UNIVERSITY OF KWAZULU-NATAL

A DESCRIPTION OF THE FORENSIC NURSING ROLE IN THE EMERGENCY DEPARTMENTS IN DURBAN METRO

NOMUSA N.T. ABDOOL

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BY
NOMUSA N.T. ABDOOL

Dr. PETRA BRYSIEWICZ

SUPERVISOR

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DECLARATION:

I declare that this work being submitted for a Master Curations (Critical Care & Trauma Nursing) at the University of KwaZulu-Natal, Durban's School of Nursing is my own. This thesis has never been submitted for any other purpose before. All references used or quoted have been acknowledged by means of referencing.

Signature: _____ Date: 23/03/2007

Nomusa N. T. Abdool

Supervisor: Dr Petra Brysiewicz

Signature: _____ Date: 29/3/2007

DEDICATION

I dedicate this thesis to my late brother Mr B.P. Shoba who passed away on the 21st of September 2005. You were a father, a brother and a friend to me. I wish you were here to share this special time with me. I will always miss you. May your soul rest in peace.

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I am thankful to the Almighty Creator for granting me the strength to complete this task.

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Finally my warmest thanks to my beloved children Faheemah, Naseer, Sameera and my husband Dawood for their understanding and the sacrifices they had to make towards my success.

ABSTRACT

Aim: The aim of the study was to describe the forensic role behaviour and expectations of the nurses working in the emergency departments.

Design: An exploratory descriptive survey was used, using the quantative approach. The respondents comprised of registered and enrolled nurses who were registered with South African Nursing Council (SANC) and had the minimum of 6 months experience in the emergency department (ED). The emergency departments of two provincial and two private hospitals as well as two comprehensive care clinics were used.

Instrument: A survey was conducted using a questionnaire consisting of forty items. The questionnaire was designed to describe the forensic role behaviour and expectations of nurses working in the ED.

Data analysis: The quantative data was analysed using the Statistical Package for Social Sciences (SPSS) program version 11.5

Findings: The findings revealed that the emergency department (ED) nurses were not certain about their role regarding forensic nursing. Most of the tasks to be performed by the ED nurses were rated as never done or seldom done. The reason was due to lack of training and knowledge in the field of forensic nursing. The ED nurses strongly felt that forensic nursing was very important to their daily activities especially in the emergency departments where they handle the trauma victims and suspects. Recommendations were suggested for the nursing practice, nurse educators and for future research in an attempt to expose the emergency nurses to forensic practice.

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LIST OF ABBREVIATIONS

CCC: Crisis Care Centres

ED : Emergency department

EN : Enrolled nurse

IAFN: International Association of Forensic Nurses

ICU: Intensive care unit

KZN: KwaZulu-Natal

LNC: Legal nurse consultant

NIMSS: National Injury Mortality Surveillance System

RN: Registered nurse

SA: South Africa

SANC: South African Nursing Council

SANE: Sexual assault nursing examiner

SPSS: Statistical Package for Social Sciences

U.S.A.: United States of America

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CHAPTER 1
INTRODUCTION

1.1 Background to the study

Violence and its associated trauma are widely recognised as a critical health problem worldwide (Lynch, 1995). The report by World Health Organisation shows that more than a million people lose their lives annually, and some suffer non-fatal injury due to various types of violence; e.g. self inflicted, interpersonal and collective violence (Krug, Dahlberg, Mercy, Zwi and Lozano, 2002). Violence is among the leading cause of death worldwide for people aged 15-44 years of age, and the cost of violence translates into billions of US dollars in annual health care expenditure worldwide (Krug et al, 2002). Road traffic collisions represent the largest contribution to the problem of injury in the U.S.A. In 1999, 41 000 people died and 3.3 million were injured in the U.S.A from road traffic collisions (Melton, McGwia, James and James, 2003).

In South Africa, the victims of violence and trauma are flooding the health care system. This is made worse by the involvement of vulnerable groups, i.e. women, children and the elderly (Akoojee, 2001). Approximately 70 000 South Africans are killed every year due to trauma. A further 3.5 million seek health care as a result of trauma. Almost half of all deaths due to injury are a result of homicide; due to gunshots or stab wounds. More than 9000 people are killed in road traffic collisions each year, and 33 000 are seriously injured (Peden, 1999). Peden (1999), further states that 39% of those killed were pedestrians and about 80% of trauma victims utilise alcohol and drugs. Rape in South Africa is another problem, and during the first six months of 1998, approximately 23 376 women were sexually assaulted or were exposed to sexual assault. The performance report of the South African Police Service (SAPS) for the financial year 2001/2002, showed a marked decrease and stabilisation in a number of serious crimes, that have been reported (Masuku, 2002). The researcher further reports on S.A.P.S. statistics for the year 2001/2002 as follows: 21 400 cases killed due to trauma and 540 000 cases of rape were reported. The National Injury Mortality Surveillance System

(NIMSS) annual report for the year 2002 reveals that 60% of pedestrians killed in road traffic collisions were under the influence of alcohol. In NIMSS report for 2002, 45.4% of homicide cases were reported and the leading cause of homicide was due to gunshots and sharp force injury, such as stab wounds (Matzopoulos, Seedat, Marais and van Niekerk, 2003).

The victims of violence and its associated trauma enter the emergency departments on a 24 -hour basis. The emergency nurses are exposed to these victims, some of whom are the perpetrators. When a victim arrives in the emergency department saving his/her life is a priority and what may be forgotten is the importance of proper handling of the victim's items that might contain forensic evidence and can be of value later. McCracken (2002), states that crucial evidence is often unwittingly destroyed during these critical moments when patient care supersedes the concern for social justice. Failure to document how the victim presented on arrival may occur (McCracken, 2002). The preservation of forensic evidence as well as documentation of the patient's condition on arrival, including therapeutic interventions and the patient's property is essential to process for use in any subsequent forensic investigation (Saunders, 2000). Lynch (1995), suggests that nurses should be proactive in recognising that any patient admitted to the emergency department with potential liability related injuries; whether victim or victimiser; living or dead, is a clinical forensic patient. Lynch (1995), cited by McPeck (2002), voiced some concern that emergency nurses have long been expected to identify, document and present legal evidence, but they have been expected to do it without any formal forensic training.

South Africa has unenviable rates of violent crime and unacceptably low rates of conviction and prosecution. South African records revealed that 50 000-55 000 rape cases are reported annually but only 7% is convicted (Minyuku, 2006). According to Dada and McQuoid-Mason (2001), what contributes to this is the poor collection of medical evidence by health workers. Dr. Zweli Mkhize, KwaZulu-Natal Minister of Health (at that time), showed his concern in this regard. He appealed to the health care practitioners to co-operate in the process of collecting and preserving medico-legal evidence to ensure conviction of perpetrators (Akoojee, 2001). According to Dada and McQuoid-Mason

(2001), nurses are more readily available than doctors to preserve evidence. They provide services in remote and rural communities and have displayed more empathy towards survivors of abuse than doctors. Dada and McQuoid-Mason (2001) thus stated that nurses can empower the victims of abuse and improve the rate of reporting cases. The authors also stated that steps have been undertaken to have forensic nursing recognised as a speciality by the South African Nursing Council. Dr Zweli Mkhize also recognised the importance of forensic nursing as a means of improving health care delivery and the administration of justice (Dada and McQuoid-Mason, 2001). The forensic physician and clinical forensic nurse are needed to bridge the gap between the criminal justice and health care systems in the management of forensic patients, because they handle the property of and information about the patient that may be useful later in a forensic investigation (Lynch, 1995).

A senior district surgeon, who, with the aid of a United States Forensic Nursing Programme, instituted a Sexual Assault Nursing Examiner (SANE) course, initiated the introduction of forensic nursing into the South African history of nursing. Twenty-four nurses were trained in Kimberley in 2000, and a group of 40 nurses were trained in KwaZulu-Natal in 2001 as a SANE (Duma, 2003). In South Africa, since forensic nursing is still in its infancy stage, the role behaviour and the role expectations of forensic nursing in emergency departments is not clear. Furthermore, nurses have previously been a largely untapped resource in collaborative partnerships between health and justice systems when managing the forensic care component of patients, who are either accused or are the victims of criminal liability related injuries (Saunders, 2000). According to Baxter (2002), without a clearly defined role and set of skills, it is difficult to ascertain the education and training requirements of forensic nursing.

1.2 Problem statement

South Africa's high levels of trauma are related to criminal cases, which require the collection of forensic evidence. The conviction of criminals depends on the proper collection of forensic evidence and failure to follow the correct procedure might result in a criminal being set free. Emergency nurses have not received much training in this area

and specialised skills are needed to both care for the critically ill and to be able to recognise and preserve evidence. Failure to preserve forensic evidence results in a low rate of conviction (Dada and McQuoid-Mason, 2001). The emergency nurse is usually the first person to see the patient; to talk to the family and even the first one to undress the patient and to handle his or her valuables and blood samples. This means that she or he has a major role to play in the gathering and packaging of forensic evidence. It is thus essential to describe how the nurses presently allocated in the emergency departments see their role in the collection and preservation of forensic evidence.

1.3 Purpose of the study

The purpose of the study was to describe the forensic role behaviour and expectations of nurses working in the emergency departments in the Durban Metro area.

1.4. Objectives of the study

The objectives of the study were to:

- Describe the frequency and perceived importance of selected forensic role behaviours performed by emergency nurses.
- Describe the perceived forensic role expectations of the emergency department nurses.

1.5 Significance of the study

The information obtained from this study would identify a crucial need for further education on forensic nursing for nurses working in the emergency departments. It would also help in the planning of such an educational programme, or could highlight the need for developing emergency department protocols for handling the forensic client. No previous studies carried out in South Africa on forensic nursing were identified and this study would then contribute to this limited body of knowledge. This study could also serve to highlight the importance of preserving forensic evidence in the emergency departments.

1.6 Definition of terms

1.6.1 Forensic nursing

Forensic nursing means the application of the nursing process to public or legal proceedings. It is the application of the forensic aspects of health care to the scientific investigation of trauma (Lynch, 1995). In this study forensic nursing relates to the knowledge, skills and practices of collecting and preserving forensic evidence by nurses in the emergency departments. This will include nurses both registered and enrolled with the South African Nursing Council (SANC).

1.6.2 Role

This is "carrying out of the rights and obligations associated with a status" (Hardy and Conway, 1988, 9). In this study, this will be described in relation to the role of the forensic nurse, which includes investigation skills, providing health care and counselling of trauma victims.

1.6.3 Emergency department

This is the department in the institution, which is the first place that victims of trauma in need of emergency treatment present themselves. In this study, emergency departments will refer to departments in institutions such as hospitals and comprehensive care clinics. The institutions involved in this study include Level I hospitals which have specialised facilities to care for the trauma victims, as well as clinics which are Level IV and are capable of stabilising the victims and transferring them to Level I institutions.

CHAPTER 2
LITERATURE REVIEW

2.1 International perspective of trauma

The incidence of trauma in the U.S.A. is a major health and economic issue (Clochesy, Breu, Cardin, Rudy and Whittaker, 1993). Over half of all traumatic incidents involve the use of alcohol, drugs, or other substance abuse and victims can end up with short and long-term disabilities. It is estimated that trauma costs the U.S.A. approximately $158 to $180 billion annually (Clochesy et al, 1993). Domestic violence, defined as a pattern of coercive control consisting of physical, sexual and/ or psychological assault against a former or current intimate partner, is an important public health problem in the U.S.A. One to two million women are injured by their partners annually, and 30% to 50% of all homicides of women are performed by former or current intimate partners (Melnick, Maio, Blow, Hill, Wang, and Farber, 2002).

A study conducted at the Shock Trauma Center (Baltimore City, USA) showed the link between alcohol and injury. As a modern poison, alcohol plays a significant role in the death of many of the 150 000 people fatally injured each year, and among the 70 million individuals in the U.S.A. who sustain non-fatal injuries. Among patients treated for injury in emergency departments, 15% to 25% test positive for alcohol (Soderstrom, Dischinger, Kerns, Kufera, Mitchell and Scalea, 2001). In Switzerland, accidents and the results of violence supersede even the combined mortality from carcinoma and circulatory disorders. Most people lost their life because of injury (Osterwalder, 2002). These are accompanied by considerable loss with regard to medical treatment, loss of work, rehabilitation and training (Osterwalder, 2002).

2.2 National perspective of trauma

People, guns and knives, motor cars and trucks, open fires, unsafe electrical connections and exposed heating elements, household chemicals and medications, are just some of the more frequently encountered objects and features of the environment that interact with

human activities to kill an estimated 70 000 South Africans each year, and lead a further 3.5 million to seek health care of some kind (Peden, 1999). Mortality data is lacking at national level, thus the relative contribution of injuries to the overall burden of disease can only be guessed at. In 1994, injuries were the leading cause of death, and the 1996 Health Department status report projected a steady increase in the incidence of injuries (Peden, 1999). Matzopoulos, Bowman, Seedat and Sukhai (2004), supported Peden (1999), by highlighting that the information regarding the causes of death is missing from the national vital statistics. The reason being is that death due to suicide and other unintentional cause; e.g. falls, fires as well as death due to undetermined causes are not reported by agencies. The information available from the police data system is about murders and the national transport system provides the information on motor vehicle collision deaths (Matzopoulos, Bowman, Seedat and Sukhai, 2004).

The leading causes of non-natural deaths in South Africa are homicide and road traffic collisions. Homicidal deaths have been reported at a rate of 59.5 per 100 000 population in 1998 and there is a sharp increase in homicidal violence (Peden, 1999). According to the author, males predominate over females in almost all age ranges. Trauma kills more people between the ages of 1 and 44 years; thereafter there is a dramatic decline. KwaZulu-Natal and Gauteng have more firearm related homicides; while in the Eastern, Northern, and Western Cape sharp objects, primarily knives, predominate. About 31 people die of firearm wounds every day in South Africa, up to 20% of all firearms related deaths in children and adolescents that are seen in Wigton in Cape Town's state mortuaries were not registered in police homicide statistics (Peden, 1999). Harris, Sukhai and Matzopoulos (2004), believed that the national annual statistics of non-natural deaths has been declining as from 1996. The most common cause of non-natural deaths was violence; i.e. 48% of injury deaths and 30% of non-natural deaths by road traffic collisions. The report compiled by these researchers also indicates that there is still a higher rate of homicide due to firearms in KwaZulu-Natal and Gauteng. It is interesting to note that Cape Town and Gauteng has highest rates for unintentional injuries due to fatal burn injuries (Harris, Sukhai and Matzopolous, 2004).

The second leading cause of non-natural deaths in S.A. is road traffic collisions and on an average day, 30 people are killed. 100 people sustain serious injuries and 250 suffer minor injuries. Before 1990, approximately 45% of road traffic deaths involved pedestrians. More than 4 500 pedestrians are killed and 26 000 are injured annually. However, this rate has declined to 38% in 1998 due to national application of effective preventive efforts to reduce the carnage; i.e. the "Arrive Alive Safety Campaign" launched in 1997 (Peden, 1999). The annual statistics for 2003 showed that 1803 pedestrians were killed, and this is a marked reduction (Harris, Sukhai and Matzopolous, 2004). The statistics of non-natural deaths due to road traffic collisions has declined. The new emerging major problem in S.A is road rage. (Sukhai, Seedat, Jordaan and Noah, 2004).

Alcohol increases the risk of injury and reports have shown this is a national and international problem. Part of the National Injury and Violence Surveillance initiative is to monitor substance abuse among trauma patients in sentinel sites in S.A. Preliminary results from these studies showed that alcohol is mostly abused by injured patients, and 40% abuse illicit drugs such as mandrax or crack/cocaine. These drugs are used either in combination with alcohol or on their own, resulting in interpersonal violence (Peden, 1999). Dawad and Sukhai (2004) compiled the 2003 statistics, which highlighted that in Durban, 2051 of the 3844 cases tested positive for alcohol in the blood concentration test. The national report for 2003 indicated that 61% of the pedestrians tested positive for alcohol in the blood (Harris, Sukhai and Matzopoulos, 2004). The study by Sukhai, Seedat, Jordaan and Noah (2004), revealed that drinking and driving contributes towards road rage, because it involves the driver who is extremely aggressive and capable of assaulting another driver.

Victims of domestic violence are among the most vulnerable members of society and all currently available remedies have proven to be ineffective. In order to protect the vulnerable groups, the government passed the Domestic Violence Act 116 of 1998 in late 1998. This Act recognises that there is a high incidence of domestic violence in S.A. and that it is a serious social evil which can take on many forms (Peden, 1999). No accurate

figures for domestic violence are available due to problems with reporting the incident.

According to Peden (1999), there is much room for improvement and a concerted effort will be needed to decrease the incidence of trauma. Prevention initiatives are aimed at intentional injuries such as domestic violence and gunshot wounds, mainly addressing the root causes of violence in order to control the continuation of violence that would result in the new victims of trauma and perpetrators. The 'Arrive Alive Campaign' is an unintentional injury preventive intervention, mostly utilized during holiday periods (Easter and Christmas) in an attempt to reduce the overall number of annual road traffic collisions. Sukhai, Seedat, Jordaan and Noah (2004), in their study recommended a comprehensive and coordinated approach that will educate the road users about behaviour modification, legal alcohol limits and carrying of illegal firearms.

2.3 An introduction to Forensic Nursing

Forensic nursing represents a new era of nursing practice that is evolving in direct response to the sequel of criminal and interpersonal violence, although it is still at its pioneering stage (Reilly, 2001). Forensic practice is recognised as having a vital role to play in trauma care as violence and its associated trauma are reported to be uncontrollable throughout the world. Forensic nursing is the application of nursing science to public or legal proceedings. This is the application of forensic aspects of health care combined with the bio-psychosocial education of the registered nurse in the scientific investigation and treatment of trauma and/or death of victims of abuse, violence, criminal activity and traumatic accidents (McCracken, 2002). The term "forensic nursing" was officially coined in 1992, during the first national convention for sexual assault nurses that led to the founding of the International Association of Forensic Nurses (IAFN) (Nelson, 1998). Virginia Lynch is the USA's pioneer of forensic nursing. Lynch did not invent it, but she gave it a name long before the IAFN. In 1995, the American Nursing Association recognized it as a specialty (McPeck, 2002).

The theoretical model of forensic nursing evolved from the role of the police surgeon or police medical officer of the United Kingdom and European countries, who is hired by

the police department and is responsible for facilitating the management of the crime victim from the scene of the incident through the legal process. Forensic nursing, a clinical sub specialty, is complementary to clinical forensic medicine and it evolved in response to societies' changing demands (Lynch, 1995). There are a number of specialty areas within forensic nursing. The nurse pathologist or death investigator is involved in the accurate determination of the cause of death for a number of reasons. It may be to exonerate the innocent when foul play is suspected, identify crimes of murder, and collect evidence or to identify public health and work related risks. The sexual assault nurse examiner (SANE) provides a comprehensive and sensitive forensic examination for victims of sexual assault. The legal nurse consultant (LNC) is a registered nurse who provides assistance to the legal system using her/his knowledge and expertise in cases where the law and health issues overlap. Forensic clinical nursing is defined as the "application of clinical nursing practice to trauma survivors or to those whose death is pronounced in the clinical environs, involving identification of unrecognised, unidentified injuries and the proper processing of forensic evidence" (Lynch, 1995, 10).

2.3.1 Forensic evidence and the trauma patient

The emergency nurse is often the first person to talk to the patient; to observe the types of trauma inflicted on a patient, thus playing an important role in the investigation of crime and the legal process in terms of victims of violence; both living and dead. The emergency nurse's ignorance on handling of forensic evidence can result in cases being won or lost. Her responsibilities are developing appropriate forensic protocols in compliance with accreditation standards, and triaging patients at risk for forensic injuries. Any patient with liability related traumatic injuries is considered a clinical forensic patient. A clinical forensic nurse's task is to attend to the patients' immediate health needs. She must approach the situation with an index of suspicion; recognize evidence where it exists; and process forensic evidence for forensic investigation. Documenting, collecting and preserving evidence can be difficult in emergency situations, but it must be done remembering that a patient's life and health is priority (Lynch, 1995). Documentation can be delayed because of an emergency situation but it must be done completely, accurately and be legible. Securing evidence and maintaining the chain of

custody must be carried out; that is the documentation of sequential transfer of evidence from one custodian to another (Lynch, 1995).

