

**ASSESSMENT OF THE NEEDS OF CRITICALLY ILL/INJURED
PATIENTS' FAMILIES IN AN
ACCIDENT AND EMERGENCY UNIT**

by

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DEDICATION

I dedicate this dissertation to my partner, Mojo Ngubeni, my parents, my niece, Refiloe, my children, Kegomoditswe and Thabiso, and to all my friends and colleagues.



“Alone we can do so little; together we can do so much.”

Helen Keller





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- All the study participants for their inputs

I sincerely say ***thank you***. May God bless you all!



DECLARATION

Student number: 21304034

I, Lesego Margaret Phiri, declare that **ASSESSMENT OF THE NEEDS OF THE CRITICALLY ILL/INJURED PATIENTS' FAMILIES IN AN ACCIDENT AND EMERGENCY UNIT** is my own work and that all the sources I have referred to or quoted have been mentioned and acknowledged by means of a bibliography. I also declare that this work has not been submitted before for any other degree at any other institution.

.....

Signature

Ms LM Phiri

.....

Date



ABSTRACT

The critical illness/injury of a family member warranting an admission to an A&E unit can predispose a family to psychological and physiological needs. The patient-centred-care approach rendered in an A&E unit focuses on the patient as a priority, resulting in the family's needs being neglected during a crisis situation. Based on the Family Resilience Framework, the aim of this study was to assess the needs of the families of the critically ill/injured patients in an A&E unit. Based on the identified needs, recommendations were made with regard to a *family-centred-care* approach as a relevant resilience-based strategy suitable to these families.

The research adopted a quantitative, non-experimental, exploratory and descriptive design. A purposive convenience sample of 100 participants was recruited over a period of four months. The data were collected by means of a structured interview schedule.

The study revealed that the five main domains of family needs identified by the respondents as very important was, in order of priority, the need for communication, support, meaning, comfort and proximity. The findings supported the need to initiate and foster a *family-centred-care* approach in the A&E unit, which could guide the nurse practitioners in supporting the affected families, which in turn could enable these families to become resilient.

Key words: Accident and emergency nursing, accident and emergency unit, crisis, critically ill/injured, family-centred-care, family needs and Family Resilience Framework.



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LIST OF ABBREVIATIONS

A&E	Accident and Emergency
AIDS	Acquired Immune Deficiency Syndrome
ASD	Acute stress disorder
CSREES	Cooperative State Research, Education and Extension Service
CINAHL	Cumulative and Index and Allied Health Literature
CCFNI	Critical Care Family Needs Inventory
CCU	Critical Care unit
DPSA	Department of Public Service and Administration
EMS	Emergency medical services
GCS	Glasgow Coma Scale
HIV	Human Immunodeficiency Virus
IDRC	International Development Research Centre
MVA	Motor vehicle accident
SPSS	Statistical Package for the Social Sciences
USA	United States of America

*For the purpose of **anonymity**, the hospital in which the study was conducted will be referred to as **the hospital**, in both text and referencing.*



1. ORIENTATION TO THE STUDY

1.1 INTRODUCTION

The sudden onset of a critical illness/injury of a family member that warrants an admission to an accident and emergency (A&E) unit, places a great deal of stress on both the patients and their families (Washington, 2001:29). The potential consequences of a critical illness/injury in a family can be catastrophic to the extent of upsetting their equilibrium, and precipitating a crisis within the most stable family system (Al-Hassan & Hweidi, 2004:64; Hallgrimsdottir, 2000:611). According to Wagner (2004:416), the initial management within the A&E unit, where staff give priority to the patients' needs, often fail to realise that the families share the crisis and have needs of their own.

Redley, Le Vasseur, Peters and Bethune (2003:607) point out that the families of critically ill/injured patients are vulnerable. Though consideration of their feelings forms a crucial element in the holistic approach to care, their needs are often overlooked when care options are implemented. The Swedish Society of Nursing (2004:15) cautions that, as long as the health care practitioners - and the nurse practitioners in particular - fail to recognise and accept that a critical illness/injury not only affects the individual, but the entire family, providing quality care will remain a futile exercise.

The aim of this study was to assess what the specific needs of the families of critically ill/injured patients in an A&E unit are in the South African context. Based on the findings, the researcher aspired to make recommendations to nurse practitioners regarding these needs, and suggest the systems that need to be put in



place to accommodate families during the patients' critical illness/injury phase *in A&E unit, as she believes it is currently being neglected.*

1.2 BACKGROUND AND RATIONALE FOR THE STUDY

It is evident that the needs of the critically ill or injured patients' families within the critical care setting and other acute hospital settings, had been researched intensively for the past two decades (Alvarez & Kirby, 2006:614; Bond, Draeger, Mandleco & Donnelly, 2003:64; Browning & Warren, 2006:86; Clarke & Harrison, 2001:61; Fontana, 2006:222; Miracle, 2006:121). Chien, Chui, Lam and Ip (2006:40) mention a number of studies have been conducted in the United States of America (USA), Canada, the Far East and Europe to investigate the needs of culturally diverse families of critically ill/injured patients in different settings such as oncology, paediatrics and neurosurgery.

In a literature search it was found that, specifically in South African and sub-Saharan societies, limited research addressing the needs of patients' families during critical illness/injury in an A&E unit had been conducted (see Section 3.1).

1.2.1 Family-centred care

Based on the researcher's experience, the current practice in the A&E unit pertaining to the critically ill/injured patients' families include that the family members are asked to wait in a demarcated area outside the A&E unit until the patient has been stabilised. The critically ill/injured patient is considered as the centre focus of care in the A&E unit, giving rise to a *patient-centred-care* approach.

In addition, there remains a prescriptive approach by nurse practitioners and other health care professionals, which deprive the families of autonomy by denying them the choice of being present during the management phase of their critically ill/injured family member. Family members often are asked to wait in a demarcated area – where little privacy is provided - for long periods without support from the



health care practitioners. See Box 1.1 for a letter from a family member supporting these views.

Box 1.1: Letter from family member received by hospital (*unedited version*)

I brought my mother to your hospital on the night of 28.05.08. She is 65 years old. Apart from suffering from sugar diabetes, she also has hypertension. On the said date, she was having a running stomach, vomiting and feeling dizzy. I was afraid to stay with her like that at home without medical help. She couldn't walk unsupported. When we arrived at the entrance of the accident and emergency unit, there was no one to receive us. I left her in the car to go and look for someone to come and help us. I saw a security guy who was very rude and less interested in helping me. He directed me to a nurse who was busy with another patient. I explained to her that I have a very sick person in the car and I need help. She told me to go look for a porter to bring her inside. When I asked her where I must look for a porter, she said they are supposed to be in front and that if they are not there, I must wait until they come. I went back to the car to check on my mother. She had started vomiting again. I felt so frustrated. After approximately 15 minutes of going in circles, an unidentified man approached me. I assume he was a porter. He just pushed a stretcher towards us without greetings. He wheeled my mother on the stretcher inside to the where the nurse I saw earlier was. When I followed her, the security told me harshly that they do not allow escorts inside. After explaining that my mother was too sick to talk, he allowed me but said I must come and wait outside after I gave them the history. The nurse checked my mother with the machines and pricked her finger. She pushed her inside to where the doctors and other nurses were.

The doctor who attended to us didn't identify himself and he didn't have a name tag on. I assume he was a doctor because he was not wearing nurses' uniform and he examined my mother. I was told to leave my mother inside and go wait in the waiting area. I again tried to explain to the nurses that she is too weak to go to the toilet unsupported and they said they will help her. I went to the waiting area. I waited for close to four hours without knowing what was happening to my mother. During that time, no one came to tell me of what was happening or why we were waiting. The waiting area was cold and there were no toilet facilities nearby. Whenever I tried to go to her, the security prohibited me. He threatened to throw me outside the hospital because he claimed I was problematic.

I waited again for an hour. He got up to go somewhere, I assume he went for supper. I then sneaked inside to check on my mother. I found her on the passage and she had messed herself. The drip on her hand was empty and drawing blood. I tried to get the attention of one of the nurses. They were all very busy and didn't have time to listen to me. Another nurse saw me trying to change her sheets. She shouted at me as if I was breaking the law. I decided that I had enough and demanded to talk to the person in charge. I was told that if I don't want to wait, I can take my mother to another hospital. I felt so disillusioned and waited again as I had no choice. She was eventually admitted to the ward after spending eight hours in the accident and emergency unit.

I must say I am deeply shocked, saddened and disappointed by the way we were treated. I hope and trust that none of our people should never ever endure the night mare and the humiliation we were subjected to. I want this matter to be looked into and treated with a great sense of urgency so as to prevent similar incidents in future. I hope for a positive response.

Thank you.

Yours faithfully

Unknown



Often the only consideration given to these families are irregular updates from nurse practitioners about the patient's progress and current condition. Family members and nurse practitioners then develop stressful relationships as evidenced by complaints received at the help desk from disgruntled families (see Box 1 for an example of a complaint from a family member).

Modern views of recognising the family as an integral decision maker and provider of psychosocial support to the critically ill/injured patient, addressing family needs has become an essential part of caring for patients in A&E units (Stayt, 2007:624). Recognition and identification of family needs could provide the focus for specific nursing interventions, moving towards a family-centred care approach in the A&E unit.

A definition of the concept as it applies to the study is provided in Section 1.8.5.6. Furthermore, an in-depth literature review and discussion on the topic of "family-centred care" has been conducted (see Section 2.4). The focus is specific with regard to the conceptual framework utilised in the study and the relevant literature available with regard to the emergency environment (see Chapter 3).

1.2.2 Family needs

According to Browning and Warren (2006:88), the majority of researchers used the Critical Care Family Needs Inventory (CCFNI) instrument developed by Molter in 1976 to identify and rank the needs statements of families. They note that some researchers employed qualitative methods to identify the needs of the critically ill or injured patients' families in some cases, while Chien et al. (2006:43) found that various researchers had developed strategies which the nurse practitioners could use to assist in identifying and meeting the specific needs of the families.

Findings from studies conducted by Appleyard, Gavaghan, Gonzalez, Ananian, Tyrell and Carroll (2000:40) and Leske (1998b:92) indicated that the impact of critical illness/injury on patients' families caused them to exhibit a well-defined and



predictable set of needs that are universally experienced by most family members. The needs perceived as important by family members of critically ill/injured patients were grouped into five major themes, namely:

- **Assurance:** The need for families to have questions answered honestly and to be reassured that the patient is receiving quality care (Browning & Warren, 2006:93);
- **Proximity:** The need for families to be physically and emotionally close to their critically ill family members when it is clear that the advantages of their presence outweigh the risks involved when they are not allowed to be with the patient (Mangurten, Scott, Guzzetta, Sperry, Vinson, Hicks, Watts & Scott, 2005:44);
- **Information:** Families require frequent, detailed updates about the patients' condition, and rate information as more important than emotional and physical needs (Washington, 2001:30);
- **Comfort:** Families require comfort and privacy with conveniences such as a telephone and the availability of drinks (Hallgrimsdottir, 2000:612); and
- **Support:** Emotional, instrumental and appraisal support, where the care of a critically ill/injured patient is not complete without some consideration of the psychological consequences, and the implications of the situation on the patient as well as the family (Browning & Warren, 2006:92).

