

CHAPTER 5

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter will conclude the research project by discussing and summarising the conclusions and recommendations following the data results and analyses. The limitations of the research will be identified and topics for future research will be mentioned.

5.2 RESEARCH AIM AND STUDY OBJECTIVES

The overall aim of this study was to investigate the core competencies needed by the A&E nurse in order to manage life-threatening situations in the emergency care environment.

In order to reach this aim the objectives were to –

- investigate the development of A&E nursing in South Africa and internationally – by interviewing SA nurses involved in this field over an extended period of time, and by consulting international literature on the subject
- describe the “emergency care environment” within which the A&E nurse practises – by using information obtained during the FGI and by the distribution of a questionnaire
- determine the core competencies required by the A&E nurse in life-threatening situations in the emergency care environment – by using information obtained from the FGI and by the implementation of a questionnaire
- make recommendations as to what core competencies are required by the A&E nurse in order to manage life-threatening situations in the emergency care environment, and what core competencies should be included in a

curriculum for training these nurses. The data analysis of the questionnaire is reflected in this Chapter.

5.3 CONCLUSIONS AND RECOMMENDATIONS

Firstly, the distribution of the questionnaire and feedback of percentages will be discussed, followed by a discussion of the data obtained from the questionnaire. Each of the five sections included in the questionnaire will be discussed individually, except for Section C and Section D. These two sections will be combined. Where differences were noted between the data obtained from the experts (qualitative data) and the data obtained from the respondents (quantitative data) it will be reported.

With reference to the core competencies of the A&E nurse within the SA context, Section A will describe the demographical scenario of A&E nurses, whereas Section B will specifically describe the “emergency care environment” within which the A&E nurse practises. The data obtained from Sections C and D will be used to make recommendations as to what skills should be included in a curriculum for training A&E nurses. The recommendations will be tabulated and compared with the literature obtained during the analysis of the qualitative data (see Tables – 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10 and 5.11) and the current scope of practice as stipulated in Regulation R 2598 (Regulation R. 2598, 1984, Chapter 2).

5.3.1 Distribution and return of questionnaire

Three methods were used to distribute copies of the questionnaire – by mail, hand-delivered and group-administered. A total of 412 copies were distributed and 132 (32,0%) were returned (see Table 5.1 – Copies of the questionnaires distributed and returned). One should take the following into account:

- Some respondents received more than one copy of the questionnaire due to the fact that copies were posted as well as distributed by hand by the tutor/administrator.

- Of 184 trained A&E nurses registered with the SANC 93 (50,5%) trained A&E nurses returned the questionnaire.
- Of the 69 A&E nurse students that the researcher was able to trace, 33 (47,8%) returned the questionnaire.
- Of the six (6) A&E nursing lecturers currently involved in A&E nurse training programmes, 100,0% completed the questionnaire.
- Of the total number of 259 A&E nurses known to the researcher, 93 were registered A&E nurses, 33 were A&E nurse students and six (6) were lecturers.
- A total of 132 (51,0%) A&E nurses completed and returned the questionnaire.

Babbie and Mouton (2001: 261) indicated that a response rate of 50% is adequate for analysis and reporting and therefore the researcher accepted the response rate for this research, although it is considered to be only a rough guide. The statistician also indicated that the researcher should aim for a return of 100 copies of the questionnaire to ensure an acceptable amount of feedback to use for the interpretation and analysis. More than 100 copies were returned in this research project.

Table 5.1 indicates the number of copies of the questionnaire distributed, versus the number of copies returned.