In the American Forensic Nurse Course on basic evidence collection held in June 1997, McCracken (2002) emphasized the importance of collecting and preserving physical evidence; for example, hair, fibers from the clothes, chipped paint, blood or semen, because this is factual evidence. According to McCracken (2002), "physical evidence cannot be wrong, cannot perjure itself, cannot be wholly absent, but only its interpretation can err. Only human failure to find it, study and understand it can diminish its value".

2.4. Preservation of evidence

The most common types of evidence are clothing, bullets, bloodstains, hairs, fibers, and small pieces of material such as glass, paint and fragments of metal. Trace and physical evidence are important for the crime investigators to establish the facts of crime. The encountered problem with collected evidence is the failure to properly preserve fragile or perishable evidence. Evidence is collected for cases such as accidents, suspicious deaths or crime related injuries and medico legal cases; i.e. a treatment situation with legal implications (Lynch, 1995).

2.4.1 Processing of clothing

The emergency nurses must be able to recognize and to preserve vital fragments of trace evidence by proper handling of patient's clothing and personal property, because clothing worn at the time of the incident may have trace evidence in linking the victim with the crime scene or assailant. According to Wick (2000), patient's property, that is, all clothing and materials removed from the patient, are packed separately, secured in a property bag and labeled with patient identification stickers. Defects in clothing can be compared to the victim's wounds and it can give insight as to what weapon or instrument was used. Clothing may contain fragments from the assailant or his blood on the victim's clothing and paint chips or broken glass could help to identify the vehicle that struck the victim. Gunshot residues surrounding bullet holes in the clothes can help to determine the range of fire (Lynch, 1995). The condition of the patient's clothing should be recorded

indicating unusual markings and tears or damages. When clothing is cut off the victim during resuscitation, cutting through tears and holes is avoided to preserve evidence. Cross-contamination, particularly of clothing and fluids is avoided. Each item is individually packaged, sealed and labeled (Lynch, 1995; McCracken, 2002). McCracken (2002), also emphasized the importance of wearing gloves all the time when handling any specimens and clothing to avoid cross-contamination, particularly of clothing and fluids. Wet clothes should be dried, and then placed in a paper bag because plastic bags cause accumulation of condensation which promotes the growth of bacteria that will interfere with examination results (Lynch, 1995).

2.4.2 Preservation of foreign bodies

Foreign bodies such as bullets, fragments, pellets and knives should be handled as little as possible. According to McCracken (2002), rubber tipped forceps or latex gloves can be used to remove the bullets thus preventing microscopic secondary marking of the item. McCracken (2002), further states that recovered bullets should not be cleaned. Bullets should be air dried and wrapped in a paper or placed in a plastic container, sealed and labeled. Knives once dried should be placed in a specimen box and sealed (over each end of the box) with labels. No markings should be made on the specimens and soft packaging should be used if the integrity of the specimen is in question.

2.4.3 The chain of custody

This begins with the person who collects the evidence, secures and maintains custody of the evidence until it is handed over to the appropriate person. Relatives should not be given clothes as these should be kept for the police. All items recovered from the patient are specified differently. Specimens of blood/body fluids, recovered bullets and knives are also recorded, and the person who takes over must complete his/her details, rank, date and time and the place of work, i.e. where stationed (Lynch, 1995; McCracken, 2002). Wick (2000), also supports Lynch's (1995), statement by saying that the hospital patient's belongings checklist should have notation on it, indicating that a proper evidence form was used and possessions were given to a police officer. If the police are not able to respond immediately, the hospital security should take the evidence and keep

it under lock and key until the police are able to collect it.

2.4.4 Documentation

Meeting the needs of the victims of trauma and violence may result in a lack of accuracy and poor documentation. Guidelines are essential to ensure that adequate and accurate documentation is done. The emergency nurse has to ensure that notes are complete, accurate and legible. The following should be documented: the condition of the victim on arrival, including patient's appearance, behavior and unusual odors; all therapeutic measures taken and the time they were rendered. The intravenous sites should be marked with a ballpoint pen indicating that this is a treatment site, rather than an original injury to exclude injection performed by the victim or someone else. The mechanism of injury should also be documented as known or suspected; for instance in cases of unconscious victims or victims who are unable to give a history. All body marks should be documented using a schematic drawing of the human body. It is essential to document the exact location of wounds, their shape, size and characteristics of the edges (McCracken, 2002).

The emergency nurse should observe the presence or absence of gunshot residue such as powder, soots or particles (Lynch, 1995). This is a vital clue which may assist in identifying if the victim was shot at a close range or from a greater distance. If gunpowder is found on the victim's clothing, it means that the victim was shot at a close range (Mittleman, Goldberg and Waksman, 1983). With gunshot cases, the emergency nurses have to document the excessive bleeding from the wound as it may wash away any gunshot residue originally present (Doyle, 2001). Bloodstain patterns or bloody fingerprints on the victim's body or article of clothing should be documented. The condition of clothing, stating holes or cuts is also done. McCracken (2002) further emphasized the documentation of administered treatment; the response of the patient to treatment and final disposition including the mode of transportation; either to another unit or discharged from the institution. When the victim is discharged, it is important to obtain the name of the accompanying person as well as the time of transport. Documentation of all items collected, the time of collection and the name of the nurse releasing the item(s)

is done. The recording of the person or the police receiving the item(s) should be according to the institution's protocol. If the items are taken by the hospital security the same method of documentation is used, one person should be responsible for the documentation to ensure continuity (McCracken, 2002).

2.5. Identifying injuries

Nurses should have an accurate knowledge of the types of injuries and be familiar with the appropriate terminology because their charting and documentation of wounds may be used as evidence in court. Their failure has resulted in confusion in the courtroom, weakening the case against the perpetrators or the perpetrator being dismissed (Lynch, 1995). There are a number of different wound patterns. Sharp force injuries include stab wounds and incised wounds, resulting from penetration or cuts that can reflect patterns consistent with the wounding object. Sharp force injuries have clean appearances like stab wounds. Blunt injuries result from assaults, abuse, accidents or resuscitation intervention and examples are lacerations, abrasions, contusions and fractures. Lacerations are blunt force injuries in which the tissue is torn and they have rough edges. Abrasions are scraping injuries and friction burns and they may indicate the weapons direction of force, especially in case of impact impression. Contusions (bruises) involve the escape of blood into the surrounding tissues and they are described according to colour and shape. Contusions may not be visible at the skin surface immediately after injury but after three to ten days. Dicing injuries are small and numerous, resulting from motor vehicle collisions. Multiple lacerations are caused by contact with shattering glass. Bite mark injuries are patterned injury most frequently unrecognized or unidentified as evidence by nurses when assessing the patient. Human bites are often associated with sexual assault. The human bite marks are shallow and follow the curve of human jaws, whereas animal bites are more punctuate in appearance following the particular age of the animal involved. Patterned injuries reflect the identity of the wounding object or provide information about the nature of the used weapon. Wounds found on the hands, arms and maybe on any part of the body are associated with trauma inflicted by others. Wounds due to self-inflicted trauma are described as hesitation wounds because they are superficial and can be observed as hesitation marks, which appear as straight wounds on

the wrist, elbow or neck. Fast force injuries are inflicted by firearms and nurses need to be knowledgeable of the mechanics of wounds caused by different types of guns. There are three characteristics of gunshot injuries that is, the entrance wound, the projectile track which refers to the internal injuries and the exit wound (Lynch, 1995).

2.6 Death in the emergency department

Death in the emergency department can be sudden and unexpected. "Maintaining an index of suspicion is essential when considering criminal activity as a cause of sudden and unexpected death" (Lynch, 1995, 8). Preservation of forensic evidence is important to aid in medico legal investigation. If death occurs in the emergency department, the emergency nurses are expected to document any activity initiated on arrival of the victim until the victim's demise (Lynch, 1995). The equipment used to resuscitate the victim is retained. Mittleman, Goldberg and Waksman (1983), state that the insertion of and removal of the intravenous needle leaves a puncture mark that may be mistaken with drugs later on. When the victim dies while in the ED it is crucial that the emergency nurses are aware that the body is taken to the mortuary as is; that is with the endotracheal tube in situ, intravascular lines are shortened as removal may be interpreted as malpractice and cover up. The hands of the trauma victim may contain valuable evidence, thus the victim's hands should not be washed. Evidence such as gunpowder can be examined in the gunshot wounds and hands of the suicidal victim. In cases of sexual assault, scraping under the victim's fingernail can be done to detect the tissue from the assailant. Preservation of evidence on the victim's hands is achieved by placing a paper bag over each hand then secured at the wrist with a band of tape (Neff and Kidd, 1993).

2.7 Extended roles of forensic nursing

The extended role of forensic nursing involves new responsibilities with regard to crisis intervention and grief counselling. Forensic nurses have to collect forensic evidence and must be able to use the equipment and supplies that are available in the emergency department or in crisis care centres. The forensic nurse has to document in detail the examinations carried out in cases of sexual assault, battering and abuse (Lynch, 1995).

Crisis intervention ensures that immediate crisis intervention is provided for all victims of violence and abuse and their families. At an international level, follow up counselling is done at community services (Pezzano, 2000). According to Akoojee (2001), trauma cases that are attended at CCC are referred for trauma counselling and support; either to the hospital social worker, psychologist, and psychiatrist or even to a NGO support group.

Clements (2002) describes grief counselling as the other role of forensic nursing. Clements (2002, 1), states that "although most emergency nurses are aware of the initial shock, demand and anger that occur with various forms of death that occur in the ED the sudden and violent nature of murder can leave surviving family members with an immense burden of unresolved issues". The emergency nurses should have an understanding of medico legal procedures in the ED. This would assist the ED nurses in providing a platform for educating surviving family members toward promoting the beginning stages of adaptive grief and bereavement in the chaotic trauma of murder. The emergency nurse has a major role to play with regard to the clothing and viewing of the body by the family. She has to explain that clothing cannot be handed over to them as well as to explain why the resuscitation equipment used is left in situ, such as endotracheal tubes and intravenous cannula. These are both considered potential evidence in an active criminal investigation. The importance of privacy is emphasised when breaking the news to the family. The room to be used should be conducive in a manner that will allow the family to express their emotions and disbelief in privacy. The telephone should be available in case the family wants to contact relatives rather than making them use the payphone in the ED. The religious and cultural aspects of death are the needs that the family may require to attend to while in the ED, thus the family should be given time to meet these needs (Clements, 2002).

2. 8 Focus on forensic nursing in South Africa

The need for forensic nurses in South Africa is now realized because the conviction rate in the criminal courts is very low (Dada and McQuoid-Mason, 2001). Some of the reasons for this are the low standards of forensic examinations, unsatisfactory testimonies by health personnel and poor training of justice personnel, such as untrained and

inexperienced police officers and prosecutors. In the health sector, the poor collection of medical evidence by health workers is a contributing factor. This is due to the shortage of doctors and that very few doctors have clinical forensic experience. The training and deployment of forensic nurses may assist in alleviating the situation (Dada and McQuoid-Mason, 2001). The KwaZulu-Natal (KZN) Department of Health is in the process of establishing Crisis Care Centres (CCC) at more than 40 provincial hospitals throughout KwaZulu-Natal. This is to provide medical care and support for survivors of violence as well as to take responsibility for the collection and preservation of medical evidence (Akoojee, 2001). Goodenough (2001), confirmed that the training of 22 nurses from public hospitals across the region of KwaZulu-Natal was initiated by the internationally recognized founder of forensic nursing V. Lynch of the U.S.A. A ceremony to present these 22 nurses with certificates after completion of the first part of the forensic nurse examiner training was used as an opportunity by Dr Zweli Mkhize; the Minister of Health in KwaZulu-Natal; to officially launch 40 Siyanakekela Crisis Care Centres for survivors of violence, abuse and rape. The CCC was established at public hospitals throughout KwaZulu-Natal (Goodenogh, 2001). There is no literature that indicates continuity in training of forensic nurses. Minister of Health Dr. Manto Tshabalala-Msimang stated in her strategic plan for the years 2004-2009, that training of forensic nurses is essential, to enabled them to support survivors of violence, including collection of forensic evidence (Policy document, 2004).

2.9 Conceptual framework

The conceptual framework used in this study is Lynch's (1990), Model of Symbolic Interaction for the Development of the Forensic Nursing Role. The Lynch (1990), study used the symbolic interaction theory by George Herbert Mead (Hardy and Conway, 1988). George Herbert Mead described the symbolic interaction theory as the theory that is relevant to the applied health sciences. Symbolic interaction admits society and its institutions as a framework within which roles are explicated (Hardy and Conway, 1988). Mead cited in Hardy and Conway (1988), further describes the interactionist as an individual whose interpretation of human behavior is based upon acts and symbols of those they are interacting with. The symbolic interaction theory can thus be used for the

development of the forensic nursing role. According to Hardy and Conway (1988,17), "Role theory represents a collection of concepts and a variety of hypothetical formulations that predict how actors will perform in a given role, or under what circumstances certain types of behaviors can be expected."

The Symbolic Interaction Model for the Development of the Forensic Nursing role has three main components which embrace the outer triangle that is, fields of expertise, the societal impact, and the health care system. Lynch (1990), explains the fields of expertise as the knowledge base of interrelated disciplines that is nursing science, forensic science and criminal justice. The role behaviors are connected through the sociological and criminological theory with the societal impact. The societal impact is comprised of human behavior which is mainly based on sociological and psychological issues The Symbolic Interaction Model for the Development of the Forensic Nursing role has three main components which embrace the outer triangle that is, fields of expertise, the societal impact, and the health care system. Lynch (1990) explains the fields of expertise as the knowledge base of interrelated disciplines that is nursing science, forensic science and criminal justice. The role behaviors are connected through the sociological and criminological theory with the societal impact. The societal impact is comprised of human behavior which is mainly based on sociological and psychological issues. Social sanctions have legal and institutional sanctions and processes. Crime and violence relate to both recognized and hidden crime and violence. The role expectations are brought by social, cultural and political factors with a role of systems. Lynch (1990), further describes the health care system as the emergency department with a system of roles related to the trauma victim and immediate relatives and forensic nursing Crime and violence relate to both recognized and hidden crime and violence. The role expectations are brought by social, cultural and political factors with a role of systems. Lynch (1990) further describes the health care system as the emergency department with a system of roles related to the trauma victim and immediate relatives and forensic nursing. The health care institution comprises of both individual and institutional roles. In a health care system, the involved education is practical and theoretical, which brings role behavior and role clarification together. See Figure 2.1 below for the Symbolic Interaction Model

for Development of Forensic Nursing Role.

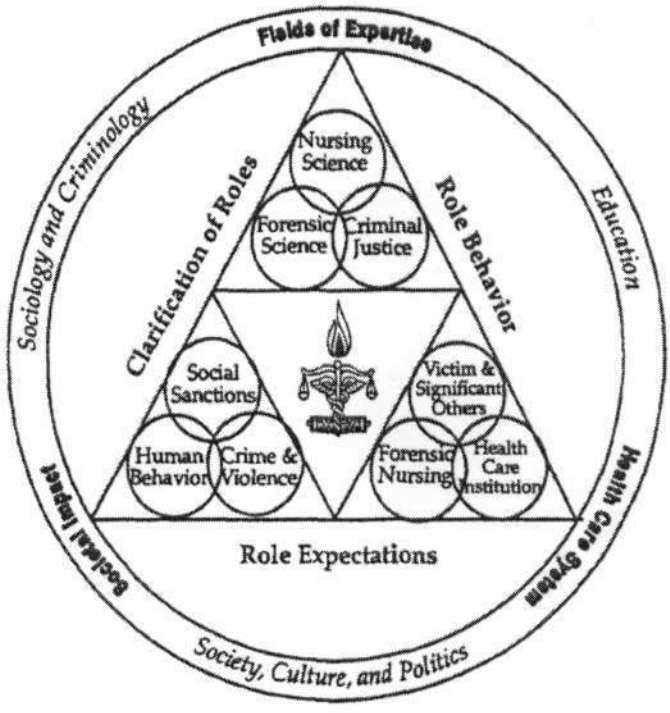

Fig 2.1 Symbolic Interaction Model for Development of Forensic Nursing Role (Lynch, 1990).

The conceptual framework embraces multiple disciplines. In the model, other concepts are woven such as sociology (social impact), criminology (crime, violence, criminal justice and social sanctions), criminal investigation (forensic science) and education (nursing, medico legal and staff specialization (Lynch, 1990). The cyclic nature of the model provides meaning to continuance, perpetuation and balance. The interlocking structures are omni directional. "The outer circle is framing and encompassing these components as symbolic of the environment underscoring the interaction of society, education and systems" (Lynch, 1990, 46).

The model at the centre has an internal triangle with the symbol of forensic nursing

displayed. The symbol has the flame of nursing. The flame is interpreted as a challenge that forensic nurses need to develop and expand into new roles ensuring the importance of the health care system interacting with other social systems. The symbolic interaction theory shows that the success of the forensic nurse lies on her/his ability in interacting with other medical and scientific professionals and the victim of crime and violence. It also assists a forensic nurse to achieve a dynamic balance needed for her/his role.

The model further describes the concepts of person, health, nursing and environment. These were selected to represent an overriding structure in regard to the role of forensic nursing.

Person: In this model, a person refers to the victim of violence and the surviving members of the family. The interaction of human behavior and human social activity determine the role of the victim. The role of the perpetrator determines the application of forensic practice to nursing (Lynch, 1990). Forensic nursing as a discipline brings the gift of communication and compassion to the science by providing care to the victims and their families and offer grief counseling on the spot.

Health: In this model health refers to the health care institutions and nursing science. According to WHO, "health is a physical, mental, social being and not merely absence of a disease or infirmity" (Craven and Hirnle, 2003), but because of crime and violence, the health of an individual or victim is affected and the victim attends the health care institution for treatment. There is violation of the human spirit for the victim and the family. It is the role of the forensic nurse to meet their emotional and spiritual needs. Thus this challenges the role of the forensic nurse for development since the health care institution is recognized as a primary source of physical and emotional stability to trauma patients.

Nursing: In this model nursing refers to nursing science and forensic nursing. The introduction of a forensic nursing role is taken as a challenge that will empower the health care practitioner and change their roles. With transformation, nurses are expected to gain new knowledge that will enable them to reach out to other scientific based disciplines. The forensic nurse is considered an integral member of the multidisciplinary team that consists of health care professionals, forensic scientists as well as the law

enforcement officers. The forensic nurse's role allows her to interact with other co.-professionals, and to interact with the victims of trauma in a holistic manner/ approach. The new demands and expectations produce the new clinical role behavior of the forensic nurse that will assist in the development of new and valid ideas, which will contribute to safety and effective patient care (Lynch, 1990).

Environment: In this model, environment refers to the interaction of human experience with the societal impact and health care systems. The researcher further states that the practice of forensic nursing allows the interaction between the health care system and the social context which is external to the health care system. External social context refers to sociology and criminology, social, cultural and political factors. Lynch (1990), further elaborates that the social climate determines the role expectations that are unique to the forensic application to nursing. The environment develops features that are relevant to guide the appropriate role behavior to the treatment of trauma. The researcher also highlights the anticipated conflict from the forensic nurse's practice; such as the forensic nurse's intervention to save life and protect the rights of the victim and his/her family; while also being expected to ensure that forensic evidence is preserved. The goal of symbolic interaction reinforces the need for social order and inter-disciplinary coordination in the health care delivery.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Research design

An exploratory descriptive survey was used to identify the emergency nurses' role behaviours and expectations while caring for the forensic trauma victims. Burns and Grove (1997, 30), defined descriptive studies as "designed to gain more information about characteristics within a particular field of study", to provide a picture of a situation as it naturally happens. The questionnaire used in this study also included four open ended questions that provided some qualitative data. According to Burns and Grove (1997, 37), qualitative data are "in the form of words and are analysed in terms of individual responses or in terms descriptive summaries or both".