1.2.3 Factors influencing family needs

One should consider that in South Africa families form the basic unit of the society. Families are "often made of close-knit social units of nuclear and extended types of family units that provide both emotional and financial support to its members" (Floven, 2001:64). This may attribute to the specific needs of the families whose family members are admitted to the A&E unit.

Tin, French and Leung (1999:349) and Washington (2001:30) found that, as **settings** and **cultures** change and differ from those in previously reported studies, family needs can change and vary accordingly. In addition, these needs may differ



in order of importance, depending on factors such as the severity of the patient's condition, the family's coping capacity, the family support structures outside the hospital and the environment in which the event takes place.

1.2.3.1 The setting

According to Redley et al. (2003:89), despite the fact that vast evidence-based research on the needs of the families in critical care units and other acute care settings has been conducted, very little has been done to address the families' needs in the A&E units. Instead, studies in the A&E units conducted by researchers such as Meyers, Eichhorn, Guzzetta, Clark, Klein, Taliaferro and Calvin (2000:33); Redley, Botti and Duke (2004:295); Weslien, Nilstun, Lundqvist and Fridlund (2005:15) and Williams, O'Brien, Laughton and Jelinek (2000:480) focused mainly on investigating the issues surrounding sudden death, as well as on the presence of families during resuscitation.

From the literature it is thus evident that the neglect of the needs of the critically ill or injured patients' families was not only a dilemma in the A&E unit where the study was conducted, but an international challenge (Calleja, 2007:28). In addition, Hallgrimsdottir (2000:618) acknowledges the gap that exists with regard to family needs in A&E units during the critical illness/injury phase, and urges researchers to engage further in this currently neglected area in order to enable nurse practitioners to provide evidence-based appropriate care to the affected families.

Acknowledging Redley et al. (2003:608) view that all research studies conducted in the critical care and acute care units, contributed immensely to the body of knowledge pertaining to the family needs, it is important to investigate the needs of families in A&E units. Families in A&E units, for example, may rate proximity and support needs as a prerequisite - especially following the onset of critical illness or injury - while families in critical care units may consider hope and information as the essential elements on the list of needs inventory (Redley, Beanland & Botti, 2003:94).



1.2.3.2 The culture

Belshek (2006:2) defines culture as “a set of shared and enduring meaning, values and beliefs that characterise national, ethnic or other groups and orient their behaviour”. Each ethnic group may regard the needs of families of the critically ill/injured patients in the A&E unit different, influencing the suggested recommendations for nurse practitioner interventions dissimilar in different settings.

According to the South African Government Information [n.d.] the ‘rainbow nation’ is a term used to describe the diversity of the cultures of the many different ethnic groups which constitutes the population in South Africa, including:

- o Black = 79%
- o White = 9.6%
- o Coloured = 8.9%
- o Indian/Asian = 2.5%.

The majority of the population group who visit the A&E unit of the hospital where the study was conducted are Blacks, of whom the majority speak Tswana. Other ethnic languages such as Zulu, Tsonga and Venda, are also spoken, although in the minority. The demarcation of the health care delivery systems according to the areas of jurisdiction by the National Health Act (no 61 of 2003) has recently given rise to a significant number of Asian as well as Afrikaans- and English-speaking people visiting the hospital where the study was conducted. Floven (2001:64) notes that Blacks are in general respectful and submissive to people in authority and have strong traditional values that require them not to question the actions of someone in an authoritative position.

Taking into consideration that the South African culture differs from the much researched Western cultures in terms of socio-cultural background, it is necessary to have a better understanding of the needs of the family members of critically ill/injured patients in their own cultural as well as the South African context. Bernal



(2006:144) points out that the envisaged holistic care options available to affected families will remain wishful thinking unless the ethnicity and culture of the client population is taken into consideration. Family care is more effective when it is in line with the culture and the context of the patient and the client population. Bernal (2006:144) further maintains that the nurse practitioners are faced with the challenge of articulating the role of ethnicity and culture.

These cultural differences discussed may impact on the patients' families needs, suggesting the importance of delineating the specific family needs for this specific setting, which in this study is an A&E unit in a public hospital in Gauteng (see Section 1.8.1).

1.3 PROBLEM STATEMENT

Families are often barred from the clinical area of the A&E unit during the management of their critically ill/injured family member. Nurse practitioners fail to recognise that the family experiences crisis stress at the same time as the patient does. The needs of the critically ill/injured patients' families may either be misinterpreted or overlooked. It is the researcher's opinion that the neglect of the needs of the affected family members by nurse practitioners can be attributed to the traditional way of giving preference to providing *patient-centred-care* in an A&E unit.

The researcher, as a nurse practitioner working in the A&E unit, noticed the following significant constraints that impacted significantly on the care of the critically ill/injured patients' families:

- there were no guidelines in place on how to care for the affected families;
- nurse practitioners were not sufficiently trained in counselling skills and crisis management to support these families;

- a shortage of personnel as well as resource constraints influenced the support provided to families as the emphasis remained with the management of the critically ill/injured patient; and
- a focus on patient-centred rather than family-centred care.

According to Socorro, Tolson and Fleming (2001:563), nurse practitioners were identified as being in the best position to address the needs of critically ill/injured patients' families because of their close proximity to both the patients and their families. Nursing care should be moved from a *patient-centred* care only to a *family-centred-care*, thus recognising the needs of the families as inseparable from those of the patient (Davidson, 2009:31). It is vital for nurse practitioners working in the A&E unit to assess the specific needs of the critically ill/injured patients' families, in order to enable them to plan and implement interventions to address these needs.

1.4 RESEARCH QUESTION

Based on the problem statement, the research question was:

What are the needs of the critically ill/injured patients' families in an A&E unit in a public hospital in Gauteng in South Africa?

1.5 AIM OF THE STUDY

The overall aim of this study was to assess the needs of the families of the critically ill/injured patients in an A&E unit. Based on the identified needs, recommendations were made with regard to a *family-centred-care* approach as a relevant resilience-based strategy suitable to these families.



1.6 RESEARCH OBJECTIVES

In order to achieve the aim of this study, the objectives were to:

- explore and describe the needs of the families of the critically ill/injured patients in the A&E unit; and
- compile recommendations with regard to *family-centred-care* as relevant for the support of the critically ill/injured patients' families in the A&E unit.

1.7 SIGNIFICANCE OF THE STUDY

The researcher envisaged that the findings of this study would create an awareness of the specific needs of the families of the critically/ill patient in the A&E unit. It was anticipated that the results of this study may be used to guide the nurse practitioners to recognise the specific needs of the patient's family holistically, and that these needs could be incorporated to render a *family-centred-care* approach when supporting the critically ill/injured patients' families in an A&E unit.

The researcher also thought it likely that the recommendations made in this study could be implemented to improve the quality of care to these families, as well as enhance healthy relations between the nurse practitioners and the family members of the critically ill/injured patients. This, in turn, could result in promoting a better relationship between nurse practitioners and the public. Furthermore, management could also benefit as additional support systems could be implemented to provide in the needs of these family and community members.

The researcher are of the opinion that the findings of the research will add to the limited body of knowledge pertaining to the needs of families of critically ill or injured patients in the A&E unit.

1.8 FRAME OF REFERENCE

The frame of reference for this study is described in terms of the setting in which the study was conducted, the conceptual framework, assumptions and the conceptual definitions.

1.8.1 Study setting

This study was conducted in the A&E unit of one of the public hospitals situated in Gauteng in South Africa. Figure 1.1 depicts a map of South Africa, including the province where the study was conducted, namely Gauteng.

Figure 1.1: Map of South Africa and its provinces (*Adopted from the South African Government Information [n.d.]*)

The public hospital in Gauteng is a Level III tertiary public hospital (teaching hospital). According to the National Health Act (no 61 of 2003) a tertiary/ Level III hospital is classified as a facility that provides in-patient services as well as specialist and sub-specialist care within the public sector.

At the time the study was conducted, this specific hospital had 1700 beds, including twenty-two critical care beds and four high care beds. The A&E unit was a 15-bed unit, which included eight adult and two paediatric resuscitation beds. Patients of all age groups and suffering from serious life-threatening to non-life-threatening conditions or injuries were admitted to the A&E unit.

A summary of the statistics for the period from 1 January 2007 to 31 December 2007 is provided in Figure 1.2. It reflects that, of an average of 3217 patients who were admitted to the A&E unit every month, 1052 were critically ill/injured. These statistics emphasise the number of families whose needs require accommodation in the A&E unit as well as highlights the importance of addressing the research question in this setting.

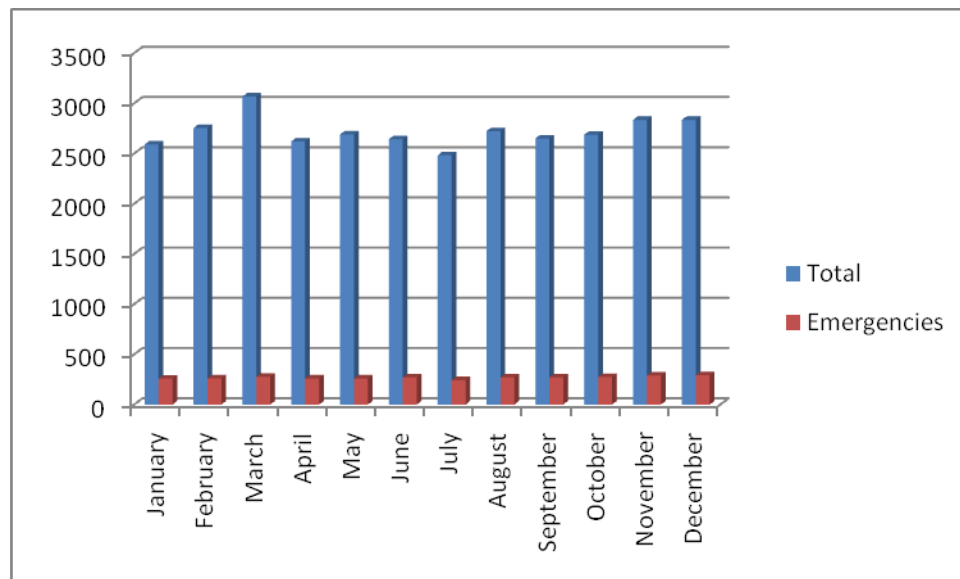


Figure 1.2: Statistic of the A&E unit: January to December 2007 (Adopted from *The Hospital: A&E unit statistics 2007*, under heading *Statistic*).



1.8.2 Role of the researcher

The researcher has been working as a nurse practitioner in the A&E unit for the past ten years and is involved in the clinical accompaniment of various students, including pre-graduate and post-graduate nurse practitioners and paramedics rotating through the unit. Working in this setting, she became aware of the families needs when accompanying a critically ill/injured family member to the A&E unit. This has led to an interest in the topic and determining a better understanding thereof.