Table 5.1 – Copies of the questionnaire distributed and returned

	Distributed	Received
Mailed (registered with a post-basic A&E nursing qualification at the SANC):		
Eastern Cape	6	2
Free State	5	1
Gauteng	111	0
KwaZulu Natal	17	2
Limpopo (Northern Province)	19	1
Mpumalanga	6	0
Northern Cape	2	0
North-West	6	1
Western Cape	12	4
Sub-total	184	11
Hand-delivered:		
Gauteng	50	31
Subtotal	50	31
Distributed by hand (researcher or others):		
Eastern Cape	10	3
Free State	10	5
Gauteng	100	55
KwaZulu Natal	50	25
Limpopo (Northern Province)	0	0
Mpumalanga	8	2
Northern Cape	0	0
North-West	0	0
Western Cape	0	0
Eastern Cape	0	0
Subtotal	178	90
Total	412	132

5.3.2 Section A – Demographical information

The majority of the respondents that completed the questionnaire were female (87,9%) and between 30 and 44 years old (76,0%). The perception of the researcher that mainly the younger registered nurse was practising within the emergency care environment due to influencing factors such as burnout and

increased physical activities within this clinical speciality field, was therefore inaccurate, as 57,6% of the respondents were older than 34 years. In terms of the nursing population – with career profiles stretching from 22 to 60 or 65 years – the younger person did not fit this perception.

The respondents were mainly employed in Gauteng (65,2%) and KwaZulu-Natal (20,5%). This could be due to the fact that up till now A&E nurse training programmes were available only in these two provinces, while the Free State has only this year started a programme. The majority of the respondents (70,4%) were trained A&E nurses, 25,0% were student A&E nurses and 4,6% were A&E nursing lecturers. Two (2) respondents who completed the questionnaire indicated that they were critical care nurses. These two questionnaires were excluded from the research project.

The respondents had the amount of experience that was required for a study of this nature, as the majority of them had two to three years or more experience to their credit and were working 37 to 48 hours per week. Both these factors would increase the validity of the results.

The majority of the respondents worked in private hospitals (72,0%), some of them in a Level I or Level II hospital (82,3%). It was evident from the data that the majority of the respondents indicated that they managed all the types of patients listed in the questionnaire within their emergency care environment, including the following: cases of sexual assault, gynaecology and obstetric emergencies, surgical emergencies, aggressive patients and psychiatric emergencies. It is therefore evident that if a scope of practice is designed, it should include all these different types of patients.

From the data it was evident that the majority of the A&E nurses were making independent decisions (60,3%) at least once a shift. The perception that independent decisions are mainly made by A&E nurses working in state hospitals is therefore not true. A realistic conclusion would be that A&E nurses are frequently making independent decisions within the SA context.

The majority of A&E nurses were either a midwife or accoucheur (84,7%) and the mainstream of these respondents indicated that they thought it was important to include the skills pertaining to supportive management for obstetric emergencies in the curriculum for A&E nurses (see Figure 4.79 - Importance: midwives and accoucheurs).

Recommendations: In a sense the demographical information also served as a census of A&E nurses in the field. It became evident that there were not enough of these clinical specialists and a need existed to train more of them. This clinical field needs to be advertised and one could start with undergraduate students – adding value to their training by including some components in their curriculum, and exposing them to the emergency care environment. Being a role model for these nurses could also be of value.

The majority of the A&E nurses are practising in Level I and Level II emergency care units. The training of A&E nurses working in Level III hospitals are of the utmost importance to improve patient care within these environments, thereby decreasing patient morbidity and mortality. If one takes into account the original aim with the A&E nurse programme – namely of upgrading patient care in peripheral hospitals in order to improve the situation of patient care prior to transfer to a tertiary hospital – the focus seems to be wrong. Should there not be more A&E nurses trained who can practise without support of doctors?

The A&E nursing programme should be more widely advertised to reach registered nurses practising in these hospitals. Marketing of the discipline is a must. Due to costs, it is often difficult for registered nurses to obtain study leave, and alternative education methods should be considered to accommodate these registered nurses and encourage them to further educate themselves within this speciality. The programme should therefore be made more attractive and bursaries could be an option.

Curricula for A&E nurses should not focus on trauma nursing per se, as it is evident that the majority of A&E nurses manage a vast spectrum of patients

within their “emergency care environment”. The curriculum should meet the needs of these nurses. When training A&E nurses it is important to ensure that they will function independently after completion of the programme, as it is evident that they are frequently expected to make independent decisions. This too should be taken into consideration when planning the curriculum.