3.2 Population and sampling

A population is the entire set of individuals or elements who meet the sampling criteria for inclusion in a study, sometimes referred to as a target population (Burns and Grove, 1997). The target population of the study was the emergency nurses working in the emergency departments in Durban Metro in hospitals and clinics. This includes two categories of nurses namely; registered and enrolled nurses with the South African Nursing Council.

Cluster sampling was used to select the setting. Cluster sampling involves the development of a sampling frame, which includes a list of all the institutions that could be used in the study (Burns and Grove, 1997). Cluster sampling is the random selection of people or events in which the researcher pre-specifies characteristics of the sample to increase representativeness (Denscombe, 1998). By using this type of sampling, the researcher is able to study what she wishes because it is a naturally occurring cluster (Denscombe, 1998). The names of the 13 institutions with emergency departments within the Durban Metro area were identified. These were 6 provincial hospitals; 4 private hospitals; and 3 comprehensive care clinics. Six of these institutions were identified to be included in the study. These 6 institutions were selected because 4 of them are large institutions with Level I emergency departments that receive transfer cases from other smaller institutions. The 2 comprehensive care clinics have Level IV emergency departments, and these were chosen as the victims of trauma often present here first and are stabilised and transferred. The total number of emergency nurses allocated in

these 13 institutions' emergency departments was 311 nurses; including day and night duty staff. The 6 institutions chosen were contacted to obtain the staff establishment for day and night duty nurses allocated in the emergency departments. The proposed size of the entire population was 140, if they met the inclusion criteria.

A sample is a subset of a population selected to participate in a research study (Polit and Hungler, 1993). Purposive sampling was used in the study. According to Polit and Hungler (1993), purposive sampling is the selection of the participants as judged by the researcher to have the necessary knowledge and experience to contribute meaningful data to the study. The researcher targeted the registered and enrolled nurses with SANC who met the inclusion criteria. The inclusion criteria for this study were nurses:

1. Enrolled or registered with the SANC
2. Who were presently allocated to work in the emergency departments in Durban Metro area (see definition of terms).
3. And had the minimum of 6 months experience in working in the emergency department as this would have allowed sufficient exposure to the clinical forensic patients.

3.3 Research setting

The researcher chose the emergency departments of four hospitals and two comprehensive care clinics in the Durban Metro area. The four hospitals were two provincial and two private institutions. The reason for choosing these institutions was that they are the only hospitals in the Durban Metro categorised as Level I emergency departments as they have the necessary facilities to care for severely injured trauma victims. These hospitals also receive trauma victims who have been transferred from smaller institutions. The two comprehensive care clinics were chosen because these clinics are categorised as Level IV. They receive a large number of trauma victims who present themselves first to the clinics. The clinics stabilise the victims and then refer them to the one of the four Level I hospitals that have the resources to deal with them.

3.4 Research questionnaire

The research tool used in this research was developed by Lynch (1990), and used amongst emergency nurses (registered nurses) in the U.S.A. Permission to use the questionnaire was granted by the author. Some changes in the questionnaire were made to suit S.A. nursing

practice; that is the roles/duties that are within the nurses' scope of practice in S.A. The changes made to the tool were as follows. The demographic data was changed to suit the S.A. nursing practise. Other questions were left out because they related to the role of the nurse pathologist/death investigator nurse and the legal nurse consultant. There is no literature in S.A. that covers forensic nursing with regard to forensic dentistry (odontology). The cases that are investigated by odontologists include examination of the human remains; reporting on dental and cranial features mainly for missing people. The odontologist also does bite mark analysis to determine the presence and extent of dental injuries (Warren, 2002). Questions regarding the odontologists were removed from the tool.

The tool requested demographic data in Section A and Section B from question 1 through to 36 described the emergency nurses' practice in relation to the frequency of performance and the level of importance of the forensic nurse's role. A. 5 point Likert scale was used to enable the respondents to score their responses. Burns and Grove (1987, 316), describe the Likert scale as "a scale designed to determine the opinion or attitude of a subject; it contains a number of declarative statements with a scale after each statement". The scale had five categories from which the respondent could select. The rating of frequency of performance was on the left hand side of the questionnaire and rating was as follows (1) never, (2) seldom, (3) often, (4) almost always and (5) always. The rating of level of importance was on the right hand side and rating was as follows (1) very unimportant, (2) somewhat unimportant, (3) neutral/no opinion, (4) somewhat important and (5) very important. Section C had open ended questions for the respondents to comment on.

3.5 Data collection

Each institutional management was approached to obtain permission to carry out the research project. Thereafter, the emergency departments' unit managers were approached and the researcher explained the study to be conducted. The researcher was supposed to negotiate a suitable time to meet with the emergency department nurses, but because most of the units' managers were accommodating, the researcher was given the time to explain the purpose and significance of the research to the respondents and asked them to complete the questionnaire on her first visit. The voluntary nature of participation in the study was highlighted and the researcher discussed the maintenance of confidentiality and the right to withdraw from the study at any time. The questionnaires were issued to the staff on duty, who fulfilled the inclusion criteria and more questionnaires were left with the unit manager to hand out to the other staff

members. The unit managers kept the completed questionnaires under lock and key. The respondents were given one week to complete or respond to the questionnaire and to hand it to the unit managers for safe keeping. The researcher made courtesy calls telephonically, to check and to remind unit managers to remind their staff members and to ensure if it was conducive to collect the completed questionnaires. Handing back a completed questionnaire was seen as consenting to participate in the study.

3.6 Reliability and validity

The reliability of this tool had been previously established by the author (Lynch, 1990), using Cronbach's alpha. Lynch (1990), reported Cronbach's alpha score as follows: 0.90 for the frequency scale and 0.92 for the importance scale. Reliability represents the consistency of measure obtained. Reliability testing is considered a measure of the amount of random error in the measurement technique. It is concerned with such characteristics as dependability, consistency, accuracy and comparability (Burns and Groves, 1997).

The assessment of the stability of the tool was done during a pilot study using the procedure referred to as test-retest method to assess the feasibility of the tool for S.A. forensic practice. Burns and Groves (1997), defined test-retest method as means of determining the stability or consistency of a measured technique by correlating the scores obtained from the repeated measures. According to Polit and Hungler (1993, 40), a pilot study "is a small scale version, or a trial run of the major study. It is done to obtain information for improving the project or for assessing its feasibility". The same questionnaire was administered to the same sample of 5 emergency nurses that were chosen from the emergency department of a non-participating institution to complete the questionnaires on two separate occasions at an interval of one week. The scores obtained were compared to find out if the tool was understandable and if necessary, what changes were required. The results of the pilot study were compiled, and few changes were done to the tool to promote understanding. Most of the emergency nurses could not understand the term 'pathologist' thus it was described in brackets as an autopsy doctor. The numerical scale was written on top of each and every page of the questionnaires, and the respondents were prompted to detail their answers in detail when responding to the open-ended questions.

The validity of an instrument is a determination of the extent to which the instrument actually reflects the abstract construct being examined (Burns and Groves, 1997). Content validity was

done. According to Polit and Hungler (1993), content validity refers to the degree to which the items in an instrument adequately represent the universe of the content. See Table 3.1 below. The proposal was presented to the Research Committee at the School of Nursing at the University of KwaZulu-Natal, to the research experts and clinical specialists who then looked at the content and the research tool to access its validity before it was used.

Table 3.1 Table for content validity

Objectives	Questionnaire items
Importance of selected forensic role behaviours performed by emergency nurses	2,3,4,6,7,9,10,12, 18,23,24,25
Perceived forensic role expectations of the emergency nurses	1,5,8,11,13,14,15,16,17,19,20,21, 22,26,27,28,29,30,31,32,33,34, 35

3.7 Data analysis

Data analysis is conducted to reduce, organise and give meaning to the data (Burns and Grove, 1997). The quantative data was analysed using the SPSS (Statistical Package for Social Sciences) version 11.5. The SPSS is a computer package for analysing quantitative data. It uses statistics that is the science of compiling facts or data of potentially numerical nature to reveal important information about phenomena. The SPSS statistical description is employed to generalise from the sample statistics to population parameters and to clarify comparisons in a set of data. Frequency distribution and percentages was used for the analysis of the study. The qualitative data obtained from the four open ended questions were manually analysed. The researcher read through the responses and attempted to identify categories which emerged from the data.

3.8 Ethical consideration

Ethical clearance was obtained from the University of KwaZulu-Natal. Permission to conduct the study was obtained from the KwaZulu-Natal Department of Health, in order to access the provincial hospitals and the clinics. Permission was obtained from the board of management of the private hospitals. The selection of the respondents was done strictly on a voluntary basis. Each questionnaire had an introductory letter, which explained the purpose of the research to the respondents. The letter also assured the respondents that confidentiality and anonymity

were maintained throughout the research study, and the respondents were requested not to provide their names, so that data could not be traced back to them. The respondents were free to withdraw or to discontinue answering the questionnaires at any point. The researcher's contact details and researcher supervisor's contact details were recorded in the covering letter, in case the respondents had questions to ask or wanted to confirm anything about the research. The researcher kept the completed questionnaires in a secure place and only the researcher and her supervisor had access to them.

CHAPTER FOUR
RESULTS AND DISCUSSION

4.1 Introduction

The questionnaires were coded and data from the questionnaires were entered and analysed using the SPSS program (Statistical Package for Social Sciences) windows version 11.5. The proposed sample size of 140 was not reached, due to circumstances that were beyond the researcher's control. The researcher encountered problems with a reduced number of staff, because many of the nurses had resigned or rotated to other departments and were not replaced. The researcher did not receive a response to the request for permission to collect data from one of the provincial institutions (hospital) following written letters as well as subsequent personal visits to the institution from July 2004 to November 2004. Thus permission to use this facility was not obtained. The researcher handed out 100 questionnaires to the remaining 5 institutions involved in the study. Only 77 were completed and returned, thus the response rate was 77%. Although the anticipated sample size was not reached, the sample of 77 was considered adequate to obtain the required descriptive statistics. The questionnaire was divided into 3 sections. Section A dealt with the demographic data; section B dealt with the forensic role behaviour and forensic role expectations. Section C had open -ended questions.

4.2 Demographic data

The first section on the questionnaire dealt with demographic data detailing age, gender, professional category, years of experience in an emergency department and working place. Table 4.1 shows the distribution of age, gender, professional category and months of experience.

4.2.1 Age

The respondents were asked to indicate which age range they belonged to on the questionnaire. The majority of the respondents, 50.6% (n=39), were aged between 31-40 years, the respondents in 21-30 years category, were 28.6% (n=22). 10.4% (n=8), were between 41-50 years of age and the above 50 years category accounted for 10.4% (n=8),

of the respondents.

Table 4.1 Distribution of age, gender, category and months of experience (n=77)

Age	Total/ %	Gender	Total/ %	Category	Total/ %	Months of exp.	Total/ %
21-30	22/ 28.6%	Males	12/ 15.6%	RN	48/ 62.3%	6-12	16/ 20.8%
31-40	39/ 50.6%	Females	64/ 83.1%	EN	29/ 37.7%	13-24	11/ 14.3%
41-50	8/ 10.4%					Above 24	49/ 63.6%
Above 50	8/ 10.4%						
No response	0	**No response**	1/ 1.3%	**No response**	0	**No response**	1/ 1.3%

4.2.2 Gender

The results of the study revealed that 83.1% (n=64), of the respondents were females and 15.6% (n=12), were males. 1.3% (n=1), respondent did not answer this question.

4.2.3 Professional category

Professional category distribution showed that 62.3% (n=48), of the respondents were registered nurses (RN) and 37.7% (n=29), were enrolled nurses (EN).

4.2.4 Experience in the ED

The majority of the respondents 63.6% (n=49), had more than 24 months of working experience in the ED and 20.8 % (n=16), had 6-12 months experience. A small percentage of the respondents14.3% (n=11), had between 13-24 months experience and 1.3% (n=1), of the respondents did not answer this question.

4.2.5 Specialised training and workplace

The respondents were asked to identify if they had any specialised training and to indicate where they were presently working, and this is illustrated in Table 4.2. In the comprehensive clinic ED, 1.3% (n=1), of the respondents were trauma trained. 26.0% (n=20), of the respondents had trauma experience.1.3% (n=1), of the respondents were

theatre trained. There were no ICU trained nurses in the comprehensive clinic. There were 2.6% (n=2), forensic trained nurses, and 3.9% (n=3), of the respondents indicated other, but no details were provided. In the private ED, 9.1% (n=7), of the respondents were trauma trained, 27.3% (n=21), of the respondents had trauma experience. There was 1.3% (n=1), theatre trained nurse and 1.3% (n=1), of the respondents were ICU trained. There was no respondent trained in forensic nursing, and 2.6% (n=2), of the respondents indicated other. In the provincial ED, 5.2% (n=4), of the respondents were trauma trained, and 16.9% (n=13), of the respondents had trauma experience. No respondents indicated to be theatre, ICU and forensic trained nurses, and 1.3% (n=1), of the respondents indicated other.

Table 4.2 Specialised training and present workplace (n=77)

Specialised training	Institution			Total
	Comprehensive Clinic ED	Private ED	Provincial ED	
Trauma trained	1/1.3%	7/9.1%	4/5.2%	12/15.6%
Trauma experience	20/26.0%	21/27.3%	13/16.9%	54/70.1%
Theatre trained	1/1.3%	1/1.3%	0/0%	2/2.6%
ICU trained	0/0%	1/1.3%	0/0%	1/1.3%
Forensic trained	2/2.6%	0/0%	0/0%	2/2.6%
Other	3/3.9%	2/2.6%	1/1.3%	6/7.8%
Total	27/35.1%	32/41.6%	18/23.4%	77/100%

The results revealed that the majority 70.1% (n=54), of the respondents are trauma experienced across all the institutions and 15.6% (n=12), are trauma trained. The forensic trained nurses 2.6% (n=2), were only identified in the clinic. The findings show that most of the duties in the ED are done by untrained people, who have limited skills on how to deal with a trauma victim and even less chance to have knowledge on how to preserve forensic evidence. Forensic nursing training had been commenced in other parts of South Africa, but these nurses are mainly found in the clinics because of the development of Crisis Care Centres (CCC) where the sexual assault victims and suspects are attended. Mataboge (2004), indicated that more nurses need to be included in medico-legal training as this will assist the police in securing convictions in cases of sexual assault. The Gauteng department of health is prioritising forensic training to improve the rate of conviction for perpetrators of sexual assault (Mataboge, 2004). Reilley (2001), stated in her curriculum proposal for Master's of Science in Forensic Nursing that nurses who are trained as Forensic nurse specialists or as sexual assault nurse examiner (SANE), would be of great value because they would establish a caring relationship with the victims in the ED. The distribution shows that very few of the ED nurses have theatre or ICU training.

4.3 Forensic role behaviour and forensic role expectations

Items were analysed according to the frequency and the importance of the task performed as rated by the ED nurses themselves. This consisted of 36 questions dealing with ED nurses' practice in relation to the frequency of performance and level of importance of the forensic nurses' role. A 5 point Likert scale was used for the ED nurses to mark their response. Frequency rating was on the left- hand side of the questionnaire and rated as follows: (1) never, (2) seldom, (3) often, (4) almost always, and (5) always. The importance rating was on the right hand side of the questionnaire and rated as follows: (1) very unimportant, (2) somewhat unimportant, (3) neutral/no opinion, (4) somewhat important and (5) very important. No response referred to the respondents who did not answer the question.

4.3.1 Notification about "dead on arrival"

When analysing the frequency that the ED nurse correctly notifies the person in the legal system (pathologist i.e. autopsy doctor), upon receipt of a 'dead on arrival' case in which the death was unattended. The majority 27.3% (n=21), of the ED nurses said that they seldom performed this task, 23.4% (n=18), of the respondents indicated to have always notified the medical doctor, 20.8% (n=16), indicated often, 16.9% (n=13), rated almost always and 11.7 % (n=9), of the respondents never did. Table 4.3 shows the results of the frequency of performance.

Table 4.3 Frequency rate for notification about 'dead on arrival' (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse correctly notifies the person in the legal system (pathologist i.e. autopsy dr.) upon receipt of a 'dead on arrival' case in which the death was unattended.	9 11.7%	21 27.3%	16 20.8%	13 16.9%	18 23.4%	77 100%

When considering the importance of carrying out this task, 62.3% (n=48), of the ED nurses rated this function as very important to their role in the ED unit. 22.1% (n=17), rated this function as somewhat important, 13.0% (n=10), indicated neutral/no opinion and 2.6% (n=2), indicated this task very unimportant. There was no response for rating of somewhat unimportant. See Table 4.4 for the level of importance.

Table 4.4 Importance rate for notification of 'dead on arrival' (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse correctly notifies the person in the legal system (pathologist i.e. autopsy dr.) upon receipt of a 'dead on arrival' case in which the death was unattended	2 2.6%	0 0%	10 13.0%	17 22.1%	48 62.3%	77 100%

The majority of the respondents indicated that it was very important to notify the correct person in the legal system following a 'dead on arrival case'; however the majority of the respondents seldom did this possibly due to lack of knowledge and training. Warren (2002) emphasised the importance of examining the deceased in order to establish the cause of death e.g. non-natural causes trauma or natural causes e.g. hypertension or acute myocardial infarction. Non-natural deaths must have a forensic autopsy done to determine the cause of death, to collect evidence from the body and to document findings which can clarify the time and circumstances of death (Hanzlick, 2001).

4.3.2 Differentiation of wound types

When analysing the frequency that the ED nurse is exposed to differentiating between an animal and a human bite in a trauma victim presenting to the ED, the following results were found. 35.1 % (n=27), of the ED nurses said that they seldom performed this task. 27.3 % (n=21), often performed the task, and 19.5 % (n=15), always performed the task. 9.1 % (n=7), of the respondents said they never performed this task and 9.1% (n=7), of the ED nurses said they almost always performed this task.

The analysed data for frequency rate revealed that most of the ED nurses 42.9% (n=33), had seldom performed the task of differentiating between a gunshot wound fired at a close range versus a greater distance, 19.5% (n=15), of the nurses indicated they almost always performing the task. 16.9% (n=13), indicated often performing the task. 11.7 % (n=9), of the nurses indicated never and 9.1% (n=7), of the ED nurses always performed the task.

When analysing the frequency that the ED nurse is capable of recognising self-inflicted trauma versus that inflicted by others; 46.8% (n=36), of the respondents seldom performed the task, 22.1 % (n=17), of the ED nurses indicated often, 14.3% (n=11), indicated almost always, with 11.7% (n=9), of the respondents who had never performed the task, and 5.2% (n=4), indicated always. Table 4.5 shows the frequency rate for the differentiation of wound types.

Table 4.5 Frequency rate for differentiation of wound types (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
'The ED nurse differentiates an animal bite wound from a human bite wound and is able to interpret medical and legal implications'	7 9.1%	27 35.1%	21 27.3%	7 9.1%	15 19.5%	77 100%
The ED nurse differentiates between a gunshot wound fired at a close range versus such a wound fired from a greater distance	9 11.7%	33 42.9%	13 16.9%	15 19.5%	7 9.1%	77 100%
The ED nurse recognises self-inflicted trauma versus that inflicted by others.	9 11.7%	36 46.8%	17 22.1%	11 14.3%	4 5.2%	77 100%

When considering the importance of carrying out this task 64.9% (n=50), of the ED nurses indicated that it is a very important function to differentiate an animal wound from the human bite. The respondents 26.0 % (n=20), indicated the task as somewhat important; 3.9 % (n=3), found it very unimportant; 2.6 % (n=2), indicated the function somewhat unimportant; and 2.6% (n=2), said they have no opinion/neutral. When considering the importance of differentiating a gunshot entry wound fired at close range versus the one fired at a distance, most of the respondents 76.6% (n=59), of the ED nurses recognised the importance of performing this task as and 19.5% (n=15), of the nurses indicated the role somewhat important and 2.6% (n=2), of the nurses stated no opinion/neutral. 1.3% (n=1), of the respondents did not indicate the importance of this task. When considering the importance of recognising self-inflicted trauma versus that inflicted by others, most of the respondents 74% (n=57), indicated this function as very important to their role. 16.9% (n=13), of the respondents indicated the task somewhat important. Less responses 7.8% (n=6), were neutral and 1.3% (n=1), indicated the task somewhat unimportant. See Table 4.6 for the level of importance.