1.8.3 Conceptual framework

According to Burns and Grove (2003:148), a conceptual framework (see Figure 2.2) is developed to clearly express the logic on which a study is based, so as to help both the researcher and the reader to understand the logic of the study. This study was guided by the Family Resilience Framework grounded in the Family System Theory.

Family resilience is described as the ability of a family to withstand and rebound from adversity in life-threatening experiences such as the critical illness/injury of a loved one. According to Walsh (2002:1) the Family Resilience Framework “can serve as a valuable conceptual map to guide prevention and intervention efforts to support and strengthen vulnerable families in crisis”. This approach can help to prevent the potential onset of post-traumatic stress disorder (PTSD) (Flannery, 1999:243).

Applied to the context of this study, the Family Resilience Framework was used as a conceptual framework to guide the prevention of PTSD and intervention efforts using a *family-centred-care* approach to support the critically ill/injured patients' families in an A&E unit. Walsh (2002:6) postulates that the Family Resilience Framework was developed to guide clinical practice and can be applied to a wide



range of problematic situations; in this context the aftermath of critical illness/injury.

Family-centred-care has demonstrated its effectiveness as a relevant resilience-based crisis intervention strategy that can assist nurse practitioners to properly identify and meet the needs of the critically ill/injured patients' families (American Academy of Pediatrics & American College of Emergency Physicians, 2006:2242; Davidson, 2009: 30; Gavaghan & Carroll, 2002:67). By viewing the critically ill/injured patient as part of a family system, nurse practitioners will be compelled to incorporate the needs of the families into the plan of care (Verhaeghe, Defloor, van Zuuren, Duijnstee & Grypdonk, 2005:502).

Applied in the context of an A&E environment, the Family Resilience Framework can assist the nurse practitioners to assess the family functioning with regard to their needs and provide appropriate interventions to the family unit. "Nurse practitioners' interventions have proved to facilitate both family adjustment and family adaptation" (Stayt, 2007:625).

The researcher found the Family Resilience Framework to be an appropriate framework to guide the logic flow of this study, as well as for the structuring of the structured interview schedule used as a data collection instrument to assess the needs of the critically/injured patients' families in an A&E unit. In Chapter 2 a detailed discussion of the conceptual framework is presented.

1.8.4 Assumptions

Assumptions are statements that are taken for granted or considered true even though the statements have not been scientifically tested (Brink, van der Walt & van Rensburg, 2006:25; Polit & Beck, 2006:495). According to Brink et al. (2006:25) assumptions determine the nature of concepts used in a research, definitions and their relationships. Burns and Grove (2003:41) suggest that



assumptions are fixed deeply in frameworks, study design and in the interpretation of results and they therefore influence the logic of the study. According to them, recognition of the assumptions by the researcher results in rigorously developed research.

The assumptions underlying this study were informed by the concepts in the conceptual framework and guided the study and the literature review. The following assumptions applied:

- the critical illness/ injury of a family member potentiates a crisis situation for the entire family (Davidson, 2009:29);
- the needs of critically ill/injured patients' families are influenced by a variety of factors and are unique individual perceptions (Browning & Warren, 2006:87);
- incorporating the needs of critically ill/injured patients' families into the plan of care is part of *family-centred-care* and is beneficial to both the nurse practitioners and the patients' families (American Academy of Pediatrics & American College of Emergency Physicians, 2006:2242);
- the nurse practitioners who employ *family-centred-care* when caring for the critically ill/injured patient are in a better position to identify and address the needs of these families (Ahmann & Johnson, 2000:88);
- *family-centred-care* helps the families in crisis to cope effectively and adapt well to the stress of critical illness/injury, thus becoming resilient (Davidson, 2009:29); and
- resilient families are able to face the life challenges including the stress of the critical illness/injury (Yunes, 2007:26).

1.8.5 Conceptual definitions

In the context of this research, and for the sake of simplicity and consistency throughout this dissertation, the following key concepts were defined:



1.8.5.1 Accident and emergency unit

According to the Collins English dictionary (2006), an 'accident' is "*an unforeseen event or one without an apparent cause*" and "*a misfortune or mishap, especially one that causes injury or death*". It further defines an 'emergency' as "*an unforeseen or sudden occurrence, especially of danger demanding immediate action*". The definition found for an 'emergency' in the paperback Oxford English dictionary (2005) reads: "*a serious and unexpected situation requiring immediate action*".

According to Wyatt, Illingworth, Graham, Clancy and Robertson (2006:2), an 'emergency unit' (also referred to as an A&E unit) is a specialised unit which focuses on providing immediate resuscitation for the patients presenting with emergency conditions.

In this study the A&E unit referred to a specialised unit in a Level III hospital situated in Gauteng, South Africa, where emergency care is provided to various types of emergencies, including critically ill/injured patients of all age groups.

1.8.5.2 Culture

Culture is "the total of the inherited ideas, beliefs, values, and knowledge, which constitute shared bases of social action" (Collins English dictionary, 2006). According to Kreitner and Kinicki (2007:G2) culture can be defined further as values and beliefs shared by the community in the way they do things. Drennan (1992) cited by Manley (2000:35) holds that culture is "*the way things are done around here*" and maintains that it is determined in the context of practice at an individual, team or organisational level. This definition applied to this study, whilst the setting refers to the A&E unit in a Level III public hospital in Gauteng where the study was conducted.



1.8.5.3 Crisis

According to Appleyard et al. (2000:611), 'crisis' refers to "an acute emotional upset stemming from any variety of sources that result in a temporary inability to cope". Redley et al. (2003:88) describe 'crisis' as "the temporary inability of the family to cope due to an upset as a result of a sudden life-threatening illness or injury requiring an admission to an emergency department".

For the purpose of this study the concept 'crisis' referred to the emotional upset of family members' experience due to the admission of their critically ill/injured family member to the A&E unit.

1.8.5.4 Critically ill/injured patient

Browning and Warren (2006:87) define a 'critically ill/injured' as a "person suffering from a life-threatening alteration of the physiologic life space as determined by the hospital records".

According to Nicol and Steyn (2004:15) a 'critically ill/injured patient' refers to either a walking patient or one on a stretcher who, due to his or her illness or injury, exhibits altered vital signs, which include a decreased level of consciousness or signs of respiratory, cardiovascular or neurological compromise. This definition was used to define a critically ill/injured patient in this study.

1.8.5.5 Family

Redley et al. (2003:608) define 'family' as a "*basic societal unit of two or more people, related by genetic or interpersonal bonds, who have a commitment to nurture each other emotionally, physically and spiritually*".

For the purpose of this study the concept 'family' adhered to the above definition, complemented by 'but has now come to terms with a crisis where they



accompanied a critically ill/injured member of the family when admitted to the A&E unit’.

1.8.5.6 Family-centred-care

‘*Family-centred-care*’, according to Ahmann and Johnson (2000:88), is an “approach to the planning, delivery and evaluation of health care that is grounded in mutually beneficial partnerships among health care providers, patient and families”.

In this study ‘*family-centred-care*’ referred to the holistic (physical, psychological and social) approach to care provided within the A&E unit for the critically ill/injured patient, as well as their families.

1.8.5.7 Family resilience

According to Walsh (2002:6) ‘family resilience’ is the ability of the family to bounce back from the stress of the crisis situation. Yunes (2007:26) describes ‘family resilience’ as the ability of the family to withstand and rebound from life’s adversities.

In this study family resilience referred to the ability of the families of the critically ill/injured patient to cope with the trauma and the stress of critical illness/injury through a *family-centred-care* approach fostered by the nurse practitioners in an A&E unit.

1.8.5.8 Needs

According to Browning and Warren (2006:87), ‘needs’ pertain to the physical, emotional, psychological and spiritual requirements of family members that, if not met, become demands that might produce distress in family members.



For the purpose of this study the concept 'needs' referred to things considered essential and important by the families of the critically ill/injured patients to nurture their physical, emotional and spiritual well-being and could produce stress if not addressed.

1.8.5.9 Nurse practitioner

Nurse is described as *"a person trained to care for the sick, somebody caring for patients, somebody trained to look after ill and injured people, especially somebody who works in a hospital or clinic, administering the care and treatment that a doctor prescribes"* (Encarta 2003; Oxford English Dictionary 2008).

Practitioner is defined as *"somebody who practises a particular profession, especially medicine"* (Encarta 2003) and defined by the Oxford English Dictionary (2008) as *"a person engaged in an art, discipline, or profession, especially medicine"*

Buppert (2008:26) states a 'nurse practitioner' is referred to as an advanced practice nurse in the USA. In the South African context a nurse practitioner includes any person registered at the South African Nursing Council in terms of the Nursing Acts: Nursing Act (no 50 of 1978) and Nursing Act (no 53 of 2005). This definition applied to this study.

1.8.5.10 Level III hospital

Based on South Africa's National Health Act's (no 61 of 2003) classification of health establishments, the Department of Health (2006:10) derived the following preliminary definition of a Level III (or referred to as tertiary) hospital: "It includes a facility that provides in-patient services as well as specialist and sub-specialist care within the public sector." This definition was adopted in this study.

1.9 RESEARCH METHODOLOGY

According to Polit and Beck (2006:504), research methods are the “steps, procedures and strategies for gathering and analysing data in a research investigation”, while Holloway and Wheeler (2002:287) refer to it as “the framework of theories and principles on which methods and procedures are based”.

This section summarises the steps, procedures and strategies used to gather and analyse data in this study. (See Table 1.1). It also provides a short description of the research design, sampling plan, data collection, data analysis and the procedures followed by the researcher to guide this study. In Chapter 4 a detailed discussion on research methodology is provided. The summary of the research methodology is depicted in Table 1.1.

Table 1.1: Summary of the research methodology

Research design	Sampling plan	Data collection	Data analysis	Reliability and validity
Quantitative <ul style="list-style-type: none">o Non-experimentalo Exploratoryo Descriptive	Population Adult family members who accompanied the critically ill/injured patient to the A&E unit of a selected public hospital in Gauteng, South Africa Sampling <ul style="list-style-type: none">o Non-probabilityo Purposiveo Convenience Timeframe 01/06/08 to 30/09/08 Sample size <ul style="list-style-type: none">o 100	Structured interview schedule	Computer package <ul style="list-style-type: none">o SPSS version 12o EPI-info	<ul style="list-style-type: none">o Pre-test conductedo Content validityo Face validity



1.10 ETHICAL CONSIDERATIONS

This section outlines the ethical considerations maintained to ensure high standards in this study. (See Chapter 4 for a more detailed discussion). To ensure a high standard of research, ethical standards and measures are set to direct the research (Brink et al. 2006:30). According to de Vos, Strydom, Fouché and Delport (2002:63), ethical guidelines serve as the basis and standards on which research is evaluated.

For this study to meet the ethical requirements, the following were ensured:

- permission to undertake the study as well as permission to access client records was elicited from the hospital authorities;
- permission to conduct this study was obtained from the Research Ethics Committee of the University of Pretoria;
- informed consent was obtained from respondents with a covering letter guaranteeing anonymity and confidentiality. Information explaining the purpose of the study, the method of data collection and the significance of the study were included in the covering letter; and
- the respondents were advised not to furnish their names in order to maintain anonymity and confidentiality. It was also emphasised in the covering letter that respondents would not receive any payment for participation in the study. The respondents were assured that no harm, emotional or physical, would befall those who decided to participate as this was a non-experimental study; they were further informed that those respondents who wished to cease participation at any stage during the study, would have the freedom to do so.