5.3.3 Section B – Context

It is evident that the “emergency care environment” within which the A&E nurse practices is no longer confined to the emergency care unit, but is a developing speciality in its own right. The clinical practice in which A&E nurses within the SA context work, includes the pre-hospital and hospital environment, management, education and research. All four categories in which nursing can be practised as described by Muller (1998: 1) are included in this context, although research within this clinical speciality is still lacking. Only four (4) respondents within this clinical speciality had a Master’s degree and there were no respondents indicating that they had a Doctoral degree.

Recommendations: The need to train A&E nurses at a high level of clinical practice is of the utmost importance. In other countries A&E nurses with a Masters degree are referred to as clinical nurse specialists. The programmes must be made accessible to all registered nurses with an interest in this field.

To enable the A&E nurse within the SA context to form a scientific basis for his/her nursing practice; to demonstrate that high-quality patient care is delivered by A&E nurses and to develop nursing knowledge about situations, people and circumstances unique to the practice of the A&E nurse – these aspects should be elaborated and A&E nurses should be motivated to start research projects (ENA 2000: 733).

5.3.4 Section C and Section D

After analysing the results presented in Chapter 4, the researcher now presents the recommendations regarding the core competencies that are required by the A&E nurse in order to manage life-threatening situations in the emergency care environment. The researcher's *recommendations* are compared with literature studied regarding the inclusion of these skills in the curricula of A&E nurses in the USA and UK data (see Tables – 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10 and 5.11) – taking into account the current scope of practice that directs the clinical practice of the A&E nurse within the SA context.

The scope of practice of registered nurses (Regulation R.2598, 1984, Chapter 2) directs the clinical practice of the A&E nurse in SA. The following components involve all the skills mentioned for managing a life-threatening situation within the emergency care environment and will therefore be indicated by (*) in Table 5.2 to Table 5.11 – **a, b, c, e, k, n, o, p, q, r and s**. However, some components of the scope of practice are applicable to specific skills and will therefore be tabulated if applicable.

5.3.4.1 *Assessment and recording*

The nursing process includes a systematic collection of data concerning a patient's actual risk for health care problems and needs (ENA 2000: 21). Both assessment and recording form an essential part of the nursing process.

The primary assessment is the basis for all emergency interventions delivered in the care for patients within the emergency care environment (ENA 2000: 1) and is used to rapidly assess and intervene on behalf of the injured or critically ill patient in a life-threatening situation – resuscitation of vital functions (Proehl 1999: 2).

The secondary assessment that follows is aimed to rapidly and systematically discover all injuries or abnormalities (ENA 2000: 14; Proehl 1999: 4). History taking provides an account of medical and social occurrences in a patient's life and include environmental factors that may influence the patient's

condition. It is often essential to establish priorities in patient care during life-threatening situations (Sanders 2000: 430).

Recording, although it is seen as a component of standard nursing practice, here refers to extensive recording and is a legal document. Due to legal implications it is important to repeat this component within the context of the A&E nurse and the management of life-threatening situations.

All four skills should therefore be included in the curriculum (see Table 5.2)

Table 5.2 – Recommendations for inclusion of assessment and recording skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Assessment and recording						
Primary assessment	Yes			*	Yes	
Medical history taking	Yes			*	Yes	
Secondary (head-to-toe) assessment	Yes			*	Yes	
Recording	Yes			*	Yes	

5.3.4.2 Safety within the pre-hospital environment

Although all these components are not included in the core curriculum for emergency nursing (ENA 2000), some of them are discussed, although not in great detail, by American authors in a book prescribed specifically for trauma nurses (McQuillan et al. 2002: 94-105).

In SA rescue work and extrication, or removal of a trapped victim, is mainly done by experts from the fire department within the pre-hospital environment. This view is shared by American authors (McQuillan et al. 2002: 98).

Safety at the scene of an accident is one of the components lacking in the curriculum for A&E nurses within the SA context. This was also evident from the FGI with experts, held by the researcher, although the majority of the respondents indicated that these skills should be included in the curriculum. Due to the fact that safe practices are one of the most critical components of an emergency response system's success, and unsafe practices lead to further injuries, the researcher recommends that A&E nurses complete a separate module regarding safety before working within this environment (McQuillan 2000: 97).