Table 4.6 Importance rate for differentiation of wound types (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/ no opinion	Somewhat important	Very important	No response	Total
'The ED nurse differentiates an animal bite wound from a human bite wound and is able to interpret medical and legal implications'	3 3.9%	2 2.6%	2 2.6%	20 26.0%	50 64.9%	0 0%	77 100%
The ED nurse differentiates between a gunshot wound fired at a close range versus such a wound fired from a greater distance	0 0%	0 0%	2 2.6%	15 19.5%	59 76.6%	1 1.3%	76 98.7 %
The ED nurse recognises self-inflicted trauma versus that inflicted by others.	0 0%	1 1.3%	6 7.8%	13 16.9%	57 74.0%	0 0%	77 100%

The importance of these tasks is indicated by the majority of the ED nurses; although the findings for frequency of performance indicated these tasks as never or seldom done. It is of crucial importance that the ED nurse is competent in performing these functions. Lynch (1995), indicated that human bite wounds might be associated with abuse e.g. sexual assault; whereas animal bite marks are accidental or can be due to negligence, or an animal trained to cause an injury e.g. police dogs. This can result in civil or criminal liability. McCracken (2002), and Lynch (1995), emphasise that bite marks can be used to recover DNA samples. Wick (2000) states the importance of gunpowder residues on the victim or suspect as it can be associated with self-defence or self-inflicted injury. Therefore, establishing the distance from which the weapon was fired is of great importance. For example, if a shot is fired at close range to the victim a heavy concentration of a smoke-like substance surrounds the entrance wound, and there are visible scorch marks from the flame discharged. It also has an implication for treatment and preservation of evidence.

4.3.3 Sexual assault evidence

When analysing the frequency that the ED nurse recovers and preserves physical trace evidence; e.g. hairs from a sexual assault *victim* 61.0 % (n=47), of the ED nurses never performed this task, 18.2 % (n=14), seldom performed this task. 13.0% (n=10) of the ED

nurse said they always performed this task. 3.9% (n=3), of the respondents indicated that they often performed this task and 3.9% (n=3), of the ED nurses almost always performed this task. When analysing the frequency that the ED nurse recovers and preserves physical trace evidence, e.g. hairs from sexual assault *suspect*; the following results were found:70.1% (n=54), of the respondents said they have never performed this task; 13.0% (n=10), of the ED nurse said they seldom performed this task. Less proportion 10.4 % (n=8), of the ED nurses always performed this task and 6.5 % (n=5), of the ED nurses said they almost always performed this task. When analysing the frequency that the ED nurse is skilled in sharing information and evidence in the investigation of sexual assault cases with law enforcement officer and medico-legal investigator; the following results were found: 51.9% (n=40), of the ED nurses indicated never; 16.9% (n=13), indicated seldom. Fewer respondents, 13.0 (n=10), indicated often carrying out this task. 7.8% (n=6), indicated almost always and 10.4% (n=8), of the ED nurses indicated always. Table 4.7 shows the findings of frequency rating for the tasks.

Table 4.7 Frequency rate for sexual assault evidence (n=77)

Questionnaire statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse recovers and preserves physical trace evidence (e.g. hairs) from sexual assault *victim*	47 61.0%	14 18.2%	3 3.9%	3 3.9%	10 13.0%	77 100%
The ED nurse recovers and preserves physical trace evidence (e.g. hairs) from sexual assault *suspect.*	54 70.1%	10 13.0%	0 0%	5 6.5%	8 10.4%	77 100%
The ED nurse is skilled in sharing information and evidence in the investigation of sexual assault cases with law enforcement officer and medico-legal investigator	40 51.9%	13 16.9%	10 13.0%	6 7.8%	8 10.4%	77 100%

When considering the importance of the ED nurse recovering and preserving physical trace evidence from the sexual assault *victim* 84.4 % (n=65), of the respondents find this function very important to their role in the ED unit. The respondents 10.4% (n=8), found the role somewhat important; 5.2 % (n=4), had no opinion. For recovering physical trace evidence from the sexual assault *suspect* 83.1% (n=64), of the ED nurses indicated this

task very important. 9.1% (n=7), indicated the task somewhat important. 6.5% (n=5), of the ED nurse were neutral and 1.3 % (n=1) indicated the role very unimportant. When considering the importance of being skilled in sharing information and evidence, 59.7 % (n=46), of the ED nurses identified this task as very important to their role in the ED, seconded by 24.7% (n=19), who indicated this task somewhat important. 14.3% (n=11), of the ED nurses were uncertain and 1.3% (n=1), indicated somewhat unimportant. There was no rating for very unimportant. Table 4.8 represents the findings.

Table 4.8 Importance rate for sexual assault evidence (n=77)

Questionnaire statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse recovers and preserves physical trace evidence (e.g. hairs) from sexual assault *victim*	0 0%	0 0%	4 5.2%	8 10.4%	65 84.4%	77 100%
The ED nurse recovers and preserves physical trace evidence (e.g. hairs) from sexual assault *suspect*	1 1.3%	0 0%	5 6.5%	7 9.1%	64 83.1%	77 100%
The ED nurse is skilled in sharing information and evidence in the investigation of sexual assault cases with law enforcement officer and medico-legal investigator	0 0%	1 1.3%	11 14.3%	19 24.7%	46 59.7%	77 100%

The findings indicated that these tasks have never been performed, but the ED nurses identified these tasks as very important to their role in the ED. Because the ED nurses might be aware of the crucial importance of obtaining specimens; e.g. vaginal swabs from the sexual assault *victim*, even though they are not practising it due to lack of training. The ED nurses recognize the importance of collecting evidence as they have better relationship with patients and thus this encourages the reporting of cases. Mataboge (2004), emphasised that the trained forensic nurses can examine the victims of trauma without waiting for the doctor. This will benefit the understaffed government hospitals and this is of an advantage to the sexual assault *victims* to prevent a long wait,

and to return home without laying a charge (Mataboge, 2004). Kupferschmid (2001), defined physical evidence as anything that can be used to (a) associate an individual with a particular crime; or (b) clear an individual of a particular crime or; (c) reconstruct the events of a particular crime. He emphasised that people who collect and preserve evidence must understand the role of physical evidence. Physical trace evidence, e.g. hair, fibres, blood, semen can be used for DNA analysis (Wick, 2000). Girardin (2001), stated that the Sexual Assault Nurse Examiners (SANE) have a unique set of skills to ensure that the victims of sexual abuse are examined sensitively and forensic evidence is collected. SANE also encouraged the victims of sexual attack to write down what happened in detail so as to be able to refer to it while talking to the law enforcement officer. These help the victim to remember the details surrounding the assault (Girardin, 2001). The SANE also give evidence to the law enforcement officer to be taken to the forensic laboratory (Girardin, 2001).

4.3.4 Testifying methods

When analysing the frequency that the ED nurse has specific knowledge as to the proper methods of testifying in a court of law in forensic cases. The following results were found: 68.8% (n=53) respondents indicated never performing the task, 15.6% (n=12), of the ED nurses seldom performed the task, 9.1% (n=7), indicated almost always. 5.2% (n=4), often performed the task and 1.3% (n=1), always did. When analyzing the frequency that a designated professional with a speciality education in forensic nursing takes charge of forensic cases, and processes them through the ED and through the courts as an expert witness, the following results were found: 27.3% (n=21), of the ED nurses indicated that their institution would not need this behavior/duty. 24.7% (n=19), of the ED nurses indicated often. 20.8 % (n=16), of the ED nurses said that they would seldom need this duty. 18.2 % (n=14), of the respondents stated they would almost always need this duty, and 9.1% (n=7), indicated that there would be always a need of this behavior. When analyzing the frequency that the forensic nurse specialist is acting as an expert witness in court representing the health care institutions, the following results were found. The need of this function in the institution ED was highly rated as not required by 40.3% (n=31), of the respondents.35.1% (n=27), of the ED nurses indicated that it would

be seldom required. 10.4% (n=8), of the respondents indicated almost always. 9.1% (n=7), said that this behavior would be often required. 5.2 % (n=4), indicated always. The results are presented in Table 4.9.

Table 4.9 Frequency rate for testifying methods (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse has specific knowledge as to the proper methods of testifying in a court of law in forensic cases.	53 68.8%	12 15.6%	4 5.2%	7 9.1%	1 1.3%	77 100%
A designated professional with a speciality education in forensic nursing takes charge of forensic cases and processes them through the ED and through the courts as an expert witness.	21 27.3%	16 20.8%	19 24.7%	14 18.2%	7 9.1%	77 100%
The forensic nurse specialist acts as an expert witness in court representing the health care institutions.	31 40.3%	27 35.1%	7 9.1%	8 10.4%	4 5.2%	77 100%

When considering the importance of having specific knowledge to the proper methods of testifying in a court of law in forensic cases 51.9% (n=40), of the ED nurses indicated this task as very important, 27.3% (n=21), said this task was somewhat important to their role. 19.5% (n=15), of the respondents were neutral and 1.3% (n=1), of the respondents indicated this task very unimportant. No respondent scored somewhat unimportant. When considering the importance of the ED nurse being skilled in taking charge of forensic cases and processing of these cases through the ED and the court as an expert witness, 54.7% (n=42), of the ED nurses reflected that it was very important to be skilled in this task. 24.7% (n=19), of the ED nurses said it was somewhat important. The respondents 19.5% (n=15), of the ED nurses were neutral and 1.3% (n=1), of the ED nurses found the skill somewhat unimportant. The ED nurses did not rate if this skill was very unimportant. When considering the importance of the ED nurse having the skill in acting as an expert witness in the court representing the health care institution; 39.0% (n=30), of the ED nurses thought it was somewhat important to be skilled in this behavior. 35.1%

(n=27), of the ED had no opinion or were neutral. 26% (n=20), of the ED nurses stated this skill was very important. The importance rating for these tasks is shown in Table 4.10.

Table 4.10 Importance rate for testifying methods (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED has specific knowledge as to the proper methods of testifying in a court of law in forensic cases.	1 1.3%	0 0%	15 19.5%	21 27.3%	40 51.9%	77 100%
A designated professional with a speciality education in forensic nursing takes charge of forensic cases and processes them through the ED and through the courts as an expert witness.	0 0%	1 1.3%	15 19.5%	19 24.7%	42 54.7%	77 100%
The forensic nurse specialist acts as an expert witness in court representing the health care institutions.	0 0%	0 0%	27 35.1%	30 39.0%	20 26.0%	77 100%

The results revealed that this task is not performed, although the majority of the ED nurses indicated it as very important to their role in the ED. The results also indicated that they would not require somebody skilled in this role in the ED. The fact is this is a new role to the responsibilities of the ED nurses and no training has been given that would enable them to testify in the court of law. Gilson (2000), highlighted the role of the forensic nurse of examining and collecting evidence from the trauma victims. Gilson (2000) further indicated that the victims also make statements to the nurses/medical doctors. These statements can be used during a criminal trial and they add credibility and weight to the case. These also relieve the victim of the burden of being the only witness who can establish an essential element of the crime (Gilson, 2000). The ED nurses show uncertainty about the need and to be skilled in this task. The reasons being the ED nurses

are not aware of forensic nursing as a new specialty. Akoojee (2001), described the role of the health care practitioner as crucial in the collection and preservation of medico-legal evidence.

4.3.5 Collection of evidence

When analysing the frequency that the ED nurse applies relevant forms of packaging that are best suited for the preservation of physical evidence connected with trauma (e.g. clothing) in the ED, the following results were found: 48.1% (n=37), of the ED nurses were not aware of the packages that are used to preserve evidence. 16.9% (n=13), indicated seldom performing the task. 18.2% (n=14), indicated often performing the task. 9.1% (n=7), always performed the task, and 7.8% (n=6) almost always. When analysing the frequency that the ED nurse collects and preserves body tissues and fluids as evidence the following results were found. Most of ED nurses 55.8% (n=43), never collected and preserved evidence. 20.8% (n=16), indicated seldom, with 10.4 % (n=8), of the ED nurses who always performed the task. 6.5% (n=5), of the ED nurses said that they often performed the task and 6.5% (n=5), indicated almost always. When analysing the frequency that the ED nurse incorporates proper collection of forensic evidence with patient care for victims of trauma, the following results were found. 37.7 % (n=29), of the ED nurses never performed this task. 24.7 % (n=19), of the ED nurse indicated often. 18.2 % (n=14), indicated seldom. 13.0 % (n=10), of the ED nurses indicated always and 5.2% (n=4), of the ED nurses indicated almost always. Table 4.11 shows the frequency rate of performance.

Table 4.11 Frequency rate for collection of evidence (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse applies relevant forms of packaging that are best suited for the preservation of physical evidence connected with trauma (e.g. clothing)	37 48.1%	13 16.9%	14 18.2%	6 7.8%	7 9.1%	77 100%
The ED nurse collects and preserves body tissues and fluids as evidence.	43 55.8%	16 20.8%	5 6.5%	5 6.5%	8 10.4%	77 100%
The ED nurse incorporates proper collection of forensic evidence with patient care for victims of trauma.	29 37.7%	14 18.2%	19 24.7%	4 5.2%	10 13.0%	77 100%

When considering the importance of the ED nurse applying relevant forms of packaging that are best suited for the preservation of physical evidence connected with trauma (e.g. clothing), the following results were recorded. 81.8% (n=63), of the ED nurses indicated this task as very important to their role. 9.1% (n=7), of the ED nurses said this task was somewhat important. 5.2% (n=4), of the respondents were neutral. 3.9% (n=3), indicated the task somewhat unimportant and there was no response for the task as being very unimportant. When considering the importance of the ED nurse collecting and preserving body tissues and fluids as evidence 72.7% (n=56), identified this task as a very important function to their role in the ED. Fewer respondents 14.3% (n=11), indicated the task somewhat important and 13.0% (n=10), were uncertain. No respondents rated very/somewhat unimportant. Higher proportion of the respondents 80.5% (n=62), identified the function as very important to their role. With 14.3% (n=11), of the ED nurses said that this task was somewhat important. Very few respondent 2.6% (n=2), indicated somewhat unimportant. 2.6% (n=2), did not answer this question. Table 4.12 below shows the importance rate of performance.

Table 4.12 Importance rate for collection of evidence (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	No response	Total
The ED nurse applies relevant forms of packaging that are best suited for the preservation of physical evidence connected with trauma (e.g. clothing)	0 0%	3 3.9%	4 5.2%	7 9.1%	63 81.8%	0 0%	77 100%
The ED nurse collects and preserves body tissues and fluids as evidence.	0 0%	0 0%	10 13.0%	11 14.3%	56 72.7%	0 0%	77 100%
The ED nurse incorporates proper collection of forensic evidence with patient care for victims of trauma.	0 0%	2 2.6%	0 0%	11 14.3%	62 80.5%	2 2.6%	77 100%

The findings show that most of the respondents had never been exposed to collection and preservation of forensic evidence, possibly due to lack of knowledge because they had indicated these tasks as very important. The results for collection and preservation of evidence confirm the lack of knowledge indicated by most of the respondents. Proper handling is the important aspect. Kupferschmid (2001) emphasised the use of gloves to prevent contamination of the samples. McCracken (2002) indicated the appropriate and individual packaging of clothing. Lynch (1995), agrees with McCracken (2002), and Kupferschmid (2001), about appropriate labelling and sealing of specimen boxes and drying of wet clothing before they are packed to prevent growth of bacteria that might interfere with forensic results. Reilly (2001), indicated that during an emergency, patient

care is a priority, thus the presence of a forensic nurse in the ED unit will allow her to play her role in collection and preservation of evidence in suspected forensic cases

4.3.6 Documentation

When analysing the frequency that the ED nurse is familiar with appropriate documentation concerning death or injury and is able to prepare legal and investigative reports, the following results were found: 39% (n=30), of the ED nurses never performed the task and 22.1% (n=17), indicated that they seldom documented death/injury. 18.2 % (n=14), always performed the task. 10.4% (n=8), of the respondents indicated often. 10.4% (n=8), of the ED nurses indicated almost always. When analysing the frequency that the ED nurse ensures accurate documentation for investigative purposes & for legal protection of both the nurse and the patient. The results showed that 31.2 % (n=24), of the ED nurses said that they always do this task. 22.1% (n=17), indicated almost always. The respondents 18.2% (n=14), indicated seldom. 18.2% (n=14), of the ED nurses indicated often. A few ED nurses 10.4 % (n=8), never performed this task. When analysing the frequency that the ED nurse is observing and documenting the circumstances surrounding the victim; the trauma and the interaction that occurs between the patient; the family, witnesses and/ other delivering the patient to the ED; the following results were found. 29.9 % (n=23), of the ED nurses seldom perform this task 28.6% (n=22), indicated never16.9 % (n=13), of the ED nurses said they almost always performed this task. 15.6% (n=12), said they often carried out this function and less proportion 7.8% (n=6), indicated always observing and documenting the circumstances surrounding the victim. One respondent (1.3%) did not answer this question. The results are shown in Table 4.13.

Table 4.13 Frequency rate for documentation (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	No response	Total
The ED nurse is familiar with appropriate documentation concerning death or injury and is able to prepare legal and investigative reports	30 39.0%	17 22.1%	8 10.4%	8 10.4%	14 18.2%	0 0%	77 100%
The ED nurse assures accurate documentation for investigative purposes & for legal protection of both the nurse and the patient	8 10.4%	14 18.2%	14 18.2%	17 22.1%	24 31.2%	0 0%	77 100%
The ED nurse observes and documents the circumstances surrounding the victim, the trauma and the interaction that occurs between the patient, the family, witnesses and/ other delivering the patient to the ED	22 28.6%	23 29.9%	12 15.6%	13 16.9%	6 7.8%	1 1.3%	77 100%

When considering the importance of carrying out this task 67.5% (n=52), of the ED nurses rated this function as very important. This was supported by 20.8% (n=16), of the respondents who indicated somewhat important. The respondents 10.4% (n=8), were uncertain. The respondents did not rate very/somewhat unimportant.1.3% (n=1), of the respondent did not answer this question. When considering the importance of carrying out this task 85.7 % (n=66), rated this task as very important to the role of the ED nurses. Fewer respondents 7.8% (n=6), said this task was somewhat important 3.9% (n=3), of the ED nurses were neutral and 2.6% (n=2), rated the task very unimportant. When considering the importance of carrying out this task 67.5 % (n=52), of the ED nurses indicated this task as very important to their role. 24.7% (n=19), of the respondents indicated the task as somewhat important. 5.2% (n=4), were neutral/ no opinion and 1.3 %(n=1), did not answer this question. It is interesting to note that 58.5% of the ED nurses indicated never or seldom performing this task, with 40.3% of the ED nurses indicating to have performed this task. Table 4.14 shows the importance rate of performance.