1.11 LIMITATIONS OF THE STUDY

Burns and Grove (2003:486) define limitations of a research study as “theoretical and methodological restrictions that may limit the generalisation of the study results”. The limitations of this study included:

- the study was conducted in one A&E unit of a Level III public hospital in Gauteng and the results can therefore not be generalised to other hospitals or provinces;
- the convenient method of sampling is not considered representative; and
- during the data collection period there were deaf among the study population who was managed at the A&E unit where the study was conducted. Due to the ignorance of the researcher and research assistants – they could not communicate in sign language – these people were unfortunately not included in the selection criteria. It would have been interesting to know their needs as well.
- although measures were put in place to control extraneous variables, the researcher questioned whether the use of multilingual research assistants was not in itself limiting; and
- the specific cultural aspects were not addressed, which could have been an added benefit to this study.

1.12 LAYOUT OF THE RESEARCH

The layout of this research consists of chapters and annexures. The findings of this study were reported in five chapters. The organisation of the chapters is depicted in Figure 1.3.



Figure 1.3: Schematic representation of the layout of the research

1.13. CONCLUSION

This chapter concentrated on the background to the needs of the critically ill/injured patients' families in an A&E unit. The problem statement and aim of the study, the research objectives, the significance of the study as well as the conceptual framework and assumptions on which the study was based highlighted. The research methodology, population, sampling, data collection and data analysis were also summarised. The ethical considerations were also briefly discussed. The conceptual framework is discussed in-depth in Chapter 2.



2. CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

Chapter 2 of this study discusses the conceptual framework on which this study was based. The conceptual framework guided the researcher in assessing and describing the needs of the critically ill/injured patients' families in an A&E unit. According to Burns and Grove (2003:148), the conceptual framework is developed to clearly express and convey the logic on which the study is based, thus making it easy for the reader to understand the logic of the study.

2.2 BACKGROUND TO THE FAMILY RESILIENCE FRAMEWORK

The researcher found the Family Resilience Framework developed by Walsh (2002:1) to be an appropriate conceptual map to guide this study. Walsh (2002:3) reports that the Family Resilience Framework can be used as a valuable conceptual map in clinical practice to foster prevention and intervention efforts, and to support and strengthen vulnerable families undergoing stressful situations. Slattery (2006:1) defines resiliency as a continuous process of growing into a strong, healthy person able to recover from the unavoidable hardships that one sometimes encounters in life. Walsh (2002:3) notes that family resilience refers to the ability of families to bounce back from stress and a crisis situation. This is achieved by focusing on the family's strengths rather than on the pathology of the situation. The prevention and intervention efforts of the Family Resilience Framework can only be achieved by implementing resilience-based intervention such as *family-centred-care* (Davidson, 2009:29).



Studies related to the needs of the critically ill/injured patient's families have found that these families undergo tremendous stress and need interventions to modify their stress (Al-Hassan & Hweidi, 2004: 64; Leske, 1998a:129; Washington, 2001:29). The Family Resilience Framework is grounded in the context of the Family System Theory. Ahmann and Johnson (2000:89) ascertain: "The tenet of the Family System Theory is that the whole is always greater than the total number of its parts." The premise behind this reasoning is that the family cannot be understood fully by assessing the individuals separately, but by studying the interactions between family members as they respond to different situations, including the critical illness/injury of a loved one.

The core concept of the Family Resilience Framework is that the management of the critically ill/injured patient should not be done in isolation. Management should be considered in the context of the Family System Theory. The family of the critically ill/injured patient should be recognised as partners in care (Cullen, Titler & Drahozal 2003:62). It is the opinion of Chui and Chan (2007:373) that the patients' wellness during the course of critical illness/injury is affected by the families' wellness. The family's role as buffer for the patient's emotional stress, as decision-maker and caregiver, should be taken into account.

To provide an in-depth discussion on the topic, the following themes that informed compilation of this chapter are discussed in the order as outlined:

- Family System Theory
- Family-centred-care
- Family Resilience Framework
- Key process of family functioning
- Family Stress Theory
- Application of the Family Resilience Framework to critically ill/injured patients' families in the A&E unit



2.3 FAMILY SYSTEM THEORY

The conceptual frame for this study was based on the Family Resilience Framework, grounded in the Family System Theory (Walsh, 2002:2). The Family System Theory views the family as a system made up of members who are interdependent. According to Appleyard et al. (2000:41), the Family System Theory explains why family members respond so intensely and are so devastated when one of their members becomes critically ill/injured.

The family is seen as a system interacting in a dynamic process that maintains homeostatic mechanisms, which can be described as roles and functions ascribed to the family members. The critical illness/injury of one member results in all family members being affected in one way or the other (Ahmann & Johnson, 2000:89).

Goodell and Hanson (1999:74) point out that the Family System Theory was first developed by a psychiatrist, Murray Bowen, in 1985. The Family System Theory is guided by the underlying assumption that chronic unrelieved anxiety lies at the root of family dysfunction (Goodell & Hanson, 1999:74).

Bowen's observations of family interactions - including or excluding mentally ill relatives - resulted in the development of the Family System Theory. During these observations, Bowen noticed similarities between the dynamics of families with a mentally ill relative, and those without a mentally ill relative. Bowen concluded these observations by conceptualising the family as "an irreducible whole, not a collection of members whose actions could be analyzed individually" (Goodell & Hanson, 1999:74). The family is viewed as a system characterised by constant interplay of emotions taking place as the family members endeavours to manage her or his existing anxieties. Appleyard et al. (2000:41) and Goodell and Hanson (1999:74) maintain that the main objective of Bowen's family system therapy was to increase differentiation within the family, in turn improving the management of anxiety afflicted by a stressful situation.



According to Goodell and Hanson (1999: 74), differentiation is the extent to which the family members emotionally differentiate between thought and emotion. Highly differentiated people are believed to make rational decisions and remain connected to the family, yet they sustain their identity, while less differentiated people are emotional and tend to fuse their identities with those of other family members. They further maintain that less differentiated people are also more reactive and are therefore less able to cope effectively with stress because of their limited coping capabilities. Understanding of the dynamics within the family system can help the nurse practitioners to assess and care for the affected families holistically (Goodell & Hanson, 1999: 74).

The advantage of managing a major stressor such as a critical illness/injury in the context of the Family System Theory, is that it can help the nurse practitioners to understand the responses of the individual members within the context of the family unit (Breland-Noble, Bell & Nicolas, 2006:159). By understanding the impact of a critical illness/injury on the family system over time, the A&E unit's nurse practitioners can assist the family to exploit their resources in overcoming and weathering the aftermath – such as PTSD - of a critical illness/injury. Bernal (2006:143) declares that, by employing *family-centred-care*, the nurse practitioner will be in a better position to assess the families' vulnerabilities and strengths, and intervene by providing honest information. Families can also be encouraged to utilise their dormant resilience to see them through their ordeal.

2.3.1 Role of the nurse practitioner

The role of nurse practitioners within the family system is not only to promote the health shortcomings of the members, but also to support and enhance family strengths such as cohesion and flexibility to come to terms with the crisis event in their lives (Swedish Society of Nursing, 2004:5). Van Horn, Fleury and Moore (2002:187) comment that the nurse practitioner's role is to assist the families to re-organise and stabilise their structures and functions while their critically



ill/injured family member progresses. The patient's family is the most important social unit for the nurse practitioners to rely on to positively influence the patient's outcome (Leske, 1998a:129).

Stayt (2007:624) urges nurse practitioners to base their care for families of the critically ill/injured patients on the concept of the Family System Theory. Nurse practitioners have the opportunity of enhancing the family strengths of the entire family, including that of the critically ill/injured family member, and to detect dysfunctional patterns that may retard progress and recovery; they are closely involved with the patients' families, and as such automatically become part of the family system. Van Horn et al. (2002:188) postulate that the nurse practitioners can use this closeness to their advantage by effectively optimising family functioning during a critical illness/injury. This can be achieved by the accurate assessment of the family's coping capabilities and the provision of appropriate intervention to prevent both present and future crises.

Although the nurse practitioners' therapeutic actions are intended for the critically ill/injured patient, the Family System Theory suggests that the family as a whole is affected by illness, and must therefore also be cared for (Goodell & Hanson, 1999:87).

2.4 FAMILY-CENTRED-CARE

Several authors who investigated the needs of the critically ill/injured patients' families, recommend moving away from the concept of *patient-centred-care* to the concept of *family-centred-care* (Ahmann & Johnson, 2000:88; Al-Hassan & Hweidi, 2004:65; Clarke, 2000:330; Gavaghan & Carroll, 2002:64; Lee, Chien & Mackenzie, 2000:47; Wagner, 2004:417). The *family-centred-care* provides the family with the opportunity of being treated with dignity and respect. There is an unbiased sharing of information between the nurse practitioners and the families. According to Hickey, Quimette and Venegoni (2000:201), "this communication enables the



families to build on their strengths by participating in experiences that enhance control and independence”.

Because the nurse practitioners are the only members of the health care team who provide the patient with continuous holistic care, they are regarded as key informants for the critically ill/injured patients’ families (Guilianelli, Kelly, Skelskey, Gonzalez, Sharp, Turley & James, 2005:119). The nurse practitioners are also compelled by their primary component in nursing practice to have systems in place, such as crisis intervention strategies, to help families in crisis to become resilient. According to Gavaghan and Carroll (2002:67), “the role of the family of the critically ill/injured patient as a spokesperson and protector, changes the position of the patient in the nurse-patient relationship into the nurse-family relationship”. However, it has been found that the nurse practitioners struggle with this relationship, since their primary focus is the management of the critically ill/injured patients. The lack of knowledge and experience in nurse-family relationship is another contributing factor in the struggle of the nurse practitioners to provide *family-centred-care*.

Gavaghan and Carroll (2002:67) urge nurse practitioners to arm themselves with evidenced-based knowledge in order to develop the caring and supportive behaviours required in *family-centred-care*. Acquiring the research-based knowledge and skill of *family-centred-care* will help to change the A&E nurse practitioners’ attitudes and dispel the myths and traditions about the patients’ families. The nurse practitioners working in emergency areas must be competent in crisis management and therapeutic communication (Gavaghan & Carroll, 2002:67; Tomlinson, Thomlinson, Peden-McAlpine & Kirshbaum, 2002:161; Walker, 2001:181). This includes being a good listener as well as being committed to patients and solving specific family-focused-problems.

Kamienski (2004:60) agrees that nurse practitioners working in an A&E unit should also adopt *family-centred-care* to support the critically ill/injured patient as a part of the family system unit. In order to maintain quality *family-centred-care*, the



general and specific needs of the families of the critically ill/injured patients should be established. The Family Resilience Framework guiding this study advocates the use of *family-centred-care* as a form of a resiliency-based approach to care for the families of the critically ill/injured patient, as this would aid them to become resilient in facing the adversity of a critical illness/injury. The *family-centred-care* includes family assessment and the crisis intervention strategies used to help families in a crisis situation (Leske, 1998a: 131; van Horn, et al. 2002: 186).

