, training and career paths” This creates a legislative opportunity for emergency nurses to develop their practice, in and beyond the hospital environment, to the benefit of the patient, nurse and the community. This is also in line with the ANC Health Plan. However, it will require inter-professional co-operation and multidisciplinary education for successful implementation. With the formulation of unit standards according to the SAQA Act, this process could be expedited. The implementation of the Higher Education Act, No. 101 Of 1997, which advocates the amalgamation of colleges with universities, offers the opportunity for multi-disciplinary teaching to become a possibility, which could increase the effectiveness of the emergency nurse within the emergency room and the pre-hospital environment. This multidisciplinary teaching could however, obscure the emergency nurses’ role functions, which makes it even more imperative that the emergency nurses’ roles be clarified.

Emergency nurses need to be highly competent as they are often the first people to witness or respond to emergencies. This is a huge responsibility, which the emergency nurse must

be trained for and be prepared to accept as it increases their level of accountability (Broderick, 2001:28). According to Hewitt-Taylor (2004:50), this requires practical, interpersonal and organizational skills, critical thinking, professional attitudes and judgment, motivation and psychomotor skills, as the nurse must be able to institute resuscitative measures with or without the support of the rest of the emergency team. This nurse must be able to manage the acutely ill or traumatized patient independently and coordinate the functions of the rest of the multidisciplinary team. According to Searle (2000:220), a nurse who undertakes extended roles must have the necessary knowledge and skills for practice at that level. The 1985 International Council of Nurses (ICN) congress in Tel Aviv stated the importance of supporting and guiding the development of nursing specialization (Searle, 2000:61). We thus have a professional, political, social and moral obligation to develop this speciality and provide the emergency nurse with the knowledge and skills for a higher level of practice.

A danger exists, that through specialization nursing care will become fragmented similar to the medical models. Holistic caring could be lost, as functional medical tasks can detract from functional nursing (Castledine, 1995:1279). Specialist nurses, therefore, need to take control of their nursing specialities and provide leadership and guidance ensuring that they are developed in a coherent functional manner to retain the essence of nursing.

2.6.5 Training of the Emergency Medical Technician (EMT)

According to Saunders (2000:11) the EMT-Basic is trained in all phases of BLS, basic airway procedures, assistance with administration of some emergency medications, patient care education, emergency vehicle operations and health promotion programmes.

The EMT- Intermediate is trained as above and includes ALS procedures such as advanced airway adjuncts, intravenous therapy, defibrillation, cardiac rhythm interpretation and administration of some emergency drugs. The EMT- Paramedic is trained to do the above but has advanced training in patient assessment, cardiac rhythm interpretation, defibrillation, drug therapy and airway management. Their roles and responsibilities are as follows:

Primary

- Preparation, response, scene assessment, patient assessment, recognition of injury/illness, patient management, appropriate patient disposition, patient transfer, documentation and returning to service;

Additional responsibilities

- Community involvement, support of primary care efforts, ad vocation of citizen involvement in EMS, participation in leadership activities and personal and professional development.

Most of these are commensurate with those of emergency nurses, regarding pre-hospital management. However, the pre-hospital clinical exposure time is less and impacts on the clinical competency at entry level of the emergency nurse into the pre-hospital environment. Emergency nurses also do not have any emergency vehicle operation training. The fact that emergency nurses are primary care givers and multi-skilled, well educated and more accessible than any of the other health care professionals, means that the role that they must play in the pre-hospital environment and the hospital needs to be carefully identified, with insight into future needs and capacity. This must be to the benefit of the community and the emergency health team and include opportunities for professional growth.

2.6.6 Collaboration

A concept analysis of collaboration done by Henneman, Lee and Cohen (1995:103), concluded that it implied:

- co-operation based on shared power and authority
- where members view themselves as a team who contribute to a common goal
- all participants offer their expertise
- sharing in responsibility for outcomes and
- each persons contribution is acknowledged.