Hazmat precautions within the pre-hospital environment are also seen as a speciality in its own right within the SA context. This skill, pertaining specifically to the pre-hospital environment, will therefore not be included in the curriculum.

The last six (6) skills mentioned correlate with the skills listed under safety within the hospital environment. If an A&E nurse can perform these skills within the hospital environment, as indicated in the data obtained, he/she should be able to apply the same skills within the pre-hospital environment. These skills, which A&E nurses refine in the emergency care unit, are transferable to the pre-hospital arena and are not context-bound. Respondents also indicated that they perform these skills within the pre-hospital environment. These skills should therefore be included in the curriculum (see Table 5.3)

Table 5.3 – Recommendations for inclusion of safety within pre-hospital environment skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Safety within pre-hospital environment						
Rescue work			Uncertain	*		No
Extrication			Uncertain	*		No
Scene safety			Uncertain	*		No
Hazmat precautions			Uncertain	*		No
Prioritisation of patient management			Uncertain	*	Yes	
Use of extrication devices			Uncertain	*	Yes	
Crisis intervention			Uncertain	*	Yes	
Conflict management			Uncertain	*	Yes	
Debriefing			Uncertain	(d)*	Yes	
Counselling skills			Uncertain	(d)*	Yes	

5.3.4.3 Safety within hospital environment

Safety within the hospital environment included much more than was perceived by the researcher. It not only included a safe hospital environment and universal precautions for the personnel, but also psychological safety.

All the skills listed under safety were used by the respondents within the hospital environment. It was also evident that these skills were described in the literature reviewed by the researcher, except for crisis management. Crisis management is one of the most important skills necessary when working within the emergency care environment, and although the researcher could not determine whether this skill is emphasised by the ENA, the respondents indicated that they frequently use this skill and therefore the researcher decided to include this skill (see Table 5.4).

Table 5.4 – Recommendations for inclusion of safety within hospital environment skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Safety within hospital environment						
Hazmat precautions	Yes			*	Yes	
Prioritisation of patient management	Yes			*	Yes	
Use of extrication devices	Yes			*	Yes	
Crisis intervention	Yes			*	Yes	
Conflict management			Uncertain	*	Yes	
Debriefing	Yes			(d)*	Yes	
Counselling skills	Yes			(d)*	Yes	

5.3.4.4 Airway and cervical spine control

The absence of an adequate airway is one of the major causes of preventable death and cardiopulmonary complications in both the trauma and medical patient (Sanders 2000: 360). Airway management and specific skills pertaining to airway control are therefore important aspects of the core competencies required by A&E nurses to manage life-threatening situations.

During the FGI the experts agreed that A&E nurses should be able to open, maintain and protect a patient's airway by using appropriate skills that do not include technical surgical interventions. Although 57,0% of the respondents indicated that they agree that the surgical tracheostomy should be included in the curriculum, the researcher decided not to include this skill under recommendations (see Table 5.5).

Table 5.5 – Recommendations for inclusion of airway and cervical spine control skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Airway and cervical spine control						
Foreign body removal: upper airway	Yes			(h)*	Yes	
Oropharyngeal airway insertion	Yes			(h)*	Yes	
Nasopharyngeal airway	Yes			(h)*	Yes	
Cricoid pressure technique (Sellick's manoeuvre)	Yes			(h)*	Yes	
Airway intubation:						
Laryngeal mask airway		No		(h)*	Yes	
Oesophageal-tracheal combitube airway (Combitube)	Yes			(h)*	Yes	
Orotracheal intubation	Yes			(h)*	Yes	
Nasotracheal intubation		No		(h)*	Yes	
Blind endotracheal intubation			Uncertain	(h)*	Yes	
Retrograde intubation		No		(h)*	Yes	
Percutaneous transtracheal ventilation			Uncertain	(h)*	Yes	
Needle cricothyroidotomy	Yes			(h)*	Yes	
Surgical cricothyroidotomy		No		*	Yes	
Surgical tracheostomy			Uncertain	(h)*		No
Endotracheal suctioning	Yes			(h)*	Yes	
Spinal immobilisation	Yes			(g)*	Yes	