Table 4.14 Importance rate for documentation (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	No response	Total
The ED nurse is familiar with appropriate documentation concerning death or injury and is able to prepare legal and investigative reports	0 0%	0 0%	8 10.4%	16 20.8%	52 67.5%	1 1.3%	77 98.7%
The ED nurse assures accurate documentation for investigative purposes & for legal protection of both the nurse and the patient	2 2.6%	0 0%	3 3.9%	6 7.8%	66 85.7%	0 0%	77 100%
The ED nurse observes and documents the circumstances surrounding the victim, the trauma and the interaction that occurs between the patient, the family, witnesses and/ other delivering the patient to the ED	1 1.3%	0 0%	4 5.2%	19 24.7%	52 67.5%	1 1.3%	77 100%

These results revealed that the respondents were not familiar with documentation related to preparation for legal purposes. Although the respondents 53.3% (n=41), indicated to have assured accurate documentation for investigative purposes and legal protection of both the patient and the nurse. The ED nurses always document, but their role does not include preparation for legal reports. The ED nurses strongly felt that this task was very important to their role. Lynch (1995), indicated that the ED nurses must ensure that any activity initiated is documented. That is from the arrival of the victim until the victim is

certified dead by the medical doctor. The ED nurses are aware of the medico-legal hazards involved and associated with poor documentation. McCracken (2002), stated that accurate documentation is essential, because crucial evidence might be lost while prioritising the needs of the trauma victims, resulting in poor collection and preservation of forensic evidence, as well as poor documentation. This contributes to a poor conviction rate. The performance of this task by the ED nurses is related to ordinary observations and documentation of who is accompanying the patient and not in terms of forensic nursing, due to the lack of knowledge and forensic training. McCracken (2002), states the importance of observing the victim's condition on arrival; the people who brought the victim or taking the victim home; the importance of recording their personal details and the residential address where the victim would be kept. This information would assist during investigation procedures.

4.3.7 Signs of abuse

When analysing the frequency rate that the ED nurse recognises signs of physical child abuse (i.e. suffocation vs. sudden infant death syndrome, accidental vs. abusive scalding /burning) the results were as follows. Most of the respondents 40.3 % (n=31), indicated often performing this task. 27.3% (n=21), of the ED nurses indicated seldom. 18.2% (n=14), indicated always 9.1% (n=7), indicated almost always. 5.2% (n=4), of the ED nurses never performed this task. When analysing the frequency that the ED nurse recognises signs of emotional battering or abuse, the following results were found. 50.6% (n=39), of the ED nurses said that they often perform this task. 19.5% (n=15), indicated always recognising signs of emotional abuse/ battering. 14.3% (n=11), of the ED nurse indicated almost always. 9.1% (n=7), indicated never performing this task and 6.5% (n=5), of the ED nurses indicated seldom. When analyzing the frequency that the forensic nurse specialist assists in searching of information, e.g. where child or spousal abuse is suspected, the following results were found. 31.2 % (n=24), of the ED nurses stated the need of this behavior would be often.18.2% (n=14), of the ED nurses indicated almost always. 18.2% (n=14), of the ED nurses stated this behavior would always be needed. 16.9% (n=13), of the respondents indicated that this behavior would not be needed and 15.6% (n=12), of the ED nurses indicated seldom. Table 4.15 represents the frequency.

Table 4.15 Frequency rate for signs of abuse (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse recognises signs of physical child abuse(i.e. suffocation vs. sudden infant death syndrome, accidental vs. abusive scalding /burning)	4 5.2%	21 27.3%	31 40.3%	7 9.1%	14 18.2%	77 100%
The ED nurse recognises signs of emotional battering /abuse.	7 9.1%	5 6.5%	39 50.6%	11 14.3%	15 19.5%	77 100%
The forensic nurse specialist assists in searching of information (e.g. where child or spouse abuse is suspected	13 16.9%	12 15.6%	24 31.2%	14 18.2%	14 18.2%	77 100%

When considering the importance of the ED nurse recognising signs of physical child abuse(i.e. suffocation vs. sudden infant death syndrome, accidental vs. abusive scalding /burning) 85.7% (n=66), of the ED nurses indicated this function as very important. 11.7% (n=9), of the respondents indicated somewhat important. 1.3% (n=1), indicated neutral and 1.3% (n=1), also indicated very unimportant. There was no rating for somewhat unimportant. When considering the importance of the ED nurse recognising signs of emotional battering/abuse, the results were as follows. 80.5% (n=62), of the ED nurses find this function very important. 11.7% (n=9), of the ED nurses indicated the task somewhat important. 5.2% (n=4), of the respondents were neutral and 2.6% (n=2), find this task somewhat unimportant. No scoring for very unimportant was captured. When considering the importance of being skilled in this area 67.5% (n=52), of the ED nurses indicated this function as a very important skill for the ED nurse. 18.2% (n=14), of the ED nurses said that this skill was somewhat important. 9.1% (n=7), of the respondents had no opinion. 2.6 % (n=2), of the ED nurses indicated this skill as very unimportant and 2.6% (n=2), said this skill was somewhat unimportant. The results are shown in Table 4.16

Table 4.16 Importance rate for signs of abuse (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse recognises signs of physical child abuse(i.e. suffocation vs. sudden infant death syndrome, accidental vs. abusive scalding /burning)	1 1.3%	0 0%	1 1.3%	9 11.7%	66 85.7%	77 100%
The ED nurse recognises signs of emotional battering /abuse.	0 0%	2 2.6%	4 5.2%	9 11.7%	62 80.5%	77 100%
The forensic nurse specialist assists in searching of information (e.g. where child or spouse abuse is suspected	2 2.6%	2 2.6%	7 9.1%	14 18.2%	52 67.5%	77 100%

Most of the respondents indicated that they often performed these tasks. This indicates that the low rate of performing this task could mean the lack of knowledge, since every nurse must be aware of signs of abuse. The forensic role behaviour of the ED nurses has been extended. They have to deal with sexual assaults, battering and abuse cases. They need to identify these victims of trauma and provide care (Lynch, 1995). Gilson (2000), found this role of ED nurses as the key to improve the response, intervention and prosecution of child abuse, domestic violence, sexual assault and other interpersonal violence cases. Thus application of theory and standards of forensic nursing practice is essential. Gilson (2000), further states that provision of care for trauma victims by qualified forensic specialists will improve the care and treatment for physical, emotional and psychological aspects of trauma. This will also improve the ability to hold offenders accountable. There is limited literature and there are no studies that cover forensic nursing. The distribution of the result shows that the respondents felt that there is a need to have a forensic nurse specialist who would be involved in investigation of child or spousal abuse. The ED nurses even identified this behavior as a very important skill that is required in the ED. Child abuse is a major social and medical problem world wide;

including South Africa (Saayman, 2003).

4.3.8 Knowledge of the duties and responsibilities

When analysing the frequency that the ED nurse has working knowledge of the duties and responsibilities of the pathologist/medical doctor. The following results were found: 45.5% (n=35), of the ED nurses indicated never. 22.1% (n=17) indicated seldom. 16.9% (n=13), of the ED nurses said that they often. 10.4% (n=8), of the respondents indicated almost always and 5.2% (n=4), of the respondents indicated always regarding the working knowledge of the pathologists. When analysing the frequency that the ED nurse has a working knowledge of the duties and responsibilities of the police investigator. The response was as follows: the higher proportion of the ED nurses 31.2 % (n=24), responded never and 27.3 % (n=21), seldom performed the task. 19.5 % (n=15), of the ED nurses indicated often. 13.0 % (n=10), said that they almost always and 9.1% (n=7), said they always did. When analysing the frequency that the ED nurse uses a working knowledge of the pathologist i.e. autopsy doctor/medical doctor's law, the following results were found. The higher proportion of ED nurses 59.7% (n=46), never performed this task. 27.3 % (n=21), of the ED nurses said they seldom performed this task. Very few respondents 6.5% (n=5), indicated often and 5.2 % (n=4), of the ED nurses said they always performed this task. 1.3% (n=1), of the respondents indicated almost always. The frequency rate results are shown in Table 4.17.

Table 4.17 Frequency rate for knowledge of the duties and responsibilities (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse has working knowledge of the duties and responsibilities of the pathologist/medical doctor.	35 45.5%	17 22.1%	13 16.9%	8 10.4%	4 5.2%	77 100%
The ED nurse has a working knowledge of the duties and responsibilities of the police investigator	24 31.2%	21 27.3%	15 19.5%	10 13.0	7 9.1%	77 100%
The ED nurse uses a working knowledge of the pathologist i.e. autopsy Dr/medical doctor's law.	46 59.7%	21 27.3%	5 6.5%	1 1.3%	4 5.2%	77 100%

When considering the importance of the ED nurse having the working knowledge of the duties and responsibilities of the pathologist/medical doctor. 45.5% (n=35), of the ED nurses indicated this task as very important to their roles. 26.0 % (n=20), of the ED nurses find the tasks somewhat important. 23.4% (n=18), of the ED nurses had no opinion and 5.2% (n=4), indicated this as somewhat unimportant. No rating was done for very unimportant. When considering the importance of the ED nurse having the working knowledge of the duties and responsibilities of the police investigator; 49.4% (n=38), of the ED nurses said this task was very important to their role. 35.1% (n=27), indicated the task somewhat important. 13.0% (n=10), of the respondents were uncertain. 1.3% (n=1), indicated somewhat unimportant and 1.3% (n=1), said the task was very unimportant to their role in the ED. When considering the importance of carrying out this task 31.2% (n=24), of the ED nurses indicated this task somewhat important. 29.9% (n=23), of the ED nurses said that this task was very important to their role in the ED. 26.0% (n=20), of the respondents were neutral. The respondents 9.1% (n=7), indicated that this task was somewhat important and 3.9% (n= 3), of the ED nurses said that this task was very unimportant. Table 4.18 shows the importance rate.

Table 4.18 Importance rate for the knowledge of the duties and responsibilities (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse has working knowledge of the duties and responsibilities of the pathologist/medical doctor.	0 0%	04 5.2%	18 23.4%	20 26.0%	35 45.5%	77 100%
The ED nurse has a working knowledge of the duties and responsibilities of the police investigator	1 1.3%	1 1.3%	10 13.0%	27 35.1%	38 49.4%	77 100%
The ED nurse uses a working knowledge of the pathologist i.e. autopsy Dr/medical doctor's law.	3 3.9%	7 9.1%	20 26.0%	24 31.2%	23 29.9%	77 100%

The findings revealed that the ED nurses do not have the working knowledge of the pathologist or the police investigator. The reason being that there are very few nurses who are trauma trained. Their training revealed the importance of working in the multidisciplinary team. Forensic nursing is still new in S.A. The ED nurses have indicated this task as important to their roles. Lynch (1990), stated that nurses' roles will change with transformation; they will be expected to interact with other co- professionals. This will challenge forensic nurses to gain new knowledge in order to merge with other scientific based disciplines. It is essential for the ED nurses to have knowledge of how the pathologist functions. McPeck (2002), stated that the forensic nurses play the vital role as part of the death investigation team. The forensic nurses are able to interpret doctors' notes and medical records; they are able to speak the medical language unlike the police officers.

4.3.9 Accomplishment of police and medico-legal investigators' missions

When analysing the frequency that the ED is assisting the police investigators in the accomplishment of their mission, the findings were as follows: a higher proportion of the respondents 32.5% (n=25), indicated never and 29.9% (n=23), indicated seldom. 22.1% (n=17) of the ED nurses indicated often. 14.3% (n=11), indicated always and 1.3% (n=1), indicated almost always. When analysing the frequency with which the ED nurse assists a medico-legal investigator, that is the pathologist or medical doctor, in the accomplishment of their mission, the following results were found: 40.3% (n=31), of the ED nurses indicated never; 27.3% (n=21), said that they seldom perform this task. 13.0% (n=10), of the ED nurses indicated often. 13.0% (n=10), indicated always and 6.5% (n=5), of the ED nurses indicated almost always. Table 4.19 represents the results.

Table 4.19 Frequency rate for accomplishment of police/ medico-legal investigators' missions (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse assists police investigators in the accomplishment of their mission.	25 32.5%	23 29.9%	17 22.1%	1 1.3%	11 14.3%	77 100%
The ED nurse assists medico-legal investigator that is the pathologist or medical doctor in the accomplishment of their mission.	31 40.3%	21 27.3%	10 13.0%	5 6.5%	10 13.0%	77 100%

When considering the importance of carrying out this task of assisting the police investigators, 44.2% (n=34), of the ED nurses said this task was very important to their role. 39.0% (n=30), indicated this task as somewhat important. 11.7% (n=9), had no opinion/neutral. Very few respondents 3.9% (n=3), indicated that this task was somewhat unimportant, and 1.3% (n=1), indicated this task as being very unimportant. When considering the importance of carrying out this function of assisting the medico-legal investigators 45.5% (n=35), of the ED nurses said that this task was very important to their role. 36.4% (n=28), indicated this task somewhat important. 14.3% (n=11), of the ED nurses had no opinion. 2.6% (n=2), indicated somewhat unimportant.1.3% (n=1), indicated very unimportant. Table 4.20 shows the importance rate of performing this task.

Table 4.20 Importance rate for accomplishment of police/medico-legal investigators' mission (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse assists police investigators in the accomplishment of their mission.	1 1.3%	3 3.9%	9 11.7%	30 39.0%	34 44.2%	77 100%
The ED nurse assists medico-legal investigator that is the pathologist or medical doctor in the accomplishment of their mission.	1 1.3%	2 2.6%	11 14.3%	28 36.4%	35 45.5%	77 100%

Most of the respondents indicated not performing these tasks because there is no involvement with the functioning of the police or medico-legal investigators. It is interesting to note that 80% of the respondents stated that these tasks were important to their role in the ED. Dada and McQuoid-Mason (2001), described the forensic nurse as a member of the multi-disciplinary team in forensic medicine.

4.3.10 Specific forensic guidelines

When analysing the frequency that the ED nurse uses specific forensic patient care guidelines, the following results were found. 58.4 %(n=45), of the ED nurses indicated never. 16.9 % (n=13), of the ED nurses indicated often. 10.4% (n=8), of the respondents indicated seldom. 9.1% (n=7), of the ED nurses said they almost always carry out this task, and 5.2 % (n=4) indicated always. Table 4.21 represents the results of frequency rate.

Table 4.21 Frequency rate for specific forensic guidelines (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse uses specific forensic patient care guidelines.	45 58.4%	8 10.4%	13 16.9%	7 9.1%	4 5.2%	77 100%

When considering the importance of carrying out this task, 81.8% (n=63), of the respondents said that this task was very important to their role. 14.3% (n=11), rated this task somewhat important. 2.6% (n=2), of the ED nurses were uncertain.1.3% (n=1), indicated the task very unimportant. No response indicated for somewhat unimportant. Table 4.22 shows the importance rate results.

Table 4.22 Importance rate for specific forensic guidelines (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse uses specific forensic patient care guidelines.	1 1.3%	0 0%	2 2.6%	11 14.3%	63 81.8%	77 100%

Although the task is not performed because forensic nursing is still new in S.A., the respondents identified it as very important to their role in the ED. McCracken (2002), emphasised the importance of having guidelines in the ED unit. This would ensure that proper management and accurate documentation is done.

4.3.11 Adequate training

When analysing the frequency that the ED nurse receives adequate training in notification of death to survivors; the following results were found. 36.4 % (n=28), of the respondents never performed this task. 31.2 % (n=24), indicated seldom.18.2% (n=14), of the respondents indicated often. 7.8% (n=6), of the respondents indicated always; and 5.2% (n=4), indicated almost always.1.3% (n=1), of the ED nurses did not answer this question. With the task of receiving adequate training in grief counselling, the results revealed the following. 40.3% (n=31), of the ED nurses said that they seldom carry out this task. 28.6% (n=22), indicated never. 16.9% (n=13), of the ED nurses indicated often. 7.8% (n=6), indicated always, and 5.2% (n=4), of the ED nurses indicated almost always. 1.3% (n=1), of the respondents did not answer this question. The respondents 32.5% (n=25), reflected that they seldom received adequate training in crisis intervention. 23.4% (n=18), of the ED nurses said they had never received training in crisis intervention.

18.2% (n=14), of the respondents indicated often. 15.8% (n=12), indicated always and 9.1% (n=7), of the ED nurses said they almost always do this task. 1.3% (n=1), of the ED nurses did not respond to this question. The frequency rate results are shown in Table 4.23.

Table 4.23 Frequency rate for adequate training (n=77)

Statement	Never	Seldom	Often	Almost always	Always	no response	Total
The ED nurse receives adequate training in crisis intervention	28 36.4%	24 31.2%	14 18.2%	4 5.2%	6 7.8%	1 1.3%	76 98.7%
The ED nurse receives adequate training in grief counselling	22 28.6%	31 40.3%	13 16.9%	4 5.2%	6 7.8%	1 1.3%	76 98.7%
The ED nurse receives adequate training in crisis intervention	18 23.4%	25 32.5%	14 18.2%	7 9.1%	12 15.8%	1 1.3%	76 98.7%

When considering the importance of carrying out these tasks, the following results were found. 75.3% (n=58), of the ED nurses said that receiving of adequate training in notification of death to the survivors was very important. 20.8% (n=16), of the respondents indicated this task somewhat important, and 3.9% (n=3), of the ED nurses had no opinion. The ED nurses did not rate on the task being very /somewhat unimportant. Most of the respondents 83.1% (n=64), said that receiving of adequate training in grief counselling was very important to their role. 13.0% (n=10), of the ED nurses indicated somewhat important, and 3.9% (n=3), of the ED nurses were neutral/ had no opinion. The respondents did not rate the task either very or somewhat unimportant. The ED nurses 83.1% (n=64), indicated that receiving adequate training in crisis intervention was very important to their role. 7.8% (n=6), of the ED indicated the task somewhat important. 6.5% (n=5), had no opinion. 1.3% (n=1), of the ED nurses indicated the task as very unimportant to their role in the ED. The respondent 1.3% (n=1), did not respond to this question. There was no rating for the task being somewhat unimportant. Table 4.24 represents the results.

Table 4.24 Importance rate for adequate training (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/ no opinion	Somewhat important	Very important	No response	Total
The ED nurse receives adequate training in notification of death to survivors.	0 0%	0 0%	3 3.9%	16 20.8%	58 75.3%	0 0%	77 100%
The ED nurse receives adequate training in grief counselling	0 %	0 0%	3 3.9%	10 13.0%	64 83.1%	0 0%	77 100%
The ED nurse receives adequate training in crisis intervention	1 1.3%	0 %	5 6.5%	6 7.8%	64 83.1%	1 1.3%	76 98.7 %

The frequency of carrying out this task showed that 68% of the ED nurses had no adequate training in notification of death to the survivors or grief counselling. Whereas misunderstanding of this task is noted with regard to adequate training in crisis intervention. The ED nurses might interpret this crisis intervention as general knowledge that is received during basic training. A higher proportion of the respondents, 90%, finds these tasks important to their role in the ED. Saunders (2000), describes different roles of forensic nursing, and highlighted the development underwent. SANE, nurse coroners and clinical forensic nurses are well trained and well equipped with skills relevant to their roles. Brysiewicz (1999) suggested that the nurse educators should be aware of the lack of information on death education in the curriculum of the nurses. The nurses need to be skilled in this so that they will be able to deal with stressful situations (Brysiewicz, 1999).

4.3.12 Liaison in forensic matters

When analysing the frequency that the ED nurse acts as a liaison in forensic matters between the hospital/victim and law enforcement/ medical examiners-pathologists i.e. autopsy doctors; the following results were found. 68.8% (n=53), of the respondents said

that they had never performed this task. 10.4% (n=8), of the ED nurses indicated seldom. Fewer respondents 6.5% (n=5), said that they often performed this task. 6.5% (n=5), of the ED nurses indicated always, and 7.8% (n=6), of the ED nurses said they always performed this task. When analyzing the frequency that the forensic nurse specialist acts as a consultant in forensic matters for other hospital departments that are presented with medico legal questions; 39.0% (n=30), of the ED nurses said this behaviour would seldom be required. 37.7% (n=29), of the ED nurses said that they would not need this behavior. 10.4% (n=8), of the respondents indicated often. 7.8 % (n=6), of the ED nurses said they would always need this task, and 5.2% (n=4), indicated that this behavior would almost always be needed. The results are presented in Table 4.25.