2.4.1 Family assessment

Family assessment involves sitting down with the family with the view to gather all the information regarding family functioning, family issues and concerns following the critical illness/injury incident. Leske (1998a:131) and Gavaghan and Carroll (2002:64) suggest that the initial assessment period can provide a wealth of information on which the nurse practitioner can base the interventions. According to Kamienski (2004:60) the initial contact with the family is very crucial as it can lay the trusting and respectful foundation needed for a mutually beneficial nurse-family relationship. Kamienski (2004:60) further maintains that the first step to providing a fruitful family assessment is to address the barriers that prevent nurse practitioners from interacting with families. Van Horn et al. (2002:186) found in their study that the majority of nurses felt that social workers or psychologists should attend to the families' needs. The nurses further felt that it was wasting time talking to the families – time which, in their opinion, could have been spent looking after the patient.

According to Leske (1998a:132) family areas for assessment include family structures, family development and family functions. Included in these three are the adjustment and adaptation phases. Appleyard et al. (2000:41) point out that it is therefore necessary to apply crisis intervention strategies as this will promote emotional stability and adaptation, and also enable the family system to maintain a sense of equilibrium.



2.4.2 Crisis intervention strategies

According to Appleyard et al. (2000:41), crisis intervention strategies to promote the family systems' emotional stability must include the following:

- o a trusting relationship between the nurse practitioners and the patients' families that is supportive and empathetic;
- o clear and concise information that the family unit is able to understand, and which allows them to make contact with their critically ill/injured family member;
- o support groups that are able to provide support to alleviate the family units' anxieties; and
- o flexible visiting hours that allow the affected families to spend quality time with their critically ill/injured family member.

The nurse practitioners must help the families of the critically ill/injured patient to resolve the crisis situation by facilitating successful coping mechanisms that can create a safe passage to adaptation (Stayt, 2007:625). An in-depth discussion of the abovementioned crisis intervention strategies follows.

2.4.2.1 Nurse-family interaction

According to Appleyard et al. (2000:41) and Gavaghan and Carroll (2002:67), there are only three ways in which the nurse practitioners can foster and support the families in a crisis situation, namely stabilisation, contrast and expansion. Proper ongoing assessment of the family systems' vulnerabilities and strengths can enable nurse practitioners to know which strategy is likely to bring the most positive results. "Continuous engagement with the families of the critically ill/ injured patient will provide insight into what is troubling them and will assist nurse practitioners to take a relevant and appropriate course of action" (Chien, et al. 2006: 40; Megens & van Meijel, 2006:704).



⇒ **Stabilisation**

Stabilisation is described as the maintenance of the family systems' present level of functioning. Appleyard et al. (2000:42) contend that nurse practitioners should try stabilising those families who are effectively supporting each other. Not all families will need intervention as some are highly differentiated with a well-balanced family system. Under such circumstances, affected families may only be provided with information. Stabilisation can also be fostered by pointing out to the affected families that a critical illness/injury can cause strain and is stressful for everyone. The affected families should be reassured and be given an opportunity to verbalise their concerns and fears. Given control over some elements of hospitalisation can also enhance stabilisation (Appleyard, et al. 2000:42).

⇒ **Contrast**

Another way in which the nurse practitioners can offer support to the families of the critically ill/injured patient is through a process of contrast. Appleyard et al. (2000:41) note that contrast is a crisis intervention strategy that involves condensing of all the family resources. The primary family members of the critically ill/injured patient may experience an overload of too much input or involvement from the extended family members or friends trying to help them. This might prove too much to deal with. In such cases, the nurse practitioners can provide a platform from where everyone's concerns or anxieties can be heard and all the problems can be solved amicably. The extended family members and friends who want to be supportive can be assigned tasks that can bring relief to the primary family members, for example, handling phone calls or doing some chores while the primary family members keep vigil over the critically ill/injured family member (Appleyard, et al. 2000:41).

⇒ **Expansion**

The third way in which the nurse practitioners can foster support to the family system is through expansion or enlargement of the family support base. Expansion



can be attained by involving other support structures such as volunteers, pastors or support groups. Interventions that are beyond the scope of the nurse practitioners should be referred to other interdisciplinary team members such as social workers or psychiatrists (Appleyard, et al. 2000: 42).

2.4.2.2 Written information

Gavaghan and Carroll (2002:68) postulate that the informational needs of the critically ill/injured patients' families may be met by providing educational programmes, which can orientate them to the A&E unit policies, and make them aware of the availability of support groups and structures. Educational material can include information pertaining to what family members can expect when visiting the unit and a description of the personnel attending to the critically ill/injured family member.

2.4.2.3 Support groups

According to Appleyard et al. (2000:41), several studies have shown that the families of the critically ill/injured patient need hope to adapt well to the crisis situation. The nurse practitioners' crisis intervention strategy that can significantly influence acceptance and adaptation of families is the support of social groups. A study that was conducted to test and appraise the effectiveness of the family support groups on stress clearly demonstrated the positive effect social groups had on reducing families' anxieties. Social groups provided the affected families with a platform for opening up by expressing their innermost feelings, and gathering information that assisted them in reducing their anxieties (Appleyard, et al. 2000:41; Gavaghan & Carroll, 2002:68).



2.4.2.4 Flexible visiting hours

Clarke (2000:331) and Goodell and Hanson (1999:59) agree that the policies on visiting hours in critical care units and other acute care units were first put in place to allow the nurse practitioners to provide uninterrupted care to the critically ill/injured patient, and to further allow sufficient rest to the patient. In the A&E unit, the first few hours following the critical illness/injury requires the nurse practitioners to give their undivided attention to stabilising the life-threatening conditions (Redley & Beanland, 2004:95). This means the affected family's proximity needs are not being met.

Appleyard et al. (2000:42) report that a study conducted to investigate the experiences of the critically ill/injured patients' families with unrestricted visiting hours, indicated more satisfaction in the families' proximity needs. Unrestricted visiting hours and an increase in visiting times strengthened nurse-family relationships and improved family coping skills. The working partnership between nurse practitioners and the affected families is believed to foster adaptation and crisis resolution among family members who find themselves in a crisis situation (Chien, et al. 2006:40; Stayt, 2007:625).

2.5 FAMILY RESILIENCE FRAMEWORK

The inherent resilience in individuals, families and communities allows them to overcome tragedy and ensure that future generations survive and are strengthened by the hardships they endure (Landau 2007:351). The concept of resilience emerged primarily from studies of children who functioned competently despite exposure to adversity when psychopathology was expected (Patterson 2002:345). Concurrently, researchers in other disciplines were noting similar competent functioning following exposure to risks. Family resilience can be examined from the perspective of family stress, where the focus draws greater attention to family success and competence (Patterson 2002:358).



Family resilience can be described as the ability of the family to weather and rebound from life's adversities (Walsh, 2002:8; Yunes, 2007:26). The Family Resilience Framework was developed as a conceptual map and strategy that can be used to guide clinical intervention and prevention efforts for vulnerable families.

The main objective for developing such a framework was to understand the variables responsible for family functioning and individual resilience in times of adversity. Nichols and Schwartz (2000) cited by Walsh (2002:1) report that the field of family therapy has over two decades refocused its attention from family deficits to family strengths. The therapeutic collaborations "are more effective when tapping family resources than depending on therapist technique" (Walsh, 2002:3).

Family resilience does not only involve dealing with stressful situations or surviving an ordeal, but also recognises the potential for personal and relational changes and growth that can emanate from adversity. The family resilience key process "encourages the family in crisis to emerge stronger and more resourceful from their period of turmoil through shared efforts" (National Network for Family Resiliency, 1995:5; Walsh, 2003:1; Yunes, 2007:27).

Assessment and intervention are not directed at the cause of the problem, but on ways to solve the problem. The family resilience intervention is achieved by identifying and amplifying the existing and potential competencies of the family. The working together of the therapist and the client as partners enables them to find new possibilities in a crisis situation, thus enabling the family to change and grow from strength to strength (Walsh, 2002:8; Yunes, 2007:27).

The family resilience approach to a problematic situation focuses on eliciting the best from a hopeless situation while enhancing the functioning and well-being of the family unit. According to Walsh (2002:8), the family resilience approach "is guided by the conviction that the crisis situation and persistent challenges affect the whole family, while the key family process facilitates the recovery and resilience of the vulnerable members as well as that of the family unit". The main aim of



fostering the Family Resilience Framework is to lessen the pathology and dysfunction and to enhance functioning and well-being. Strategies such as these “have the potential of benefiting the whole family unit as they strengthen relational bonds” (Walsh, 2002:8).

According to Yunes (2007:26) the family resilience approach to care focuses on “adaptational processes over a period of time, from ongoing interaction to the passage of the family life cycle and the multigenerational influences”. Unresolved stress and life crises can have a crippling effect on the functioning relationship of the family unit as well as on its individual members.

The conditions in which the family system develops and functions are mainly influenced by its surroundings (Walsh, 2002:8; Yunes, 2007:26). The family system is viewed as “an open system and part of the larger community and society which functions in accordance with its broader rational life cycle”. Beckett (2000:1) maintains that some families are less likely to cope with the stress of the situation. This can be attributed to unsuccessful attempts to cope with stressful life experiences, possibly due to biological or sociocultural issues.

The advantage of using a Family Resilience Framework in clinical practice to assess families under stress, according to Walsh (2002:8), is that the assessment is aimed at encouraging resilience rather than on identifying the causes of stress. It is imperative that during the assessment of the family system, factors such as family values, resources, relationships and hardships be taken into consideration, as these have a direct impact on how the family reacts to stress. The family resilience approach is based on the assumption that families have a strong belief in their potential to recover from, and even thrive in, the face of adversity (Beckett, 2000:2; Walsh, 2003:5). The clinicians and nurse practitioners using the resilience-based *family-centered-care* approach, motivate clients to accept their situation and encourage the latter’s healing and problem-solving skills. Simply put, clients are encouraged to seize opportunities and handle situations effectively (Walsh, 2002:8; Flannery, 1999:244).



Walsh (2002:8) indicates that the Family Resilience Framework as a multipurpose framework can be used widely to solve a variety of problematic situations. In this study, it was applied in the context of critical illness/injury. The Family Resiliency Framework can “also be used with other models of interventions, as it offers a conceptual map that identifies and targets key family processes that reduce the risk of dysfunction. It also acts as a buffer against stress, and encourages healing and growth” (Walsh, 2002:8).

2.5.1 Principles of resilience

According to Slattery (2006:1) the effectiveness of family resilience depends on the specific principles including meaning, meaningful relationships, participation, personal power, positive sense of oneself, others’ positive expectations and hope.

Each of these elements will be discussed in Sections 2.5.1.1 to 2.5.1.7.

2.5.1.1 Meaning

What really matters when people try to find meaning in every situation, is for them to have a sense of purpose in who they are and what they do. Families of the critically ill/injured patients are confronted with crisis situations. Thus, in order to find meaning in the whole situation, they have to be encouraged to find strength from their existing resources (Slattery, 2006:1).