Table 5.5 – (continued)

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Immobilisation devices:						
Cervical collars	Yes			(g)*	Yes	
Head immobilising device (HID/Ferno blocks)	Yes			(g)*	Yes	
Spine board	Yes			(g)*	Yes	
Scoop stretcher	Yes			(g)*	Yes	
Vacuum splints	Yes			(g)*	Yes	
Log-rolling	Yes			(g)*	Yes	
Cervical spine X-ray			Uncertain	(g)*	Yes	

5.3.4.5 Breathing and ventilation

Ineffective breathing is another major cause of preventable death and cardiopulmonary complications in both the medical and trauma patient (Sanders 2000: 360). Both the experts and respondents indicated that they agree that these skills should all be included in the curriculum, as they are all used within the emergency care environment within the SA context (see Table 5.6).

Despite various opinions regarding the skills performed by A&E nurses pertaining to the insertion of underwater drains for a patient with a tension pneumothorax, pneumothorax or haemothorax, it is now evident that these skills are performed by A&E nurses within the SA context and are therefore important to include in the curriculum.

Although interpretation of the chest X-ray is recommended to be included in the curriculum, it is not within the A&E nurse's scope of practice to exclude spinal injuries (see Table 5.5).

Table 5.6 – Recommendations for inclusion of breathing and ventilation skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Breathing and ventilation						
Initiate appropriate oxygen therapy	Yes			(h)*	Yes	
Nebulisation therapy	Yes			(h)*	Yes	
Bag-valve-mask ventilation	Yes			(h)*	Yes	
Anaesthesia bag ventilation (Boyles machine)	Yes			(h)*	Yes	
Confirmation of proper advanced airway placement	Yes			(h)*	Yes	
Oxygen and ventilation monitoring						
Peripheral saturation monitoring	Yes			(h)*	Yes	
Arterial blood gas monitoring	Yes			(h)*	Yes	
Exhaled or end-tidal CO ₂ monitoring (capnograph)	Yes			(h)*	Yes	
Peak expiratory flow monitoring (e.g. asthma patients)	Yes			(h)*	Yes	
Non-invasive mechanical ventilation	Yes			(h)*	Yes	
Mechanical ventilation	Yes			(h)*	Yes	
Drawing an arterial blood gas (ABG) sample	Yes			(g)*	Yes	
Interpretation of arterial blood gas (ABG)	Yes			(h), (i) *	Yes	
Manipulation of treatment according to arterial blood gas (ABG)	Yes			(h), (i) *	Yes	

Table 5.6 – (continued)

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Occlusive dressing for open pneumothorax (tape only three sides)	Yes			(h) *	Yes	
Emergency needle decompression of tension pneumothorax	Yes			(h) *	Yes	
Emergency placement of an underwater drain for the treatment of a tension pneumothorax		No		(h) *	Yes	
Emergency placement of an underwater drain for the treatment of a pneumothorax and/or haemothorax		No		(h) *	Yes	
Chest drainage system management	Yes			(h) *	Yes	
Chest X-ray			Uncertain	(h) *	Yes	

5.3.4.6 Circulation with haemorrhage control

The skills pertaining to circulation with haemorrhage control were all recommended except for peripheral vein cutdown. During the FGI the experts decided that not all surgical procedures should be included in the curriculum of the A&E nurse.

Although the skills pertaining to the paediatric patient within this category seem to be used less often within the emergency care environment by the A&E nurse, this could be due to the fact that these patients are less often managed within this environment than the adult patient. These skills were therefore still recommended (see Table 5.7).