Table 4.25 Frequency rate for liaison in forensic matters (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse acts as a liaison in forensic matters between the hospital/victim and law enforcement/ medical examiners-pathologists i.e. autopsy doctors.	53 68.8%	8 10.4%	5 6.5%	6 7.8%	5 6.5%	77 100%
The forensic nurse specialist acts as a consultant in forensic matters for other hospital departments that are presented with medico legal questions	29 37.7%	30 39.0%	8 10.4%	4 5.2%	6 7.8%	77 100%

When considering the importance of carrying out this task, 33.8% (n=26), of the ED nurses said this task was very important to their role in the ED. 33.8% (n=26), of the ED nurses indicated this task somewhat important to their role. 28.6 % (n=22), respondents were uncertain about the importance of this function to their role. A lesser percentage 3.9% (n=3), indicated this task as being very unimportant. When considering the importance of the ED nurse having this skill, 37.7 % (n=29), of the ED nurses said that it was very important for the ED nurse to have this skill. 26 % (n=20), of the respondents were neutral/ had no opinion. 24.7% (n=19), found this skill somewhat important. 7.8%

(n=6), of the respondent said that this skill was somewhat unimportant, and 3.9% (n=3) of the ED nurses said it was very unimportant to have this skill. Table 4.26 represents the importance rate of performance.

Table 4.26 Importance rate for liaison in forensic matters (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse acts as a liaison in forensic matters between the hospital/victim and law enforcement/ medical examiners-pathologists i.e. autopsy Drs.	3 3.9%	0 0%	22 28.6%	26 33.8%	26 33.8%	77 100%
The forensic nurse specialist acts as a consultant in forensic matters for other hospital departments that are presented with medico legal questions	29 37.7%	30 39.0%	8 10.4%	4 5.2%	6 7.8%	77 100%

The response revealed a lack of knowledge in performing this task and its importance to the role of the ED nurses. The main cause is that forensic nursing is slowly being introduced in S.A. Dada and McQuoid-Mason (2001), emphasised the need of forensic nursing in South Africa in order to improve the conviction rate of criminals. There is limited literature that deals with forensic nursing. The results showed that the ED nurses would not require this behavior and there are mixed feelings as to whether this skill would be utilized.

4.3.13 Provision of grief counselling and crisis intervention

When analysing the frequency that the ED nurse provides grief counselling for victims of trauma and their significant others, the following results were found. 32.5% (n=25), of the ED nurses said that they often performed this task. 31.2% (n=24), of the ED nurses

indicated seldom. 14.3% (n=11), indicated always.13.0% (n=10), of the ED nurses said they almost always performed this task, and 9.1% (n=7), indicated they had never performed this task. When analysing the frequency that the ED nurse provides crisis intervention for victims of trauma and their significant others, the following results were found: 35.1% (n=27), of the ED nurses said that they had seldom performed this task. 32.5% (n=25), of the ED nurses indicated often. A lower percentage, 18.2% (n=14), indicated as always performing this task. 9.1% (n=7), indicated that they had never performed this task, and 5.2% (n=5), of the ED nurses said they almost always performed this task. Table 4.27 represents the results.

Table 4.27 Frequency rate for provision of grief counselling and crisis intervention (n=77)

Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse provides grief counselling for victims of trauma and their significant others.	7 9.1%	24 31.2%	25 32.5%	10 13.0%	11 14.3%	77 100%
The ED nurse provides crisis intervention for victims of trauma and their significant others.	7 9.1%	27 35.1%	25 32.5%	4 5.2%	14 18.2%	77 100%

When considering the importance of carrying out these tasks, the following results were found. The respondents 75.3% (n=58), indicated that provision of grief counselling to the trauma victims and their immediate families is very important to their role. 18.2% (n=14), of the respondents indicated this task somewhat important. 5.2% (n=4), of the ED nurses were neutral and 1.3% (n=1), said that this task was very unimportant. The ED nurses 71.4% (n=55), said that the provision of crisis intervention for victims of trauma and their immediate families was very important to their role in the ED. 26.0% (n=20), indicated this task somewhat important. The respondents 1.3% (n=1), were neutral and 1.3% (n=1), reflected that this task was very unimportant to their role in the ED. Table 4.28 shows the importance rate.

Table 4.28 Importance rate for provision of grief counselling and crisis intervention (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse provides grief counselling for victims of trauma and their significant others.	1 1.3%	0 0%	4 5.2%	14 18.2%	58 75.3%	77 100%
The ED nurse provides crisis intervention for victims of trauma and their significant others.	1 1.3%	0 0%	1 1.3%	20 26.0%	55 71.4%	77 100%

The results show that these tasks were rarely done; although most of the ED nurses said that they were important to their roles. The reason being is that counselling has never been included in the training of nurses, except where it is required. Mataboge (2004) stated that forensic nurses are also given training in trauma counselling and HIV/AIDS counselling and testing.

4.3.14 Interview of witnesses

When analysing the frequency with which the ED nurse conducts interviews of witnesses in suspected trauma cases, the findings were as follows: 64.9% (n=50), of the respondents never carried out this task. 18.2 % (n=14), of the ED nurse indicated seldom. 7.8 % (n=6), of the ED nurses said they often performed this task. 5.2 % (n=4), indicated almost always; and 3.9% (n=3), of the ED nurse said they always performed this task. Table 4.29 represents the frequency rate results.

Table 4.29 Frequency rate for interview of witnesses (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The ED nurse conducts interviews of witnesses in suspected trauma cases.	50 64.9%	14 18.2%	6 7.8%	4 5.2%	3 3.9%	77 100%

When considering the importance of carrying out this task, 35.1% (n=27), of the ED nurse were uncertain about the importance of this task to their role. 29.9% (n=23), of the ED nurses indicated somewhat. 27.3% (n=21), of the respondents said that this task was very important. 3.9% (n=3), of the ED nurses said this task was somewhat unimportant with 3.9% (n=3), indicating that they have never done this task. The results are presented in Table 4.30.

Table 4.30 Importance rate for interview of witnesses (n=77)

Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The ED nurse conducts interviews of witnesses in suspected trauma cases.	3 3.9%	3 3.9%	27 35.1%	23 29.9%	21 27.3%	77 100%

The results show that this function is carried out, and the ED nurses were uncertain about its importance to their role. Lloyd (2003), describes that the forensic nurse has to make an early detection in suspected cases, thus the forensic nurse is trained on how to conduct investigations.

4.3.15 ED forensic consultant

When analyzing the frequency that the ED forensic consultant is available to interface with trauma victim's family, police, medical examiner/pathologist, the press, funeral home, insurance companies, worker compensation, etc. The following results were found: 33.8 % (n=26), of the ED nurses said that would be no need of this behavior/duties. 33.8% (n=26), of the ED nurses said it can be seldom required. 19.5 % (n=15), of the respondents felt it could be performed often; whereas 7.8% (n=6), of the ED nurses said it would be needed almost always.5.2 % (n=4), indicated that it can be performed always. Table 4.31 shows the frequency rate results.

Table 4.31 Frequency for the ED forensic consultant (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
An ED forensic consultant is available to interface with trauma victim's family, police, medical examiner/pathologist, the press, funeral home, insurance companies, worker compensation, etc.	26	26	15	6	4	77
	33.8%	33.8%	19.5%	7.8%	5.2%	100%

When considering the importance of the ED nurse to be skilled in this area, 35.1% (n=27), of the ED nurses indicated that it was very important to be skilled in this task. 28.6% (n=22), of the ED nurses indicated that it was somewhat important, and 27.3% (n=21), of the ED nurses had no opinion. 6.5% (n=5), of the ED nurses said it was very unimportant to be skilled in this task; and 2.6% (n=2), indicated this behavior as somewhat unimportant. The importance rate results are shown in Table 4.32.

Table 4.32 Importance for ED forensic consultant (n=77)

Questionnaire Statement	Very unimportant	Somewhat important	Neutral/no opinion	Somewhat important	Very important	Total
An ED forensic consultant is available to interface with trauma victim's family, police, medical examiner/pathologist, the press, funeral home, insurance companies, worker compensation, etc.	5	2	21	22	27	77
	6.5%	2.6%	27.3%	28.6%	35.1%	100%

These findings portray the reality about forensic nursing in S.A. There is a lack of information. The forensic nurses are a part of the multidisciplinary team i.e. medical, police, welfare and justice personnel. The forensic nurses must ensure and maintain the

close working relationships and liaison between the professionals and the community (Akoojee, 2001).

4.3.16 Forensic nurse specialist in the ED

When analyzing the frequency that the forensic nurse specialist is operating primarily in the ED, the following results were found. Most of the respondents 46.8% (n=36), identified that the forensic nurse specialist would always be in the ED, and 20.8% (n=16), of the respondents indicated often. 13% (n=10), of the respondents indicated never. 10.4% (n=8), said that they would almost always need this behavior and 9.1% (n=7), indicated seldom. Table 4.33 reveals the results.

Table 4.33 Frequency rate for forensic nurse specialist in the ED (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The forensic nurse specialist operates primarily in the ED.	10 13.0%	7 9.1%	16 20.8%	8 10.4%	36 46.8%	77 100%

When considering the importance of having the ED nurse skilled in this area, 71.4 % (n=55), of the respondents said that it was very important. 19.5 % (n=15), of the ED nurses found it somewhat important and 9.1 % (n=7), of the ED nurses had no opinion. No respondents rated the need of this skill as very /somewhat unimportant. The importance rate results are shown in Table 4.34.

Table 4.34 Importance rate for forensic nurse specialist in the ED (n=77)

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The forensic nurse specialist operates primarily in the ED.	0 0%	0 0%	7 9.1%	15 19.5%	55 71.4%	77 100%

Most of the ED nurses felt that the forensic nurse specialist must be allocated in the ED and highlighted the importance of this behavior. Dada and McQuoid-Mason (2001) stated the forensic nurses must operate in the emergency departments in urban and rural areas.

4.3.17 Forensic nurse as a nurse educator

When analyzing the frequency that the forensic nurse specialist is functioning as a nurse educator to the staff in forensic matters, the following results were found. 48.1 % (n=37), of the ED nurses said that this behavior would always be needed. 16.9% (n=13), of the ED nurses indicated often. 14.3% (n=11), of the respondents said that they would almost always needing this task. 13.0% (n=10), of the ED nurses indicated never, and 7.8 % (n=6), said that they would seldom need this behavior. Table 4.35 reflects the frequency rate results.

Table 4.35 Frequency rate for forensic nurse as a nurse educator (n=77)

Questionnaire Statement	Never	Seldom	Often	Almost always	Always	Total
The forensic nurse specialist functions as a nurse educator to the staff in forensic matters.	10 13.0%	6 7.8%	13 16.9%	11 14.3%	37 48.1%	77 100%

When considering the importance of the ED nurse having this skill 80.5 %(n=62), of the ED nurses identified this skill as very important. 16.9 %(n=13), of the respondents said it was somewhat important to have this skill and 1.3 %(n= 1), of the ED nurses had no opinion, and 1.3% (n=1), said this skill was somewhat unimportant. The ED nurses did not indicate if the skill was very unimportant. The results are presented in Table 4.36.

Table 4.36 Importance rate for forensic nurse as a nurse educator

Questionnaire Statement	Very unimportant	Somewhat unimportant	Neutral/no opinion	Somewhat important	Very important	Total
The forensic nurse specialist functions as a nurse educator to the staff in forensic matters.	0 0%	1 1.3%	1 1.3%	13 16.9%	62 80.5%	77 100%

Most of the ED nurses found that the forensic nurse specialist would be utilized often to teach them. McCracken (2002) indicated the importance of the forensic nurse in the ED because she will teach forensic nursing skills relevant to collection, packaging and preservation of forensic evidence.

4.4 Development of forensic nursing in South Africa

This part of questionnaire asked open -ended questions about forensic nursing.

4.4.1 Problems with preservation of forensic evidence in the ED

The respondents were asked if they had any problems in their ED regarding the preservation of forensic evidence. 55.8% (n=43) of the respondents stated yes and 40.3% (n=31), of the respondents indicated no. 3.9% (n=3), did not respond to the question.

4.4.1.1 Chain of custody

The ED nurses stated that the bullets are removed from the patient but there is, *"no place to keep bullets"*. The respondents expressed their concern about the collected evidence that the, *"evidence is not collected by police"*. McCracken (2002) identifies what the chain of custody entails; i.e. using different methods to collect evidence; to establish continuity of evidence possession; disposition of that evidence and maintenance of confidentiality. Other respondents were not concerned about preserving evidence from the sexual assault victim because, *"all rape cases goes to provincial hospitals"*. The respondents were happy with the manner they were dealing with forensic evidence and stated that, *"in my department only bullets are collected and sent to securities"*.

4.4.1.2 Lack of knowledge

The respondents felt that they were contributing to the poor conviction rate of criminals because they were only familiar with the recovery of bullets and had very little other knowledge regarding preserving other forensic evidence. One respondent commented about this and explained that; *"we are able to preserve bullets only for evidence in police cases. We do not know anything about preserving of clothes, semen, gunpowder residue etc. This lack of knowledge of forensic nursing may jeopardise some police cases. Our main focus is saving a life, but our doctors do document wounds"*. The ED nurses

expressed their concern with regard to their practice and the lack of training and the risks involved. They stated that *'staffs do not have the training to appreciate the need of preservation of evidence, as well as the chain of custody. It is learnt by 'trial and error'.* The respondents highlighted that they had guidelines that assist them with handling of forensic evidence *"because we have protocols on how to handle bullets and how to keep them for forensic evidence purposes. But as for clothing-no clue at all".* Other respondents were concerned about the lack of current protocols in their ED and that the available protocols are taken as standing orders. He stated that, *"no information is given, we rely on the few existing policies that are not updated (reviewed) and commonly taken as routine".* Appropriate protocols and procedure manuals must be provided on how to collect and sore evidence, as well as the chain of custody. The ED nurses must have access to this information (Duma, 2003).

4.4.1.3 Insufficient staff

The respondents commented that there are fewer institutions that have forensic trained nurses that provide this service. The victims of trauma are sent to these institutions which cater for all the sexual assault cases and they encounter problems and *"in provincial hospitals - patients sometimes wait for longer periods - evidence is lost".* Other institutions already have nurses who are forensic trained to deal with sexual assault cases, but *"the clinic/department is not yet equipped to practise this. The nurse who has been trained has too many roles she plays in the department, which hinders her from practising preservation".* Mataboge (2004) expressed his concern regarding the matter that they do not have their own evidence collection kits. Nurses have to rely on police for the kit, thus preventing them from offering an effective service to sexual assault victims. The researcher further emphasised the importance of collecting and preserving medical evidence properly, because it is the only means that would facilitate the conviction of criminals.

4.4.2 Information on forensic nursing

The respondents were asked if they receive enough information on forensic nursing and if not, what can be done to meet their needs. The respondents 9.1% (n=7), indicated yes and 90.9% indicated no.

4.4.2.1 Lack of information

The respondents strongly felt that the lack of information affects the functioning of other disciplines that are involved in the care of the trauma victim. One respondent explained that,

> *"the only information I have is what I was taught during my trauma training for Trauma Diploma. I feel we need more education in this regard since we are bound to make mistake, which will damage the police case. We need more communication channels to be opened between the police and nurses since some suspects are treated without any evidence taken".*

There was a mutual concern regarding the exposure of working together with the law enforcement officers as well as to be exposed to court proceedings. Other respondents highlighted that the exposure to court cases would be of value and this might open their eyes to acknowledge the preserving of evidence. He commented that, *"we need more teaching exposure as to what happens in court when conducting these cases".*

Very few forensic nurses were trained for the purpose of working in the CCC. The same nurse covers other units, e.g. maybe allocated in the obstetric unit, and is unable to provide in service education to her colleagues. One respondent stated that more nurses need to be trained, *"because we've got only one forensic nurse for the whole institute so we still need more nurses to undergo forensic training".* Duma (2003) indicated that sometimes the forensic nurses are summoned to court to give evidence as an expert witness or as a fact witness. This is taken as a strong challenge for forensic nurses because it is new and there is no one to guide the novice. Nurses had never been exposed to court room, this means that they have no knowledge regarding the court procedures and terminology used.

The respondents have identified the importance of forensic nursing and they revealed that practising of forensic nursing is essential and it should be available in all the institutions either private, provincial or at the clinics. One respondent stated that, *"'the introduction of forensic nursing should be introduced to all emergency rooms at all hospitals"*. Most of the ED nurses express their concern with regard to the lack of information and the limited number of nurses that are exposed to forensic training as well as their wrongly allocation. The respondents explained that,

> *"the heads of forensic nursing should do follow ups, in-services, workshops, seminars on the subject. The trained nurse should be allocated accordingly"*.

The concerns revealed by the respondents proved that they really feel the need for training in forensic nursing. The trained forensic nurses would play an important role in dealing with the medico legal aspects of violence, abuse and sexual assault by bridging the gap between health care practitioners and the law enforcement officers to halt the criminals going free (McGlew, 2001).

4.4.3 Doctors' knowledge in forensic care

The respondents were asked if a medical doctor practising in their ED demonstrates a strong knowledge of forensic practice and how they do it. The respondents 3.9% (n=3), indicated yes, 84.4% (n=65), indicated no and 11.7% (n=9), did not respond.

4.4.3.1 Incompetence and training

Most of the respondents indicated that their doctors did not reveal any knowledge regarding the preservation of forensic evidence. One respondent even stated that, *"some doctors are clueless"*. A higher proportion of the respondents indicated that the doctors do document wounds, although some of them do not specify the measurements. Confusion has been noted with identification of wounds, e.g. to differentiate between abrasion and laceration.

> *"Most doctors document most injuries or wounds and remove superficial bullets, but preserving clothes or doing nail clippings or swabbing some parts... that I have never seen. Our doctors are called to give evidence in court on patients they saw i.e. about wound and injuries"*.

The majority of the respondents revealed that their doctors were only competent in removal of bullets. Mataboge (2004) emphasised that the doctors also need to be trained, because not all of them know how to do forensic examinations. The other respondent supported the statement that other doctors really lack knowledge of forensic practice by saying that, *"it also need to be included in their educational requirements. Ongoing updates"*. The respondents also felt that the doctors' scope of practice was very limited when it comes to forensic practice. Other respondents revealed that they had no doctors allocated in their clinics, possibly because in the clinics they have primary health care nurses and in these clinics there are forensic trained nurses who are allocated to cover the shortage of staff, and not permanently placed in the ED.

4.4.4 Introductory to forensic nursing

The respondents were asked if in the future training of nurses an introductory to forensic nursing should be included and to state the reason. All the respondents 100% (n=77), indicated yes.

4.4.4.1 Introductory to basic nursing

Most of the respondents indicated that it was very important to have forensic nursing included in the curriculum for basic training. The respondents indicated that the exposure to forensic nursing is important to any nurse that becomes exposed to forensic patients, because who ever is attending to the forensic patient can destroy the evidence if the person is not knowledgeable. The respondents said that, *"it is important where there are cases that need investigation in suspicious cases and it will help in working hand in hand with police"*. The other respondents felt that it is essential, *"to make everybody aware of forensic nursing"*. Duma (2003) commented that basic forensic nursing principles should be introduced to undergraduate nursing students as violence is an issue of public concern and health problem. The researcher further stated that in-service education and training should be offered to health care practitioners that deal with victims of trauma. The respondents evaluated having knowledge in forensic nursing as a need or a must have.