2.5.1.2 Meaningful relationships

Meaningful relationships are fostered by interaction with others in mutually fulfilling, supportive and uplifting ways beneficial to all concerned. The nurse practitioners are encouraged to form meaningful relationships with the families of



critically ill/injured patients by adopting a nurse-family relationship (Slattery, 2006:3). This can be promoted by treating the affected families as partners in care.

2.5.1.3 Participation

Being actively involved in events, rather than passive onlookers, encourages trust and eases tension; it makes people happy and makes them feel good. Studies indicated that the families of critically ill/injured patients had voiced that they wanted to participate in the care of the patient (Hupcey, 1999:253). It is, therefore, essential that the nurse practitioners involve the families of the critically ill/injured patients in the care of their ill family members.

2.5.1.4 Personal power

People with the ability to take control of their lives experience a sense of power which enables them to tackle life's adversities with confidence. Levine and Zuckerman (2000:11) postulate that the autonomy of the families of the critically ill/injured patients must be recognised and respected. The affected families must be provided with a platform to voice their fears and concerns without fear of victimisation. Tapp (2000:69) cautions the nurse practitioners to resist the notion of regarding themselves as the experts. They should start recognising the families of the critically ill/injured patient as experts in their own right.

2.5.1.5 Positive sense of self

A positive sense of the self implies more than self-esteem. It involves a deep sense of worth, belonging and of being in charge of one's own life. The results of the study by Stayt (2007:623) in which nurses' experience in caring for families with a relative in a critical care unit (CCU) were explored, clearly indicated the importance of encouraging a positive sense in the affected families by helping them to see a crisis situation as manageable. Affected families should be reassured.



2.5.1.6 Others' positive expectations

People tend to flourish and find encouragement in being expected to perform well. The families of the critically ill/injured patients can be encouraged to concentrate on the positive aspects of their lives by capitalising on their strengths rather than on their shortcomings (Davidson, 2009: 33).

2.5.1.7 Hope

People need a coping mechanism that fosters belief in positive outcomes, and involves faith in improvement (Slattery, 2006:1). Most of the studies pertaining to the needs of the critically ill/injured patients' families, indicated hope as indispensable. Fontana (2006:222) notes that hope was the most important need experienced by the affected families. Hope has been mentioned in literature as one of the coping mechanisms used by families in crises. The nurse practitioners can foster hope in the affected families by constant encouragement and by being active listeners.

2.5.2 Family functioning key processes

The Family Resilience Framework offers "a conceptual map that identifies and targets key family processes that reduce the risk of dysfunction" (Walsh, 2002:4). The three key processes within the domain of family function, according to Walsh, are: the family belief system, organisational patterns and the communication process.

2.5.2.1 Family belief system

The family belief system, consisting of shared beliefs, generates resilience by promoting a positive and hopeful outlook, by providing spiritual values and finding

meaning and purpose in stressful situations. Affected families can be helped to stand together by being made aware of the crisis situation as a shared challenge to be tackled. Making a crisis situation comprehensible, manageable and meaningful can soften the family's reaction to a crisis situation and lessen the sense of guilt, blame and shame that usually follows the critical incidents (Yunes, 2007:26).

2.5.2.2 Organisation patterns

According to Walsh (2002:4) resilience through organisation patterns can be fostered by reinforcing shared leadership, mutual support and teamwork to face life's challenges and adversities. Affected families can be helped to develop resilience by being assisted to navigate the disruptive changes and structural organisation associated with the critical illness/injury incident. Stability may be regained by the families by fostering resilience-based strategies to counter disorientating changes. Promoting behaviours "that reflect strong leadership, security, continuity and dependability" should be encouraged" (Walsh, 2002:4).

2.5.2.3 Communication process

Yunes (2007:27) maintains that encouraging emotional expression and collaborating problem-solving through communication, promotes resilience. Families should be helped to be proactive and resourceful, to shift from crisis-reactive mode to preparing for the future.

2.6 FAMILY STRESS THEORY

Although the Family Stress Theory is beyond the scope of this study, it is briefly discussed as it has an influence on the conceptual framework guiding this study.



Family Stress Theory is a theory that explains the dynamics of the families undergoing a stressful situation, such as a critical illness/injury. It is important for the clinicians and nurse practitioners to understand how and why the families of critically ill/injured patients react to stressful situations, so that the appropriate and relevant resilience-based strategies can be fostered (Walsh, 2002:6).

According to Beckett (2000:1) the use of the Family Stress Theory - developed by Reuben Hill in 1989 - is a model explaining why some family systems adapt and grow and even thrive when confronted by crisis events, while some crumble in similar conditions. Walsh (2002:8) maintains that "it is advisable for the clinicians and nurse practitioners in particular to assess the family functioning in the context of the multigenerational system, as it may lead to a variety of interventions". Holistic assessment of the family system also entails having background knowledge of someone you are dealing with – and applying that into practice. Sometimes the family system's background history may compel the nurse practitioner to involve several community based agencies such as churches or other larger systems in the care of the affected families.

Beckett (2000:2) points out that the Family Stress Theory was guided by the following underlying assumptions:

- o events that happen unexpectedly are usually perceived to be stressful;
- o the stress of critical illness/injury is more devastating and disruptive for the family when experienced from within than outside the family system;
- o being exposed to a stressful situation for the first time evokes feelings of shock and helplessness; and
- o unexpected stressor events are more difficult to handle than non-ambiguous events.

According to Beckett (2000:2) McCubbin and McCubbin modified the Family Stress Theory in 1989, and came up with the Resiliency Model of Stress, Adjustment, and Adaption. Beckett (2000:2) elaborates further that the same researchers defined family resiliency as "the ability of the family to respond to and eventually adapt to



the situation and crisis encountered during the family's life cycle." The two researchers also maintain that "the role of the nurse practitioners within the Family Stress Theory, is not only to promote family health and facilitate recovery from illness, but also to offer support, aid family strength, connect families with community support and to assist families to arrive at a realistic appraisal of what is considered best in their particular situation" (Beckett, 2000:1). A resilience-based approach such as *family-centred-care* has the potential of enabling the affected families to adapt well to the stress of critical illness/injury.

The Resiliency Model of Stress, Adjustment and Adaptation describes family adaptation as the outcome of the family's endeavours over a period of time to normalise the situation on two levels, namely the individual to the family and, secondly, the family to the community (Beckett, 2000:2).

2.7 LEVELS OF DYNAMIC SUPPORT SYSTEM

The two levels of the dynamic support system are depicted in Figure 2.1. From this figure, it is evident that resiliency in an individual is a combination of heredity, learning and support systems in the school, church or community structures that establishes competence and provides a value system (National Network for Family Resiliency, 1995:3). Individuals who are encouraged to be optimistic and resilient in life have a better chance of building up their confidence, consequently, this can result in improved relationships with friends and family. According to the National Network for Family Resiliency (1995:8) individuals who lack resilient behaviour can be encouraged to be proactive in dealing with the stress of critical illness/injury; this in turn, can result in an improved self-esteem, self-efficacy and an increased sense of responsibility.

Figure 2.1: Two levels of the dynamic support system (*Adopted from the National Network for Family Resiliency, 1995:3*)

Resilience in individuals affected by the stress of critical illness/injury means they become optimistic and resourceful, and exhibit a sense of determination in dealing with the crisis situation. The National Network of Family Resiliency (1995:8) postulates that an individual's resilience is learnt at home and in the community - what the nurse practitioner has to do is just to reinforce the already existing structures. What this implies is that the working together of the individual members of the family and the nurse practitioners in appraising the stress of critical illness/injury can be easily attained.

Resilient families have the ability to cultivate strengths to meet the challenges of daily life positively (National Network of Family Resiliency, 1995:5). Families who



have learnt to cope with the challenges of life will be in a position to positively deal with the stress of the critical illness/injury. Resilience in families can be fostered by encouraging them to solve problems by cooperation, being open to one another and to recognise the role of social support structures in the community if need be. The family's ability to recover from crises is mostly influenced by other life stressors and their own perceptions towards life (Beckett, 2000:3). The "family's adaptation to long-term stress and crisis, is influenced by their: goals, values, problem-solving skills, and community support networks. Commitment, appreciation, time together, communication, faith and values, and coping skills have been identified as traits in healthy families" (National Network of Family Resiliency, 1995:8). These traits result in families being highly differentiated.

Beckett (2000:2) assesses that family resilience includes "characteristics, dimensions and properties which help families to be resistant to disruption in the face of change and adaptive in the face of crisis situation". Resilient behaviour is crucial for the most vulnerable families facing a crisis situation such as a critical illness/ injury. According to National Network of Family Resiliency (1995:5), there are three characteristics central to healthy families, namely:

- **cohesion**: facilitates togetherness and individuality;
- **adaptability**: balances flexibility and stability; and
- **communication**: this should be clear, open and consistent.

2.8 FAMILY RESILIENCE-BASED PROGRAMMES

The National Network of Family Resiliency (1995:5) points out families can be helped to be resilient by being encouraged to cultivate their strengths to meet the challenges of life positively. There should also be programmes in place that can be used to support the families in crises situations.

According to the National Network of Family Resiliency (1995:5) the following elements are recommended for effective family resilient programmes:

- **community based:** children and individuals should be recognised as part of the family unit and the community, as communities who are involved in neighbourhood activities respond well to the needs of individuals and the families;
- **comprehensive:** for the programmes to be effective, it must be comprehensive and focus on services that address the education, health, social and emotional needs of individuals, parents and children;
- **empowering:** the clients/families should be empowered so that they can manage and shape their own interventions;
- **complex:** the focus must be on early intervention and crisis prevention. Intervention must be aimed at addressing the causes, not the symptoms;
- **culturally relevant:** it should be culturally sensitive, so that barriers can be addressed;
- **collaborative:** it should involve all the stakeholders or multiple agencies and organisations for them to be effective;
- **respectful:** interactions between clients and providers should be on a one-to-one basis and the clients' autonomy should be recognised and respected;
- **intergenerational:** providing survival skills can help families acquire a resilient approach to problematic situations; and
- **accountable:** it needs to be assessed regularly to be in-line with changing times.

2.9 APPLICATION OF THE FAMILY RESILIENCE FRAMEWORK

Applied within the setting of critical illness/injury, the family resilience-based approach to care can assist the nurse practitioners to assess and target the family processes that reduce the risk of dysfunction, minimise stress and encourage healing and growth from the crisis situation. Family resilience orientated

intervention is directed at minimising family vulnerability. The Family Resilience Framework focuses on the family coping capabilities and adaptational pathway in dealing with recovery from a stressful situation such as critical illness/injury. The Family Resilience Framework which guided this study is depicted in Figure 2.2.

2.9.1 Overview of the key concepts

The key concepts of the conceptual framework as it applies to the A&E unit are discussed next.

2.9.1.1 Critically ill/injured patients' families

The families of the critically ill/injured patient form the centre focus of this study and are viewed in the context of the Family System Theory. A critical ill/injury of one family member affects all members of the family.

2.9.1.2 Critical illness/injury as a stressor

Critical illness/injury is recognised in literature as a major stressor. Its impact on the critically ill/injured patients' families has devastating repercussions.