Table 5.7 – Recommendations for inclusion of circulation with haemorrhage control skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Circulation with haemorrhage control						
Haemodynamic monitoring of the critically ill patient	Yes			(c), (m) *	Yes	
Analyse 12-lead ECG: myocardial infarction	Yes			(c) *	Yes	
Analyse ECG strips: lethal rhythms	Yes			(c) *	Yes	
Analyse ECG strips: non-lethal rhythms	Yes			(c) *	Yes	
Control external bleeding	Yes			(c) *	Yes	
Suturing of skin lacerations	Yes			(j) *	Yes	
Administration of resuscitation fluids	Yes			(i) *	Yes	
MAST suit application	Yes			(i) *	Yes	
Intravenous access	Yes			(i) *	Yes	
Peripheral line access	Yes			(i) *	Yes	
Internal jugular venous access		No		(i) *	Yes	
External jugular venous access		No		(i) *	Yes	
Femoral venous access		No		(i) *	Yes	
Intraosseous access	Yes			(i) *	Yes	
Central line access		No		(i) *	Yes	
Peripheral vein cutdown		No		(i) *		No
Umbilical venous access			Uncertain	(i) *	Yes	
Umbilical arterial access			Uncertain	(i) *	Yes	

Table 5.7 – (continued)

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Emergency pericardiocentesis for treatment of a pericardial tamponade		No		*	Yes	
Effective performance of CPR (ventilations and compressions)	Yes			*	Yes	
Splinting of limbs	Yes			(g), (j) *	Yes	
Splinting of pelvis	Yes			(g), (j) *	Yes	
Limb X-ray interpretation			Uncertain	(j) *	Yes	
Pelvic X-ray interpretation			Uncertain	(j) *	Yes	

5.3.4.7 Disability, differential diagnosis, defibrillation and drugs

All the skills listed in this section are recommended to be included in the curriculum. A much debated issue has developed around the fact that A&E nurses are not allowed to prescribe drugs, but in **life-threatening situation** it is evident that A&E nurses within the SA context are in a position where they are forced to prescribe drugs and they agree that these skills should be included in the curriculum (see Table 5.8).

Table 5.8– Recommendations for inclusion of disability, differential diagnosis, defibrillation and drug skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Disability, differential diagnosis, defibrillation and drugs						
Monitoring patient's level of consciousness						
AVPU scale	Yes			*	Yes	
Glasgow coma scale	Yes			*	Yes	
Neonatal stress response	Yes			*	Yes	
Blood glucose monitoring	Yes			(l) *	Yes	
Differential diagnosis for cardiac arrest (correctable causes)	Yes			*	Yes	
Defibrillation	Yes			*	Yes	
Cardioversion	Yes			*	Yes	
External pacing	Yes			*	Yes	
Vagal manoeuvres	Yes			*	Yes	
Prescribing appropriate medication to facilitate:						
Sedation	Yes			(c) *	Yes	
Analgesia			Uncertain	(c) *	Yes	
Skeletal muscle relaxant			Uncertain	(c) *	Yes	
Treatment of cardiac arrest	Yes			(c) *	Yes	
Correction of hypoxia	Yes			(c), (h) *	Yes	
Positive inotropes			Uncertain	(c) *	Yes	
Correction of metabolic acidosis	Yes			(c), (i) *	Yes	
Thrombolysis in acute myocardial infarction	Yes			(c) *	Yes	
Treatment of acute pulmonary oedema		☐		(c), (h) *	Yes	

5.3.4.8 Exposure and environmental control

Internationally and within the SA context both these skills are regarded as essential skills within the emergency care environment (see Table 5.9).

Table 5.9 – Recommendations for inclusion of exposure and environmental control skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Exposure and environmental control						
Measures to reverse hypothermia	Yes			*	Yes	
Measures to reverse hyperthermia	Yes			*	Yes	

5.3.4.9 Adjuncts

Although these three skills were indicated as important skills to be included in the curriculum by both the experts and respondents, the researcher decided that only the insertion of the arterial line should be recommended. The insertion of a nasogastric tube and urine catheter are regarded as components of standard nursing practice (existing knowledge) and therefore it seems unnecessary to repeat these skills during the post-basic programme (see Table 5.10).