South Africa is a big country with large rural areas and limited access to emergency facilities. Where “short” distances, delay access to primary response and definitive care due to poor transport systems, low income and inadequate pre-hospital emergency services. According to Goosen et al (2003:705), 47.6% of patients with injuries present to the hospital in private vehicles, with an average of 120 minutes pre-hospital time where more than one hour impacts negatively on patient survival. Patients are received in the emergency rooms far too late, necessitating an investigation into how this problem can be overcome. Emergency rooms are overburdened, understaffed or not appropriately staffed which puts the patients and staff at risk and delays patient access to definitive care. These emergency rooms often appear to be in the midst of a disaster. The profile of injuries that patients present has changed to include multiple gunshot wounds and those due to motor vehicle accidents. These injuries require major interventions from a competent team. The advances in medicine have also created major challenges for emergency room management. One solution to the problems is collaboration between all the members of the emergency team to improve the services throughout all the phases of the emergency care cycle. It involves working together harmoniously to achieve a common objective in health

care services (Searle, 2000:122). It means ensuring that the team is appropriately educated and skilled, which requires collaborative management. Unfortunately, this is always left to the medical doctors, but emergency nurses must get involved with the nursing structures to ensure that they can competently play their role in these vital teams.

Nurses, being the backbone of health services, play a vital role in trying to deliver the best services to their patients. This requires competence that, in turn, requires the ability to collaborate with and co-ordinate emergency health care providers to ensure the holistic care of individuals and/or the community (Meretoja et al, 2002:95). A descriptive study was undertaken to identify indicators for competence (Lindeke & Block, 1998:213). It identified collaboration as an essential element. If competent emergency services must be delivered, good collaborative relationships need to be developed within and outside of the emergency rooms. However, ineffective collaboration could occur in a situation of no real partnership, undifferentiated skills, unclear responsibilities, unclear authority and different goals (Lindeke & Block, 1998:213). This means that the emergency health care team must communicate effectively, but this can be done only if all members know what is expected.

2.7 Choice of Research Methodology

Action research was chosen as it aims to solve a relevant problem within a given context through collaborative participation and democratic inquiry of the professional researcher and stakeholders and to seek for solutions and resultant self-determination. It is concerned with data encountered in the midst of perception and action that requires a high level of discipline and rigour. The research process is a form of scientific enquiry that presents an adequate scientific trail for replication and scientific scrutiny. It may contribute to

transformation for greater effectiveness and justice that can lead to empowerment and competence (Denzin & Lincoln, 2000:96, 330, 331). Badger (2000:201) concurs with this in her examination of action research, change and methodological rigour. She states that its suitability is derived from the situational, collaborative, participatory and self-evaluative nature, where the design is led by the research problem rather than the requirements of a particular methodology. As an educator, Joyce (2005:74) found it suitable for improving educational practice and for developing and changing an existing programme. Williamson et al (2004:153) used action research in a phased approach to uncover new knowledge to bring about effective organizational change.

Baillie (1999:228) found that collaboration was necessary in the pursuit of practical solutions for change and development of theory. Foss & Ellefsen's (2002:245) triangulation of different methods was used to provide knowledge that was necessary to obtain a richer and more comprehensive picture of the issue under investigation. A combination of quantitative and qualitative methods was used to discover and verify information and to draw attention to the complexities and anomalies of the situation being researched. Graham et al (2004:153,162) employed this methodology and found that triangulation and the collection of data, using mixed methods, provided richness and depth to the analysis.

Action research cannot use experimental research to provide a warrant but it involves a different approach that involves critical, reflective, cyclic processes (Dick, 2005:4). These cyclic processes involve planning, data collection, interpretation/analysis, implementation and evaluation. Reflection is an important aspect of these processes. They were

successfully implemented in various studies to bring about change in nursing education, practice and management, as was done by Joyce (2005:74) and Graham et al (2004:153).

2.8 Summary

This chapter has explored literature dealing with the importance of the role of the emergency nurse within the pre-hospital environment as well as the emergency room. The historical perspectives that led to current emergency nursing practice were described as it emphasizes the importance of the speciality as part of the total health care system. Varying levels of patient acuity and needs necessitate that the emergency team is well educated and skilled to meet the needs of the patient, family, community, nurse and the health services. The need to clarify the expanding role of emergency nurses', so they can assume accountability for their actions and for what is known, within the necessary legislative support structure has been discussed. Current conflicts and the lack of an appropriate framework have been highlighted (as these are major stumbling blocks in current practice) including international responses to these problems and the importance of collaboration. The choice of action research as the methodology for this research was motivated.

The following chapter will discuss the research methodology undertaken to answer the research objectives.