4.4.4.2 Post basic course

The respondents also highlighted that forensic nursing should be included in the post basic courses. More concern has been shown throughout about handling of the forensic patient, either a victim of trauma or the suspect, and preservation of forensic evidence. One respondent said that,

> *"it must be included in the training and ED nurses must be trained so that they know what to do when there is a victim or a suspect and to prevent them spoiling evidence. Each ED must have at least 2 forensic nurses, one on night duty and one on day duty".*

Some felt it is not essential for all nurses to be exposed to forensic nursing. The respondents commented as follows,

> *"only to those who are specialising in emergency/trauma department, as others have not much to do with forensic nursing, but for trauma nurses at least in-service training on forensic will be of great benefit to both the nurse and her patient".*

The respondents also stated that, *"I feel that this should only pertain to post basic courses and especially to trauma, theatre and ICU".* Duma (2003), in her article about forensic nursing, strongly felt that a trauma nurse without forensic nursing is more likely to destroy forensic evidence, while striving to save life. Forensic nursing should be provided at post–basic graduate level for the nurses who want to be forensic clinical nurse specialists.

4.4.4.3 Forensic evidence

Most of the respondents are aware that failure to collect and preserve forensic evidence interferes with the processing of criminal cases and passing of judgement. One respondent stated that, *"a lot of evidence is lost or not documented properly and jeopardise patient care and law enforcement".* The respondents also revealed their concern about the escalating rate of violence. Today in the media the main headlines are about sexual abuse and murder, especially of the women and children. The respondent commented that, *"lifestyles have changed over the years. There is more violence today and crime involving women, children and the elderly".* In the study of Intimate Partner

Violence, Duma (2004) emphasised the importance of health records that contain forensic documentation that can be utilised in the court of law as evidence. The importance of recording the victim's surrounding appropriately, because inappropriate documentation has resulted in the suspects being acquitted. There is a need to train nurses and doctors who are allocated in the hospitals ED and clinics on the correct documentation regarding physical and sexual abuse cases to prevent inappropriate forensic documentation (Duma, 2004).

CHAPTER FIVE
CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the study

This study investigated the forensic nursing role behaviour of the ED nurses in the emergency departments in Durban-Metro area. The respondents were asked to respond to questions that were challenging them to reveal if they were aware that nursing science, forensic science and criminal justice are interrelated disciplines that bring about role behaviour and role expectations. There is overlapping of roles thus it is not easy to separate the role behaviours from role expectations.

5.2 Forensic role behaviours

The respondents were asked to indicate their roles on performing the tasks stated in the questionnaires and to indicate the rate of frequency and the rate of importance on these tasks.

5.2.1 Collection and preservation of forensic evidence

The results of this study show that the ED nurses were not carrying out the tasks related to the collection and preservation of forensic evidence. Most of the respondents had indicated that they had never performed these tasks e.g. to collect, package and preserve physical trace evidence from a trauma victim/suspect. Most respondents also indicated that they could not identify the gunshot wounds fired from close range to those fired at a distance. The respondents have never been exposed to the collection of evidence from sexual assault victim/suspect except if working in the Crisis Care Centre (CCC). The forensic nurses in CCC also experienced problems with the unavailability of sexual assault evidence collection kits. They rely on the police officers to bring the kit along and at times, the police officers fail to provide the kits, case numbers, as well as the identification number of the investigating officer (Mataboge, 2004). Knowledge was displayed regarding recovering of bullets from trauma victims, but there are breaks in a chain of custody if the police do not collect the recovered bullets. The respondents agreed that these tasks were very important to their practice in the ED. Most of the respondents had acknowledged that they were often capable of identifying the signs of abuse, physical or emotional. The

respondents remarked that they often had exposure in differentiating between animal and human bite wounds. McCracken (2002), Wick (2000), and Lynch (1995), clarify that human bite wounds are used to recover DNA samples and also indicated that gunpowder residue on victims' clothing or by the wounds or by fingernails would confirm the distance at which the shot was fired. It also assists to exclude self-inflicted trauma.

Most of the respondents responded positively towards accurate documentation of events. They even indicated that the medical doctors in their institution did document wounds. But there is a concern with these results. The respondents might be referring to ordinary documentation not specifically related to the documentation of events involving the forensic patients due to a lack of education and expertise. For example, the forensic nurse's roles include the following: accurate documentation of the circumstances surrounding the victim; the trauma and the interaction between the patient and family members; accurate documentation for investigative purposes and legal protection and to act as a liaison in forensic matters. Duma (2004), described the importance of forensic documentation. The researcher further stated the importance of ED nurses documenting what they observe, smell e.g. smell of alcohol. The reason being, these documents can be used in the court of law as evidence and this can be the only evidence available to convict the criminal/suspect.

5.3 Forensic role expectations

5.3.1 Forensic nurse as an expert witness in court

The ED nurses have new roles and responsibilities with the introduction of forensic nursing. The results of this study revealed that the respondents had no information or exposure to events where the ED nurse is expected to testify in the court of law. The respondents were not aware that interviewing of witnesses it was part of their expected role. Lynch (1995), McCracken (2002), Akoojee (2001), Dada and McQuoid-Mason (2001), and Duma (2004), highlighted the new role of the ED of testifying in the court of law by giving evidence.

5.3.2 Forensic nurse as a member of a multi disciplinary team

Akoojee (2001), and Dada and McQuoid-Mason (2001), emphasised that forensic nurses should be trained in a manner that they are able to function in a

multidisciplinary team; i.e. with police officers, doctors and welfare personnel etc. The results of this study revealed that the respondents had never assisted the police officers and pathologists, and they had no knowledge about the duties and responsibilities of the police officer/ pathologist. These results mean that the ED nurses need to be trained so that they would understand the importance of carrying out these tasks. Mataboge (2004) indicated that the Gauteng health department was prioritising the training of forensic nurses in order to assist the police officers in securing a higher conviction rate of sexual assault suspects. The trained forensic nurses have to collect and preserve evidence that can be presented in a court of law.

5.3.3 Training of nurses

The results of this study showed that the respondents had never received training with regard to notification of death to the survivors, crisis intervention, and grief counselling. The ED nurse could only be good in counselling, e.g. HIV or trauma counselling, once they have done these courses after basic training or after undergraduate training. It is interesting to note that the respondents indicated that they have often provided grief counselling and crisis intervention. The ED nurses- mainly the registered nurse –often had to break bad news to the relatives. Younger registered nurses still lack the skill of breaking such news because they had received no training in this; thus they utilised senior staff to assist them. Mabatoge (2004), wrote that more nurses need to be given medico-legal training and indicated that this training include trauma counselling and HIV/Aids counselling and testing.

5.3.4 Field of expertise

The respondents had to indicate how often they would utilise the forensic nurse specialist in their institution and if the forensic nurse's skills were required. The results revealed that most of the respondents felt they would not need the forensic nurse specialists in their institution. The tasks the ED nurses indicated were not needed were that they would not need a forensic nurse consultant to take charge of forensic cases, nor to be an expert witness in the court of law. As the result, the importance rating shows that the respondents were uncertain about the importance of these skills. The respondents were positive towards having the forensic nurse specialist allocated in the ED of their institutions and to be a nurse educator on forensic matters. This was rated as a very important skill that would be required in the

ED. Duma (2003), emphasised the importance of having ED nurses trained in forensics because their lack of knowledge would jeopardize the recovering of the first and last forensic evidence available. This really reflects the lack of knowledge when it comes to forensic duties.

5.4 Development of forensic nursing in South Africa

The results obtained from the open-ended questions-section C of the questionnaire was also used to determine the current practices regarding forensic duties and responsibilities. It was hoped that the respondents' response would assist towards future development of forensic nursing in S.A. Most of the respondents had encountered problems with the collection and preservation of forensic evidence. Mostly, the respondents had been exposed to removal of bullets. Not all the institutions had a safe place in which to keep recovered bullets. The main concern was the chain of custody which was not done appropriately, because the police had never turned up to collect the recovered evidence. Fewer respondents indicated that they had no medical officer allocated in their institution, and these respondents were also concerned that the two forensic nurses that were trained were not allocated in the ED. These trained forensic nurses were utilised to cover in other units that were short staffed.

The respondents felt strongly that the exposure to forensic nursing was a requirement either to be included in the basic training or in the post basic courses like trauma, theatre technique or ICU. The respondents remarked about the lack of information regarding forensic nursing and recommended programmes like in service education, workshops or seminars. Most of the respondents were aware that their lack of knowledge and information jeopardises the duties of the police officers in the processing of reported forensic cases.

5.5 Limitations with the study

The failure to obtain permission from one of the hospitals was a limitation because the proposed size of the sample could not be obtained. The draining out of nurses from the health institutions also influenced the sample size, as well as the criteria to be met by respondents' such as work experience, where the ED nurses were supposed to have worked for at least six months in the ED. Keeping of questionnaires by the unit

managers also affected the response, because the respondents feared that their unit managers might read through their responses. Each time, when the researcher came to collect the questionnaires, these were either not filled in or they were misplaced and not found. As a result, more money and time was spent on the reprinting of questionnaires.

5.6 Recommendations for the future

5.6.1 Recommendations for the practice

The ED nurses should be exposed to forensic nursing education and training. There should be protocols in place. The results of this study showed that the ED nurses were aware that forensic nursing is very important to their daily functioning in the ED. One of the respondents stated that their lack of knowledge jeopardises the conviction of criminals and preservation of forensic evidence. McCracken, cited in Lynch (2002), emphasised the importance of treating each and every trauma patient as a liable trauma patient. Unit managers especially ED managers, are mostly trauma and theatre trained. In-service education on preservation of forensic evidence should be given, especially with regard to bullets. The respondents had revealed in this study that they were recovering the bullets. The unit managers could even provide information on the maintenance of chain of custody with regard to recovered bullets. Unit managers in the clinics should ensure that the forensic trained nurses are allocated in the ED because the sexual assault victims present themselves here. These forensic nurses were trained because of the introduction of the C.C.C. The forensic nurses should be encouraged and given time to run in-service education programmes on forensic nursing, that is, on collection and preservation of forensic evidence and the importance of interacting with the doctors, police officers and welfare personnel. Protocols should be updated as some respondents complained about protocols, which are old and never updated.

5.6.2 Recommendations for the nurse educators

Nurse educators should suggest having forensic nursing included in the undergraduate curriculum, mainly as an introduction to forensic nursing. The findings also revealed the lack of, or no access to forensic nursing information. The nurse educators could provide information by holding in service education or informal education to highlight the importance of this field. The respondents revealed also the insufficient

training in relation to crisis intervention, grief counselling and notification of death to the relatives. It is essential to have the ED nurses skilled in this manner, thus training is important.

5.6.3 Recommendations for future research

The researcher would recommend further research to be conducted, which would have a larger sample size to further explore whether or not the ED nurses were aware of their duties and responsibilities with regard to preservation of forensic evidence, and to support findings of this study. It would be interesting to conduct a study that includes the qualitative aspect with a larger sample that represents the whole KwaZulu-Natal region.

5.7 Conclusion

From the results of this study, the researcher was able to conclude that the respondents/ED nurses had identified the importance of forensic role behaviours towards their role in the ED, despite the lack of knowledge, information and training. With the increasing rate of violence, motor vehicle collisions, trauma and sexual assault trauma, the ED nurse is facing the new challenges of acquiring the new skills to effectively care for forensic patients. The ED nurses' role is increasing with the new responsibilities and duties to include in her/his daily activities. As recommended by the respondents,' forensic nursing should be recognised as essential to improve the conviction of criminals and to protect the victims of trauma and the innocence.

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APPENDIX A

LETTERS REQUESTING PERMISSION

UNIVERSITY OF NATAL
DURBAN CAMPUS

School of Nursing
Faculty of Community and Development Disciplines
Durban 4041 South Africa
Telephone: +27 (0)31 260 2499
Facsimile: +27 (0)31 260 1543

26 July 2004

Mrs A. Chinniah
Nursing Manager
Addington Hospital
Durban

Dear Madam

Re-Permission to conduct a study in the premises of your institution

I wish to request your kind permission to carry out a research project in the emergency department of your institution. I am registered with the School of Nursing, University of KwaZulu-Natal in Durban to do my M Cur (Critical care and trauma nursing). This research project is a partial requirement of this master's degree. My research is titled " A description of the forensic nursing role in the Emergency Departments in Durban Metro".

The aim of the study is to describe the forensic role behavior and expectations of nurses working in the emergency departments in Durban Metro. It is hoped that this study could highlight the importance of preserving forensic evidence in the emergency departments. The target population for the study will be registered and enrolled nurses licensed under South African Nursing Council, with at least 6 months exposure in the emergency departments. The reason being they will be having enough exposure to the treatment of the forensic patient. The data collection method to be used will be close and open ended questionnaires. I have attached the letter from Department of Health which grants me the permission to conduct a study if it's convenient within your institution.

Thank You

Yours sincerely

Nomusa N.T.Abdool (Mrs).
Contact No. 0825603671
Petra Brysiewicz (Supervisor)
Contact No. 0312601281

UNIVERSITY OF NATAL
DURBAN CAMPUS

School of Nursing
Faculty of Community and Development Disciplines
Durban 4041 South Africa
Telephone: +27 (0)31 260 2499
Facsimile: +27 (0)31 260 1543

31 August 2004

Mr. C. M. Bhekiswayo
Hospital Manager
King Edward VIII Hospital
P.O. Congella

Dear Madam

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Faculty of Community and Development Disciplines
Durban 4041 South Africa
Telephone: +27 (0)31 260 2499
Facsimile: +27 (0)31 260 1543

09 September 2004

Mrs. Mthalane
Assistant Deputy Director
KwaMashu Polyclinic
P.O KwaMashu

Dear Madam

Re-Permission to conduct a study in the premises of your institution

I wish to request your kind permission to carry out a research project in the emergency department of your institution. I am registered with the School of Nursing, University of KwaZulu-Natal in Durban to do my M Cur (Critical care and trauma nursing). This research project is a partial requirement of this master's degree. My research is titled " A description of the forensic nursing role in the Emergency Departments in Durban Metro".

The aim of the study is to describe the forensic role behavior and expectations of nurses working in the emergency departments in Durban Metro. It is hoped that this study could highlight the importance of preserving forensic evidence in the emergency departments. The target population for the study will be registered and enrolled nurses licensed under South African Nursing Council, with at least 6 months exposure in the emergency departments. The reason being they will be having enough exposure to the treatment of the forensic patient. The data collection method to be used will be close and open ended questionnaires.

Thank You

Yours sincerely

Nomusa N.T.Abdool (Mrs).
Contact No. 0825603671
Petra Brysiewicz (Supervisor)
Contact No. 0312601281

UNIVERSITY OF NATAL
DURBAN CAMPUS

School of Nursing
Faculty of Community and Development Disciplines
Durban 4041 South Africa
Telephone: +27 (0)31 260 2499
Facsimile: +27 (0)31 260 1543

09 September 2004

Mrs. Phungula
Assistant Deputy Director
KwaDabeka Community Health Centre
P.O. Clernaville

Dear Madam

Re-Permission to conduct a study in the premises of your institution

I wish to request your kind permission to carry out a research project in the emergency department of your institution. I am registered with the School of Nursing, University of KwaZulu-Natal in Durban to do my M Cur (Critical care and trauma nursing). This research project is a partial requirement of this master's degree. My research is titled " A description of the forensic nursing role in the Emergency Departments in Durban Metro".

The aim of the study is to describe the forensic role behavior and expectations of nurses working in the emergency departments in Durban Metro. It is hoped that this study could highlight the importance of preserving forensic evidence in the emergency departments. The target population for the study will be registered and enrolled nurses licensed under South African Nursing Council, with at least 6 months exposure in the emergency departments. The reason being they will be having enough exposure to the treatment of the forensic patient. The data collection method to be used will be close and open ended questionnaires. I have attached the letter from Department of Health which grants me the permission to conduct a study if it's convenient within your institution.

Thank You

Yours sincerely

Nomusa N.T.Abdool (Mrs).
Contact No. 0825603671
Petra Brysiewicz (Supervisor)
Contact No. 0312601281

UNIVERSITY OF NATAL
DURBAN CAMPUS

School of Nursing
Faculty of Community and Development Disciplines
Durban 4041 South Africa
Telephone: +27 (0)31 260 2499
Facsimile: +27 (0)31 260 1543

23 July 2004

Miss B. Huddle
St Augustine's Hospital
P.O. Box 30105
Durban

Dear Madam

Re-Permission to conduct a study in the premises of your institution

I wish to request your kind permission to carry out a research project in the emergency department of your institution. I am registered with the School of Nursing, University of KwaZulu-Natal in Durban to do my M Cur (Critical care and trauma nursing). This research project is a partial requirement of this master's degree. My research is titled " A description of the forensic nursing role in the Emergency Departments in Durban Metro".

The aim of the study is to describe the forensic role behavior and expectations of nurses working in the emergency departments in Durban Metro. It is hoped that this study could highlight the importance of preserving forensic evidence in the emergency departments. The target population for the study will be registered and enrolled nurses licensed under South African Nursing Council, with at least 6 months exposure in the emergency departments. The reason being they will be having enough exposure to the treatment of the forensic patient. The data collection method to be used will be close and open ended questionnaires.I have included the Ethical clearance from the University of KwaZulu-Natal and the questionnaire to be used in the project and should you have any queries please contact me.

Thank You

Yours sincerely

Nomusa N.T.Abdool (Mrs).
Contact No. 0825603671
Petra Brysiewicz (Supervisor)
Contact No. 0312601281

UNIVERSITY OF NATAL
DURBAN CAMPUS

School of Nursing
Faculty of Community and Development Disciplines
Durban 4041 South Africa
Telephone: +27 (0)31 260 2499
Facsimile: +27 (0)31 260 1543

23 July 2004

Mrs. A Williamson
Entabeni Hospital
P.O. Box 2230
Durban

Dear Madam

Re-Permission to conduct a study in the premises of your institution

I wish to request your kind permission to carry out a research project in the emergency department of your institution. I am registered with the School of Nursing, University of KwaZulu-Natal in Durban to do my M Cur (Critical care and trauma nursing). This research project is a partial requirement of this master's degree. My research is titled " A description of the forensic nursing role in the Emergency Departments in Durban Metro".

The aim of the study is to describe the forensic role behavior and expectations of nurses working in the emergency departments in Durban Metro. It is hoped that this study could highlight the importance of preserving forensic evidence in the emergency departments. The target population for the study will be registered and enrolled nurses licensed under South African Nursing Council, with at least 6 months exposure in the emergency departments. The reason being they will be having enough exposure to the treatment of the forensic patient. The data collection method to be used will be close and open ended questionnaires.I have included the Ethical clearance from the University of KwaZulu-Natal and the questionnaire to be used in the project and should you have any queries please contact me.

Thank You

Yours sincerely

Nomusa N.T.Abdool (Mrs).
Contact No. 0825603671
Petra Brysiewicz (Supervisor)
Contact No. 0312601281

UNIVERSITY OF NATAL
DURBAN CAMPUS

School of Nursing
Faculty of Community and Development Disciplines
Durban 4041 South Africa
Telephone: +27 (0)31 260 2499
Facsimile: +27 (0)31 260 1543

21 June 2004

Mr G. Tromp
Department of Health KZN
330 Longmarket Street
Pietermaritzburg
3200

Dear Madam

Re-Permission to conduct a study in the premisis of the provincial institutions in Durban Metro

I wish to request your kind permission to carry out a research project in the emergency department of your institutions. I am registered with the School of Nursing, University of KwaZulu-Natal in Durban to do my M Cur (Critical care and trauma nursing). This research project is a partial requirement of this master's degree. My research is titled " A description of the forensic nursing role in the Emergency Departments in Durban Metro".

The aim of the study is to describe the forensic role behavior and expectations of nurses working in the emergency departments in Durban Metro. It is expected that the results will show if there is a need for further education on forensic nursing for nurse working in the emergency departments and it will highlight the possible need for planning and developing emergency department protocols for handling the forensic client. It is hoped that this study could also highlight the importance of preserving forensic evidence in the emergency departments.

The target population for the study will be registered and enrolled nurses licensed under South African Nursing Council, with at least 6 months exposure in the emergency departments. The reason being they will be having enough exposure to the treatment of the forensic patient. The institutions to be used will be Addington, King Edward VIII, KwaDabeka Comprehensive and KwaMashu Polyclinic. The data collection method to be used will be close and open ended questionnaires.I have included the Ethical clearance from the University of KwaZulu-Natal and the questionnaire to be used in the project and should you have any queries please contact me.