Table 5.10 – Recommendations for inclusion of adjunct skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Adjuncts						
Arterial line insertion	Yes			(g) *	Yes	
Nasogastric tube insertion	Yes			(h) *		Yes
Urine catheter insertion	Yes			(m) *		Yes

5.3.4.10 Special circumstances

The skills pertaining to special circumstances are all recommended to be included in the curriculum. After analysing the data it became evident that all these skills are used within the emergency care environment by A&E nurses within the SA context and that the majority of the respondents indicated that they agree to the inclusion of these skills.

The only reason for the inclusion of the obstetric emergencies within the curriculum of the A&E nurse was to enable these nurses to perform the procedures mentioned in Table 5.11 within the emergency care environment, and not to educate these nurses to become registered midwives. The majority of the A&E nurses registered as either a midwife or accoucheur indicated that they agree to the inclusion of these skills in the curriculum and therefore the researcher recommends to include these skills (see Table 5.11).

Table 5.11 – Recommendations for inclusion of special circumstance skills in curriculum

	Inclusion in curriculum: USA and UK			Scope of practice: SA (R.2598)	Recommendations for inclusion in curriculum: SA context	
	Yes	No	Uncertain		Yes	No
Special circumstances						
Supportive management for obstetric emergencies						
Normal delivery	Yes			*	Yes	
Breech presentation			Uncertain	*	Yes	
Prolapsed cord			Uncertain	*	Yes	
Shoulder presentation			Uncertain	*	Yes	
Multiple pregnancy			Uncertain	*	Yes	
Placenta abruptio	Yes			*	Yes	
Placenta previa	Yes			*	Yes	
Premature labour			Uncertain	*	Yes	
Supporting the rape victim	Yes			(d) *	Yes	
Collecting forensic evidence from the rape victim	Yes			(d) *	Yes	
Neonatal stress management	Yes			(c) *	Yes	
Selecting an appropriate transport mode for the critically ill or injured patient	Yes			*	Yes	

5.3.5 Section E – Attitudes and values of the A&E nurse

The majority of the respondents indicated that an A&E nurse should have all the attitudes and values listed.

Recommendations: The following recommendations are made pertaining to the attitudes and values of A&E nurses:

- Management should take note of what this clinical speciality entails and acknowledge it as a speciality field. Registered nurses wanting to specialise in this field should be given the options and allowed to work within the environment if they choose to.
- Management should implement debriefing strategies for A&E nurses, as this was a very strong suggestion that came forward from the experts during the FGI as well as from the respondents. There is a definite need for this type of intervention.
- Forensic nursing is a new speciality field in SA. It became evident, however, that this area has been neglected in the curriculum and needs to be addressed. A&E nurses are expected to perform these skills within the clinical setting, especially collecting forensic evidence from the rape victim.
- The SANC should change its perceptions regarding the role of A&E nurses.

5.4 FURTHER RECOMMENDATIONS

The emergency care environment within which the A&E nurse practises is considerably more extensive than originally perceived by the researcher. It is now evident that it is a multifaceted environment and a clinical speciality field in its own right.

This information should be integrated when compiling a curriculum to ensure that A&E nurses are trained for the purpose they are used for within this environment and to ensure that these nurses meet the demands of both the health services and the community. Such a curriculum should therefore relate to the needs of the A&E nurse's clinical practice.

Identifying the skills performed by A&E nurses in the emergency care environment and obtaining the perceptions of these nurses regarding the inclusion of these skills in the curriculum, were useful for the following reasons:

- When developing a programme for A&E nurses one can use the knowledge, skills, values and attitudes identified in this research to add value to the curriculum.
- Empirical evidence regarding the skills performed by A&E nurses within the SA context is now available and this could help to improve the professional status of these nurses within the emergency care environment.
- These skills could guide activities for continuing educational courses for A&E nurses practising within the emergency care environment.
- An extended scope of practice for A&E nurses pertaining to life-threatening situations could be formulated, based on the evidence gathered in this research.