2.9.1.3 Crisis situation

A critical illness/injury has catastrophic effects that often cripple the families' equilibrium and has the potential to precipitate crises even within a stable family system.



Figure 2.2: A Family Resilience Framework (*developed by author, from the work of Walsh, 2002: 1-18*)



2.9.1.4 Needs

The paces at which the events of critical illness/injury unfold in an A&E unit create specific needs for the families. Specific interventions by nurse practitioners are required to address these needs.

2.9.1.5 Nurse practitioners

Due to their close proximity to the patient at all times, nurse practitioners are in a position to address the needs of the patients and their families during the crisis situation.

2.9.1.6 Family-centred-care versus patient-centred-care

Family resilience-based interventions such as *family-centred-care*, has been found to be the best way of addressing the needs of the critically ill/injured patients' families as opposed to *patient-centred-care*.

2.9.1.7 Stress pile-up

Failure on the part of the nurse practitioners to address the needs of the critically ill/injured patients' families, results in stress pile-up.

2.9.1.8 Family coping

On the other hand, appraisal of the crisis situation by fostering the resilient-based intervention to assess the families' needs and to facilitate family coping mechanisms prevents stress pile-up.



2.9.1.9 Adaptation versus maladaptation

Family-centred-care is aimed at achieving resiliency outcome processes such as family adaptation rather than maladaptation. The outcome of adaptation is a resolved crisis situation, resulting in a resilient family; the outcome of maladaptation is an unresolved crisis situation resulting in a family suffering from the aftermath of the crisis situation such as PTSD.

2.9.2 Characteristics of the conceptual framework

On the bottom left-hand corner of the conceptual framework, a box of keys explains the meanings of the different symbols used in the framework. It should be noted that the conceptual framework can be read from the left-hand side or vice versa. Both directions explain the different cascade of events that took place following the onset of the critical illness/injury, and the pathway of emotions that led to adaptation or maladaptation experienced by the affected families while dealing with the stress.

The outcome of the emotional pathway was either adaptation or maladaptation and depended on the initial approach of care provided by the nurse practitioners to support the critically ill/injured patients and their families. Fostering of the *family-centered-care* result in the emotional pathway leading to adaptation, consequently, the resilient family; *patient-centered-care* lead to maladaptation.

The characteristics of the conceptual framework, their relationships and the effects of the two nursing care approaches, namely *patient-centred-care* and *family-centred-care*, are summarised in Table 2.1.



Table 2.1: Needs assessment of families: *patient-centred-care* versus *family-centred-care*

Needs assessment	
Through <i>patient-centred-care</i>	Through <i>family-centred-care</i>
The critical illness/injury as a stressor and its impact on the family unit viewed in the context of the Family System Theory	The critical illness/injury as a stressor and its impact on the family unit viewed in the context of the Family System Theory
The critical illness/injury considered as a crisis situation	The critical illness/injury considered as a crisis situation
Affected families predisposed to needs	Affected families predisposed to needs
Unmet needs results in stress pile-up	Identified needs enable the affected families to appraise and to cope effectively with the critical illness/injury
Affected families' maladaptation to the crisis situation	Affected families adapting well to the crisis situation
Long-term effects of the unresolved crisis situation predisposing the affected families to post-traumatic stress	The resolved crisis situation resulting in the affected families being resilient
The outcome of the whole situation resulting in non-resilient families	The outcome resulting in resilient families

The interpretation of the framework from the left-hand side indicates the impact the critical illness/injury had on the family unit accompanying the critically ill/injured patient to an A&E unit. Critical illness/injury has been reported to have catastrophic effects that can precipitate crisis even within a stable family system (Goodell & Hanson, 1999:87). A patient-centred approach to care provided by the nurse practitioners in the A&E unit where the study was conducted, seemingly failed to acknowledge that the affected families were also in crisis. The families of the



critically ill/injured patient were left alone to deal with the stress of the situation in their own way. The crisis situation resulted in them having unmet needs. This led to a point where the stress piled up to the extent of them not being able to adapt well to the situation. The resulting outcome of this, was maladaptation. It is possible that this unresolved crisis situation could later present itself as PTSD.

The interpretation of the conceptual framework from the right-hand side also indicates the different cascade of events following the onset of critical illness/injury and the emotional pathway the families experienced while trying to deal with the stress of the situation. The difference here is that the nurse practitioners provided a resiliency-based approach to care - *family-centred-care* - to support and strengthen the vulnerable family unit. The nurse-family interaction that occurred in this case, allowed the nurse practitioners to assess the family's coping capabilities and detect dysfunctional patterns that could retard progress. Working together, the nurse practitioners and the family unit were able to find new possibilities to appraise the situation. By getting back their strength, the affected families were able to cope effectively, adapt well and face the challenges brought on by the crisis situation. In the end, the resolved crisis situation resulted in a resilient family who was prepared to face present and future challenges.

It should be noted that the *family-centred-care* advocated by this study, is considered the most effective resiliency-based crisis intervention strategy that should be used to foster support and facilitate the functioning of the family system going through a crisis situation such as a critical illness/injury.

2.10 CONCLUSION

In Chapter 2 of this study a discussion of the Family Resilience Framework as a conceptual framework guiding this study, was presented. The literature review on the Family Resilience Framework indicated that the Family Resilience Framework can be used as an excellent conceptual framework in clinical practice to foster



prevention and intervention efforts, and to support and strengthen the families in crisis, like those experiencing the stress of a critical illness/injury. The Family Resilience Framework also emphasised the importance of viewing the patients' families in the context of the Family System Theory. The advantage of applying and managing a major stressor such as a critical illness/injury in the context of the Family System Theory is that it can assist the nurse practitioners to understand the responses of individual members within the context of the family unit.



3. LITERATURE REVIEW

3.1 INTRODUCTION

Chapter 3 of this study discusses the literature review conducted concerning the needs of the critically ill/injured patients' families in an A&E unit. A literature review, according to Brink et al. (2006:67), is an organised written presentation of published research topics, of which the purpose is to convey what is known currently about the phenomenon of interest to the researcher. According to Polit and Beck (2006:133), a literature review provides the readers with the background and current knowledge on the research topic and can also play a major role for nurse practitioners who wish to provide evidence-based practice in clinical settings.

De Vos, Strydom, Fouche and Delport (2002:127) state the importance of the review of literature as follows:

- it assists researchers to select sources relevant to the topic;
- it assists the researcher to identify loopholes or deficiencies in the topic and determine better methodology;
- it enables the researcher to demonstrate current knowledge of theories and accepted definitions of key concepts in his or her study;
- it prevents unnecessary duplication;
- repetition of the topic is avoided by conducting a literature review; and
- at the same time this saves time and money for the researcher.

The researcher conducted the literature review with the aid of computer assisted database bibliographies, namely Medline (Ovid) and Cumulative Index to Nursing and Allied Health Literature (CINAHL). The use of other search engines such as



Google and Yahoo were also employed throughout the study to conduct an extensive literature review.

The literature review of this study focuses on the needs of the critically ill/injured patients' families in an A&E unit. The literature searches conducted conveyed that the topic has been extensively researched in the critical care unit (CCU). Therefore, the literature search was broadened to include the needs of the critically ill/injured patients' families in general, providing the best approximation of what the families of the critically ill/injured patient consider as important to them. This literature review therefore includes studies conducted in a CCU, other acute care units and paediatric CCU's.

The researcher was further motivated to include these studies by the assertion made by Picton (in Hallgrimsdottir, 2000:613) that even though studies with family needs in the CCU and other acute care settings are not directly comparable due to differences in the settings and the cultures, they somehow make general comments about the family's caring needs when the patients' condition is critical and can therefore be transferred to the A&E unit. These studies were therefore included in order to increase the comprehensiveness of the review, in light of the limited number of existing studies within the A&E units.

The review was primarily based on the Family Resilience Framework and utilised as the conceptual framework which guided this study (see Section 1.8.3). The specific concepts constituting the Family Resilience Framework such as the family unit, family needs, impact of critical illness/injury on the family and *family-centred-care* were covered and are discussed.

3.2 FAMILY UNIT

Addressing the health care needs of the critically ill/injured patients' families falls within the scope of practice of an A&E nurse practitioner (Kamienski, 2004:60).



However, determining who is considered family can prove difficult for the nurse practitioners, especially if they have to decide whom to include in the discussions and nursing interventions. Kamienski (2004:60) points out that, in light of the various definitions of family – and how people define themselves - and regulations regarding the release of information, the decision has implications for an A&E nurse practitioner. Despite this dilemma, the A&E nurse practitioner has the responsibility to conduct the family assessment in order to identify the strength of each family member and the family as a unit, as well as the external resources that can help them to cope with the stress of the critical illness/injury (Kamienski, 2004:60).

According to Lee et al. (2000:47), the traditional way of viewing a family as those related by blood, does not apply in today's times. It is frequently stated in literature that the concept 'family' can take many different forms. The family, according to several authors (Lee, et al. 2000:47; Leske, 1998a:130; Levine & Zuckerman, 2000:8), can be defined as those individuals whom the patient him- or herself considers as family; those with whom he or she shares interpersonal relationships characterised by a sense of belonging and strong mutual commitment. Kamienski (2004:60) describes family health as a "dynamic, changing, relative state of well being including biological, psychological, spiritual, sociological, aesthetic and cultural factors of the family system".

Levine and Zuckermann (2000:8) point out that the concept 'family' can pertain to a nuclear family, an extended family or a step family. For most people, the concept 'family' evokes images of a nuclear family which, according to today's standards, limits what can constitute a family unit. They describe a family as "members who by birth, adoption, marriage or declared commitment, share deep, personal connections and are mutually entitled to receive and obligated to provide support of various kinds to the extent possible, especially in times of need" (Levine & Zuckerman, 2000:8). The same researchers made recommendations that the health care professionals should cultivate an understanding of family dynamics through the acquisition of education and skills. Part of an educational process should entail a greater appreciation of the changing structures of families and the



many different ways in which people form both commitments and relationships. Other aspects of education should include learning the cultural beliefs and traditions of the different ethnic groups. It is essential for people to become conversant with the diverse views concerning homosexuality, partnership, single parents, unmarried couples, mixed race marriages and traditional relationships. (Levine & Zuckerman, 2008:8). This knowledge base can prove helpful to the nurse practitioners and other health care workers when caring for families of the critically ill/injured patients.

Leske (1998a:130) supports the abovementioned assertion and holds that the term 'nuclear family' originally meant "a family unit composed of a husband, wife and children. Nowadays, the term nuclear family also refers to couples without children, single parent households, reconstituted families of second marriages, homosexual couples and people living in communes". Leske (1998b:92) postulates that it is common in today's times to find people who are not biologically or legally related living together. Leske (1998a:130) cautions that using the traditional nuclear family as a standard for family assessment and treatment can discriminate against others and set up a hierarchy where some families are valued more than others. The assessment and treatment of the critically ill/injured patients' families should rather focus on who 'the family' say they are.