Thank You

Yours sincerely

Nomusa N.T.Abdool (Mrs).
Contact No. 0825603671
Petra Brysiewicz (Supervisor)
Contact No. 0312601281

APPENDIX B

LETTERS OF PERMISSION

PROVINCE OF
KWAZULU-NATAL
HEALTH SERVICES

ISIFUNDAZWE
SEKWAZULU-NATALI
EZEMPILO

PROVINSIE
KWAZULU-NATAL
DEPARTEMENT VAN GESONDHEID

NATALIA
330 LONGMARKET STREET
PIETERMARITZBURG

TEL. 033-3952111
FAX 033-3454433

Private Bag :X9051
Eskhwunu Sposi : Pietermaritzburg
Privaatsak : 3200

Enquiries : Mr G.J. Tromp
Extension: 2761
Reference: 9/2/3/R

2004 -07- 20

Mrs N.N.T. Abdool
School of Nursing
University of KwaZulu-Natal
DURBAN
4041

Dear Madam

PERMISSION TO CONDUCT A STUDY IN THE PREMISES OF THE PROVINCIAL INSTITUTIONS IN DURBAN METRO

Your letter dated 21 June 2004 refers.

Please be advised that authority is granted for you to carry out a research project regarding "A description of the forensic nursing role in the Emergency Departments in Durban Metro" at the following institutions, Addington Hospital, King Edward VIII Hospital, KwaDabeka Comprehensive and KwaMashu Polyclinic and for the pilot study which will be conducted in a non-participating hospital, that is Prince Mshiyeni Memorial Hospital, provided that;

(a) Prior approval is obtained from Heads of the relevant institutions;

(b) Confidentiality is maintained;

(c) The Department is acknowledged;

(d) The Department receives a copy of the report on completion; and

(e) The staff and patients are not inconvenienced and service delivery not affected.

Yours sincerely

20 July 2004

SUPERINTENDENT-GENERAL
HEAD : DEPARTMENT OF HEALTH
AJK/abdool

PRINCE MSHIYENI MEMORIAL HOSPITAL

PROVINCE OF
KWAZULU-NATAL
HEALTH SERVICES

ISIFUNDAZWE
SAKWAZULU-NATAL
EZEMPILO

PROVINCE
KWAZULU-NATAL
GESONDHEIDSDIENSTE

TELEPHONE: 031-907 8111
ENQUIRIES : DR. A. M. SEEDAT

Private Bag X07, MOBENI, 4060
REFERENCE:

FASCIMILE NO: 031-907 3334
DATE: 2004.08.11

MRS. N.N.T. ABDOOL
SCHOOL OF NURSING
UNIVERSITY OF KWAZULU – NATAL
DURBAN
4001

Dear Mrs. Abdool

Re: STUDY: FORENSIC NURSING ROLE

Your letter dated 5th August 2004 refers.

Hospital Management grants you permission to conduct your study at this hospital provided that the conditions laid down by the Superintendent General are adhered to.

Please report to Mrs. D. Radebe, Nursing Manager on your arrival, as well as Dr. V.B. Mahomed at C4 (comfort Centre).

Yours Faithfully

HOSPITAL MANAGER

ENTABENI HOSPITAL

Entabeni Hospital
148 South Ridge Road
Durban 4001
PO Box 2230
Durban 4000

Telephone: 031 204 - 1300
Facsimile: 031 261 - 6435
Docex: DX 287 DURBAN.

Mrs Nomusa N T Abdool
62 Oribi Circle
Mobeni Heights
4092

2 July 2004

Dear Mrs Abdool

Permission is hereby granted for you to conduct a research project in the emergency unit at Entabeni Hospital.

Please contact Sr Bronwyn Glaeser, Unit Manager of the casualty department to arrange suitable times to conduct this research project.

On completion of the project would you kindly send me a copy of your findings and confirm that this project remains confidential.

Thank you

Yours sincerely

Mrs A Williamson
Nursing Manager

St Augustine's Hospital

107 Chelmsford Road, Durban • PO Box 30105 Mayville, 4058
Tel +27(0)31 268-5000 • Fax +27(0)31 201-4606
Web address: www.netcare.co.za
P.R. No. 5802562

5th August 2004

Mrs Nomusa N.T Abdool
School of Nursing
University of Kwa-Zulu Natal
DURBAN
4041

Dear Nomusa

PERMISSION TO CONDUCT STUDY FORENSIC NURSING – TRAUMA UNIT

Thank you for your interest in utilising St. Augustine's Hospital as a research facility.

Permission is hereby granted for you to publish your case presentation with the proviso that anonymity is maintained.

Yours sincerely

MISS B HUDDLE
Nursing Manager

ROVINCE OF
AZULU-NATAL

ISIFUNDAZWE
SAKWAZULU-NATAL

PROVINSIE
KWAZULU-NATAL

KING EDWARD VIII HOSPITAL

(Recipient of the Premier's & PWC Good Governance Awards 2001)

Postal Address: Private Bag , Dalbridge , 4014. • Telephone: 031 3603853 • Fax: 031 2061457 •

Enquiries: Mr. A.J Seekola
Reference: KE 2/7/1 **(24/2004)**
Research Programming
1 September 2004

Mrs NNT Abdool
School of Nursing
University of KwaZulu-Natal
DURBAN
4041

Fax No. 031 260 1543

Request to conduct research at King Edward VIII Hospital
Protocol: A description of forensic nursing role in the Emergency Departments in Durban Metro.

Your application received on the 31 August 2004 is approved.

Please ensure the following:

- That King Edward VIII Hospital receives full acknowledgement in the study on all publications and reports and also kindly present a copy of the publication or report on completion.
- Sign an Indemnity Form at Room 8, Admin Block before commencement.
- Discuss your research project with our Nursing Manager: Mrs ZG Zola and the relevant General Managers before commencement.

The Management of King Edward VIII Hospital reserves the right to terminate the permission for the study should circumstances so dictate.

Yours Sincerely

CMB

Mr. CM Bhekiswayo 01/09/04
Hospital Manager.

cc General Managers: A&E/ Critical Care/ General Surgery/ Internal Medicine/ O&G/ Orthopaedics/ Paediatrics/ Radiology/ Theatre/ Specialty Services.

Office of the Nursing Manager
ADDINGTON HOSPITAL
P.O. Box 977
DURBAN
4000

Tel : 031-3272439/2976
Fax : 031-3272453
e-mail : ad911938@dohho.kzntl.gov.za

Enquiries : Mrs CA Lancaster
Matron's secretary

18 September 2004

Mrs Nomusa N.T. Abdool
School of Nursing
University of KwaZulu Natal
DURBAN
4041

Dear Madam,

PERMISSION TO CONDUCT A STUDY ON THE PREMISES OF ADDINGTON HOSPITAL

Your letter dated 26th July 2004 in the above regard refers.

At the outset, please accept my sincere apologies for the lengthy delay in replying to your letter.

You are requested to submit the following to Mrs A Chinniah, Nursing Manager, Addington Hospital:

- Your questionnaire
- Letter of confirmation from the University of KwaZulu Natal that you are a student.
- The date(s) you intend to carry out your research.

On receipt of the above documentation, you will be notified accordingly.

Yours faithfully,

A. Chinniah

NURSING MANAGER
AC/cal

KWA-ZULU NATAL
HEALTH SERVICES

KWA-ZULU NATAL
EZEMPILO

KWADABEKA CLINIC
P.O. BOX 371
CLERNAVILLE
3602
TEL: 031-7072234
FAX: 031-7070033

DOCUMENTS TO BE TRANSMITTED VIA FAX MACHINE
AMAPHEPHA ADLULISWA NGOMSHINI WEFEKISI

DESPATCHED TO
ITHUNYELWA KU PETRA BRYSIEWICZ

DEPARTMENT
UMNYANGO School on Nursing, University of KZN Durban

FAX NUMBER
INOMBOLO YEFEKISI 031 - 2601543

FROM
IPHUMA KU Mrs K F. Pitumaula

DEPARTMENT
UMNYANGO Kwadabeka Community Health Centre

DATE / USUKU 02-12-2004

NUMBER OF PAGES DISPATCHED
INANI LAMAPHEPHA ATHUNYELWE 1

MESSAGE - UMYALEZO

This is to confirm that MRS Nomusa Abdool
Your Master's Degree Student has been granted
permision to carry out a study in this institution

Nomusa

PROVINCE OF KWAZULU-NATAL HEALTH SERVICES

ISIFUNDAZWE SAKWAZULU-NATALI EZEMPILO

PROVINSIE KWAZULU-NATAL GESONDHEIDSDIENSTE

KWAMASHU COMMUNITY

HEALTH CENTRE

PRIVATE BAG X 013
KWAMASHU
4360

G1400 BHEJANE ROAD
KWAMASHU
4360

TEL: (031) 503 1236

FAX: 031 - 503 1815

Date: 02-03-2006
Enquiries: N.E. Sithole
Reference: KCHC/2006

Kwa Mashu CHC
P.Bag X 013
KWA MASHU
4360

Dear Sir/Madam

RE: PERMISSION GRANTED TO NOMUSA ABDOOL (PROFESSIONAL NURSE) TO CONDUCT A STUDY IN THE PREMISES OF KWA MASHU CHC STUDIES.

Mrs Nomsa T. Abdool is granted permission to conduct her study in the premises of this Institution from 09th September 2004 to 31st October 2004.

Yours faithfully

N.E. SITHOLE CPN

PROVINCE OF KWAZULU-NATAL DEPARTMENT OF HEALTH
02 MAR 2006
KWAMASHU POLYCLINIC PRIVATE BAG X013 KWAMASHU 4360

APPENDIX C

ETHICAL CLEARANCE LETTER

UNIVERSITY OF
KWAZULU-NATAL

RESEARCH ETHICS COMMITTEE

Student: Nomusa N.T. Abdool

Research Title: A description of the forensic nursing role in the Emergency Departments in Durban metro

A. The proposal meets the professional code of ethics of the Researcher:

(YES) NO

B. The proposal also meets the following ethical requirements:

	YES	NO
1. Provision has been made to obtain informed consent of the participants.	✓	
2. Potential psychological and physical risks have been considered and minimised.	✓	
3. Provision has been made to avoid undue intrusion with regard to participants and community.	✓	
4. Rights of participants will be safe-guarded in relation to: 4.1 Measures for the protection of anonymity and the maintenance of confidentiality.	✓	
4.2 Access to research information and findings.	✓	
4.3 Termination of involvement without compromise.	✓	
4.4 Misleading promises regarding benefits of the research.	✓	

Signature of Student: NNAbdool. Date: 17/5/04

Signature of Supervisor: PBJEWS Date: 17/5/04
- CHAIR POST GRADUATE

Signature of Head of School: [signature] Date: 17/5/04.

Signature of Chairperson of the Committee: [signature] Date: 31/5/04
(Professor F Frescura) Interim Dean

School of Nursing, University of KwaZulu-Natal Durban 4041

Telephone no. 031- 260 2499 and Fax no. 031- 260 1543

APPENDIX D

QUESTIONNAIRE

Section A: Demographic Data

Please fill in the following demographic data before completing the questionnaire
Please indicate your response by placing an X in the appropriate space

1 Age

21-30 years		1
31-40 years		2
41-50 years		3
Above 50		4

2 Gender

Female		1
Male		2

3 Which category best describes your profession?

Enrolled nurse		1
Registered nurse		2

4 Specify speciality

Trauma trained		1
Trauma experienced		2
Other		3
Details		4

5 Years of experience in an emergency department

6-12 months		1
13-24 months		2
Above 24 months		3

6 The institution where you work is a

Comprehensive clinic		1
Private hospital emergency depart.		2
Provincial hospital emergency depart.		3

Section B: Emergency Department Nursing Forensic Survey

Survey Instructions

You will be asked to rate items describing the Emergency Department Nurse's practice. Each item is to be rated on its **frequency of performance and its importance**. Rate the frequency with which the Emergency Department (ED) nurse is performing the following functions using a numerical scale from 1 (indicating never) through to 5 (indicating always) by **circling** the number on the scale to the left of each statement/question.

Frequency of performance-**left side**

1 Never	2 Seldom	3 Often	4 Almost Always	5 Always

Also please rate the Level of importance of the following functions to the role of the ED nurse using a numerical scale from 1 (very unimportant) to 5 (very important) by **circling** the number on the scale to the right of each statement/question.

Level of importance-**right side**

1 Very unimportant	2 Somewhat unimportant	3 Neutral/No Option	4 Somewhat Important	5 Very Important

Sample Question

For example, "The Emergency Department (ED) nurse receives adequate training in notification of death to survivors"
Based upon your experience, if you believe that training received by you and your staff is seldom provided but that such training is somewhat important, your response to this question would appear as follows

1 2 3 4 5 - <--- Frequency Importance ----- >1 2 3 4 5

Frequency			
2.seldom	3.often	4.almost always	5.always

Importance				
1very unimportant	2somewhat unimportant	3neutral/no opinion	4somewhat important	5 very important

Please rate the frequency circling the appropriate number on the left side and rate the importance by circling the appropriate number on the right side

1. The ED nurse correctly notifies the person in the legal system (pathologist i.e. autopsy dr., medical doctor, etc.) upon receipt of a "dead on arrival" case in which the death was unattended.

1 2 3 4 5 < ----Frequency Importance ---- >1 2 3 4 5

2. The ED nurse differentiates an animal bite wound from a human bite wound and is able to interpret medical and legal implications.

1 2 3 4 5 <---- Frequency Importance ---- >1 2 3 4 5

3. The ED nurse recovers and preserves physical trace evidence (e.g. hairs, fibres, fingernail scrapings) from a sexual assault victim.

1 2 3 4 5 < ---- Frequency Importance---- > 1 2 3 4 5

4. The ED nurse recovers and preserves physical trace evidence (such as hairs, fibres, and fingernail scrapings) from sexual assault suspects.

1 2 3 4 5< ---- Frequency Importance---- > 1 2 3 4 5

5. The ED nurse has specific knowledge as to the proper methods of testifying in a court of law in forensic cases.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

6. The ED nurse differentiates between a gunshot entry wound fired at close range versus such a wound fired from a greater distance.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

7. The ED nurse applies relevant forms of packaging that are best suited for the preservation of physical evidence connected with trauma (such as clothing and other evidence).

1 2 3 4 5 < ---- Frequency Importance ----- > 1 2 3 4 5

Frequency			
2.seldom	3.often	4.almost always	5.always

Importance				
1very unimportant	2somewhat unimportant	3neutral/no opinion	4somewhat important	5 very importa

8. The ED nurse is familiar with appropriate documentation concerning death or injury and is able to prepare legal and investigative reports.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

9. The ED nurse recognises signs of physical child abuse (i.e. suffocation versus sudden infant death syndrome, accidental vs. abusive scalding or burning, accidental vs abusive bone fracture.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

10. The ED nurse recognises signs of emotional battering / abuse

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

11. The ED nurse has working knowledge of the duties and responsibilities of the pathologist i.e. autopsy dr. /medical doctor.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

12. The ED nurse has a working knowledge of the duties and responsibilities of the police investigator.

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

13. The ED nurse recognises self-inflicted trauma versus that inflicted by others.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

14. The ED nurse is skilled in sharing information and evidence in the investigation of sexual assault cases with law enforcement officer and medico-legal investigator.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

15. The ED nurse assists police investigators in the accomplishment of their mission

1 2 3 4 5 < ---- Frequency Importance ----- > 1 2 3 4 5

16. The ED nurse assists a medico-legal investigator that is the pathologist or medical doctor in the accomplishment of their mission.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

Frequency			
2.seldom	3.often	4.almost always	5.always

Importance				
1very unimportant	2somewhat unimportant	3neutral/no opinion	4somewhat important	5 very import

17. The ED nurse incorporates proper collection of forensic evidence with patient care for victims of trauma

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

18. The ED nurse assures accurate documentation for investigative purposes & for legal protection of both the nurse & the patient.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

19. The ED nurse uses specific forensic patient care guidelines.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

20. The ED nurse receives adequate training in notification of death to survivors.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

21. The ED nurse receives adequate training in grief counselling

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

22. The ED nurse receives adequate training in crisis intervention.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

23. The ED nurse observes and documents the circumstances surrounding the victim, the trauma, and the interaction that occurs between the patient, the family members, witnesses, and/ or others delivering the patient to the ED.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

24. The ED nurse acts as a liaison in forensic matters between the hospital/victims and law enforcement/medical examiners-pathologists i.e. autopsy drs.

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

Frequency			
2.seldom	3.often	4.almost always	5.always

Importance				
1very unimportant	2somewhat unimportant	3neutral/no opinion	4somewhat important	5very importa

25. The ED nurse collects and preserves body tissues and fluids as evidence.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

26. The ED nurse provides grief counselling for victims of trauma and their significant others.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

27. The ED nurse provides crisis intervention for victims of trauma and their significant others.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

28. The ED nurse conducts interviews of witnesses in suspected trauma cases

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

29. The ED nurse uses a working knowledge of the pathologist i.e. autopsy dr. /medical doctor's law.

1 2 3 4 5 < ---- Frequency Importance ---- > 1 2 3 4 5

Frequency			
2.seldom	3.often	4.almost always	5.always

Importance				
1very unimportant	2somewhat unimportant	3neutral/no opinion	4somewhat important	5 very important

Questions 30 through to 36 pertain to the role of the forensic clinical nurse specialist. The following questions refer to the roles and functions of a forensic clinical nurse specialist. These questions will assist in the development of forensic nursing, thus when answering consider the forensic clinical nurse specialist as employed by your hospital. **The level of importance would refer to how important it would be for a nurse to be skilled in each of the following areas. The rate of frequency would refer to how often your hospital ED would have need of this behaviours/ duties.**

30. A designated professional with a speciality education in forensic nursing takes charge of forensic cases and processes them through the ED and through the courts as an expert witness.

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

31. An ED forensic consultant is available to interface with trauma victim's family, police, medical examiner/pathologist, the press, funeral home, insurance companies, worker compensation, etc.

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

32. The forensic nurse specialist assists in searching of information (e.g. where child or spouse abuse is suspected.

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

33. The forensic nurse specialist acts as a consultant in forensic matters for other hospital departments that are presented with medico legal questions.

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

34. The forensic nurse specialist operates primarily in the ED

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

35. The forensic nurse specialist functions as a nurse educator to the staff in forensic matters.

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

36. The forensic nurse specialist acts as an expert witness in court representing the health care institutions.

1 2 3 4 5 <---- Frequency Importance ----> 1 2 3 4 5

Views on forensic nursing as a new emerging role in S.A.

Your opinion and detailed information in regard to the following questions will help to benefit future research as well as the development of forensic nursing in S.A.

37. Are there any problems in your department with regard to the preservation of forensic evidence, e.g. bullets, clothing/wounds? And what are these problems?

38. Do you receive enough information on forensic nursing? If not, what more can be done to meet your needs?

39. Does a medical doctor who practices in your ED demonstrate a strong knowledge of forensic practice? And how do they do this?

40. In the future training of nurses, should an introductory to forensic nursing be included? And why?

APPENDIX E

COVERING LETTER

Dear respondent

I am a Master's student at the University of KwaZulu-Natal in Durban, studying Critical Care and Trauma nursing. I am conducting a research study, the purpose of which is to describe forensic role behaviour and expectations of nurses working in the emergency departments in Durban Metro area. You are asked to complete this questionnaire and put it in the boxes provided in your department. Confidentiality and \ anonymity will be maintained at all the times. Information gathered would be used for research purposes only. You are requested not to fill in your personal details on the questionnaire. You have a right to withdraw at anytime, should you feel like doing so.

Thank you very much for your time and effort.

Thank you

Yours sincerely

Nomsa .N.T. Abdool

Contact no: 0825603671

P Brysiewicz (Supervisor).

Tel no: 0312601281