The existing scope of practice (Regulation R.2598, 1984, Chapter 2) is broad and non-specific. This places the A&E nurse in a very difficult position, as he/she is not legally covered when performing skills during life-threatening situations. This is a serious issue when taking into account that the A&E nurse and the SANC have not reached an agreement on this matter, as previously discussed. Another dilemma is that if other professional health care workers do not realise what core competencies the A&E nurse possesses to manage life-threatening situations, the A&E nurse will not be valued for his/her specialised contribution or be credited for hard work within the emergency care environment. It is therefore of crucial importance to extend the scope of practice of the A&E nurse in order to ensure the professional well-being of this speciality.

Due to the fact that A&E nursing in SA is not represented by a professional organisation dedicated to the speciality by defining standards, providing continuing education and promoting the profession, A&E nursing is not regarded as a clinical speciality in its own right. It is therefore imperative for A&E nurses to start such an organisation to take care of their specific needs.

However, the A&E nurse also has a commitment to accept responsibility and to provide competent, safe and effective management to all patients during

life-threatening situations in accordance with high ethical and professional standards required of him/her.

The A&E nurse will have to stay competent within this clinical speciality field. To measure competency, standards must exist for assessing his/her skills in practice (Proehl 2002: 98). Standards already exist for A&E nurses, but are not used widely throughout the country. A&E nurses will have to assess A&E nurses, using these standards and upgrading them if necessary to ensure competency of the A&E nurse practising within the environment. Continuous education will have to be implemented to ensure high standards of nursing care within this clinical speciality.

The following was stated at the quadrennial meeting of the International Council of Nurses held in Mexico in 1973 concerning what nursing – and therefore including A&E nursing – is all about (Masson 1985: 160):

”Nursing is concerned with caring for people throughout the span of life, and at all points on the continuum between sickness and health. Nursing is a profession in its own right. As such it has the right and responsibility to govern its own practice and professional affairs, and accepts a commitment to society in accordance with professional ethics.”

5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

The researcher believes that further research in the field of A&E nursing is justified. Topics should include:

- Research into the content and structure of the A&E nursing education programme to ensure competence of A&E nurses working within the emergency care environment
- How well are we preparing A&E nurses to be competent practitioners, and who are fit to practise as required from the emergency care environment – measurement of outcome
- A comparative study including A&E nursing in other countries

- A study on perceptions of other professionals of what the field of A&E nursing involves
- A study on what should be included in pre-registration programmes regarding this field and will it be enough?
- A study on the community role of the A&E nurse in the prevention of injuries within the SA context
- Design a scope of practice based on this research and test if it is broad enough
- A qualitative study elaborating on values and attitudes relevant within this context
- A study on how perceptions of A&E nurses can be changed

5.6 LIMITATIONS

Mainly two limitations can be identified with reference to this research. Firstly, the view of other professionals regarding A&E nurses were not included and secondly, this research is context-bound. As the title indicates, it can be generalised for SA, but not in a world-wide context.

5.7 TO CONCLUDE

The research has shown that A&E nursing within the SA context is a relatively new clinical speciality field, originating in Cape Town in the late 1970s. The scope within which these nurses practise is not limited to clinical practice within the hospital environment, but offers an extensive, multifaceted environment, including the pre-hospital environment, education, management and research.

When evaluating the core competencies performed by the A&E nurse within the emergency care environment it is evident that he/she is performing advanced life-support skills when managing life-threatening situations, and plays an important role as part of the multidisciplinary team within this

environment. These nurses should therefore be welcomed and valued by other members of the team.

The researcher envisions that this research will provide substantial proof to influence the future of A&E nurses in SA, that the number of A&E nurses will continue to increase, and that they will attain greater authority within their own speciality. A&E nurses should be respected for their role in the emergency care environment and should feel proud of themselves, and confident about their knowledge, skills, values and attitudes.

"I would rather be ashes than dust!

*I would rather that my spark should burn out in a brilliant
blaze than it should be stifled by dryrot.*

*I would rather be a superb meteor, every atom of me in
magnificent glow, than a sleepy and permanent planet.*

The proper function of man is to live, not to exist.

I shall not waste my days in trying to prolong them.

I shall use my time." -

Jack London (1876 – 1916)