It is reported in the Swedish Society of Nursing (2004:7) that a working group was appointed by the Swedish advisory council society of nursing to prepare for a working conference, of which the theme was the needs of families in the context of care. The working group was also tasked with an assignment to come up with a better description of a family unit. The main aim of the working conference was to identify the needs of the family members when one of them is affected by illness. The theme was chosen due to its significance within nursing, and again as an area of great interest to the members of the public (Swedish Society of Nursing, 2004:7).



The working group started by trying to define the concepts 'family member' and 'family unit'. A total of 470 scientific articles were consulted to come up with the definitions. The working group observed that the concept 'family' was used to an increasing extent as a substitute for a relative, or next of kin. The report indicated further that the concept 'family member' afforded a wider scope when describing the care recipients' closest social network. Besides persons related by kinship, family members could include a friend, neighbour, or a person from the extended family, for example, a former wife's offspring. The report explained in detail that the term 'family member' was associated with a single individual, whereas several individuals could constitute a person's family members, thus constituting a system, often a 'family system', of which the patient is the centre (Swedish Society of Nursing, 2004: 13).

According to Gavaghan and Carroll (2002:66) the term 'family' has changed from implying only a spouse or children, and has expanded to include individuals who have a significant relationship with the patient. In South Africa the situation is not different from that in other Western countries. The families form the basic unit of the society and are made up of close-knit social units of nuclear and extended types of family units that provide both emotional and financial support to its members. More recently, as an area of great concern, South Africa and the sub-Saharan region have seen the emergence of households being run by children. This is mainly due to the scourge of HIV/Aids that continues to claim the lives of the parents of those children (Seshoka, 2005: 35).

The implications of understanding the concept of a family unit by a nurse practitioner is that they must be attuned to the different client populations visiting the A&E unit. It is imperative that every family unit should be assessed holistically and, consequently, be dealt with according to its own unique circumstances.



3.3 CARE OF FAMILIES IN ACCIDENT AND EMERGENCY UNITS

The rapid development of advanced technology and medicine gave rise to the emergence of A&E nursing some forty years ago (Jones, 1999:3). According to Redley and Beanland (2004:97), the A&E unit presents a unique challenge to both nurse practitioners and family members. The focus of care in the A&E unit is transient and directed at a wide range of situations such as stabilisation, life saving interventions and early transfer (Redley & Beanland, 2004:97).

The care of critically ill/injured patients within the A&E unit is a priority for the nurse practitioner; the family may be present but forgotten in the waiting area. This is in agreement with Wagner (2004:416) who states the initial management within the A&E unit focuses on the patient as a priority, with the staff often failing to recognise that the patients' families are experiencing a crisis along with the patient. The management of the critically ill/injured patient at this point in time is directed at stabilising the immediate and life threatening conditions. Wagner (2004:416) adds that the critically ill/injured patients' families are more able to cope with crises when their needs are met. Therefore, it is of utmost importance that their needs are taken into consideration when nurse practitioners wish to ensure optimal *family-centred-care*.

Clarke and Harrison (2001:62) maintain that family support plays a significant part in promoting progress and recovery. The critically ill/injured patients' family should therefore be allowed to contribute and be involved in patient care. Miracle (2006:122) asserts that these families often respond with confusion followed by anxiety. Their distress is exacerbated by the lack of support and information while waiting for the outcome of their critically ill/injured family member.



3.4 ROLE OF THE FAMILY UNIT DURING CRITICAL ILLNESS/INJURY PERIOD

According to Guilianelli et al. (2005:120) the families of the critically ill/injured patient have a positive effect on her or his response to treatment. They act as buffers for the patients' stress and serve as valuable resources for the patients' care (Gavaghan & Carroll, 2002:64; Stayt, 2007:624). However, when their stress levels are high, as is the case with a critical illness/injury, they may not be in a position to support the patient, and may transfer that stress to the patient. Should the crisis situation be allowed to continue without offering the relevant support, the family unit may experience a change in roles that could prevent them from functioning properly.

The Swedish Society of Nursing (2004:13) posits that disease and ill health affect the whole family. The family members have a key role to play in how a sick person perceives and copes with life situations. Bearing this in mind, research should therefore focus on the role of the family in nursing today, both as a resource and as a group of individuals with the right to have their needs satisfied within the context of care provided. Guilianelli et al. (2005:120) argue that the family remains the most important social unit for health care professionals to treat, and positively influence the patients' outcome.

In a study to establish the opinions of the family members and the staff on the family's participation in care of the critically ill/injured patient, Azoulay, Pochard, Chevret, Arich, Brivet, Brun, Charles, Desmettre, Dubois, Galliot, Garrouste-Orgeas, Goldgran-Toledano, Herbecq, Joly, Jourdain, Kaidomair, Lepape, Letellier, Marie, Page, Parrot, Rodie-Talbere, Sermet, Tenaillon, Thuong, Tulasne, Gall, Schlemmer and the French Famirea Group (2003:2) point out that the patients' family should not be viewed as the recipients of information, but should rather be provided with the opportunities for an active role. The results of this study demonstrated that 70% of the family members who participated viewed their involvement in the care



of the critically ill/injured patient as natural. On the part of the staff who participated, 60% stated that the family members of the critically ill/injured patients should help in providing care, while 65.8% stated that the family members may cause unintended problems to the patient. Twenty-three per cent of the staff pointed out that involving the family members in care may worsen the family's already stressful situation. This in itself indicates the mixed perceptions of the nurse practitioners towards the role that the families of the critically ill/injured patient can play during the critical illness/injury period.

Levine and Zuckerman (2000:5) outline the reasons why the patients' family is essential to the modern health care delivery system. Several researchers hold the same viewpoint (Auerbach, Kiesler, Wartella, Rausch, Ward & Ivatury, 2005:202; Gavaghan & Carroll, 2002:64; Stayt, 2007:624). The roles played by the patients' family during a critical illness/injury period are outlined in Sections 3.4.1 to 3.4.4.

3.4.1 Family as critic or advocate

According to Auerbach et al. (2005:202), the family is often called to participate in crucial decision making processes. The family is therefore the patient's unofficial quality control agent. They think they watch out for the member by often criticising the individual staff and institution policies. In case of chronic illness, the patient's family monitors the medications and procedures because they are familiar with the specifics of the patient's care. The patient's family perceives this vigilance as necessary and emotionally meaningful. As "critics of care or unofficial quality control agents, the family is likely to request or demand attention or assistance beneficial to their ill family member that the attending staff may find inconvenient or outside their job description" (Levine & Zuckerman, 2000:11).



3.4.2 Family as providers of care

The patient's family is the provider of some care in the hospital; but particularly outside the hospital when the patient is discharged. The nurse practitioners may expect more hands-on care from the family such as helping with feeding or bathing of the patient. The family may sometimes play this role on their own when they feel that the attending staff is not doing enough to care for their critically ill/injured family member (Auerbach, et al. 2005:202; Levine & Zuckerman, 2000:11; Stayt, 2007: 624).

3.4.3 Family as witness

Levine and Zuckerman (2000:12) assert that the patient's family may be witnesses - though not in a legal sense but in the spiritual sense - of going through the process of illness with their ill/injured family member. For the competent but critically ill/injured patient, the family serves as a link to the outside world without the constraints of the institutional rules or parameters. The family creates, as far as possible, a 'homelike' environment in the hospital for the patient. Over and above all this, the patient's family generally acts or behaves in a way they regard as befitting to protect his or her welfare and interests by monitoring the patient's care to get the best possible outcome (Gavaghan & Carroll, 2002:64; Levine & Zuckerman, 2000:11).

3.4.4 Family as decision-maker

The role of the patient's family as the decision-maker is well recognised in literature by, amongst others, Stayt (2007:624) and van Horn et al. (2002:186). The patient's family is sometimes expected to make life changing decisions with which the rest of the family unit does not agree, for example, in a situation where the family member is expected to give informed consent when the patient has to



undergo an operation. Another example is when the family has to issue a 'do not resuscitate' order when the treatment modalities fail and the patient's condition is hopeless.

Miracle (2006:121) asserts that the role of the family is part and parcel of the patient's care. The same researcher emphasises the importance of forming a relationship with the patient's family. A nurse-family relationship can provide mutual trust between the staff and family, thus providing a basis for quality care to all concerned.

3.5 FAMILY NEEDS

According to Miracle (2006:121) research regarding the needs of the critically ill/injured patients' families first started in the 1970s. Most of the studies were conducted to determine the experiences and, more importantly, the needs of family members of acute and critically ill/injured patients. The majority of the studies were predominately quantitative and descriptive in nature. Only a few of these studies focused on the experiences in a qualitative way and in a broader sense. According to Chien et al. (2006:40) and Stayt (2007:624), a number of the studies were conducted in the USA, Canada, Europe and the Far East.

Miracle (2006:121) contends that the needs of the critically ill/injured patients' families were also explored under different settings. Examples of these studies include researches conducted by Bernal (2006:143) who studied the needs of the culturally diverse families; Tomlinson et al. (2002:161) and Wheeler (2005:56) who investigated the needs of the critically ill/injured patients' families in paediatric settings. Wilkens, White and O'Riordan (2000:42) studied the support needs of families caring for a relative in palliative care.

Other researchers took it a step further by developing strategies that the nurse practitioners can apply to properly identify and meet these needs (Astedt-Kurki,



Paavilainen, Tammentie & Paunonen-Ilmonen, 2001:373; Chien, et al. 2006:43; Guilianelli, et al. 2005:118; van Horn, et al. 2002:186). These studies can be divided into quantitative and qualitative studies. Before embarking on an extensive discussion of quantitative studies on the needs of critically ill/injured patients' families, a brief discussion on the background of the data collection instrument used in those studies – the Critical Care Family Needs Inventory (CCFNI) - is given.

3.5.1 Critical Care Family Needs Inventory

According to Browning and Warren (2006:87) and Miracle (2006:122) the concept of "relatives needs" in critical care settings has predominantly arisen from Molter's review of the literature in 1979 on the effects of serious illness on relatives. Molter continued and developed the Critical Care Family Needs Inventory (CCFNI), a questionnaire consisting of 45 needs statements that family members could rate on a 4-point Likert scale (Paul & Rattray 2007:278). The validity and reliability of this instrument was found to be satisfactory. The CCFNI has been used in many studies, several countries and in different settings (see Section 3.1). Various test applications using the CCFNI confirmed that the family needs identified by Molter remained constant (Kosco & Warren, 2000:61). See Sections 3.5.2 and 3.5.3.

It is worth mentioning that the structured interview schedule used in this study to assess and describe the needs of the critically ill/injured patients' families, was adopted from the CCFNI revised by Redley and Beanland (2004:95) for use in A&E units (see Annexure C). The CCFNI has been used widely over two decades to identify and analyse the needs of critically ill/injured patients' family in critical care units (Redley & Beanland, 2004:95). However, owing to the differences of care between the CCU and the A&E unit, its use as a needs assessment tool for use with families in the A&E unit, posed some recognisable challenges. The focus of care in a CCU is definitive in nature, while care within the A&E is often unpredictable and focuses on immediate and life saving interventions. Owing to this, Redley and



Beanland (2004:95) started the process of revising, adapting and reconstruction of the CCFNI instrument for use in the A&E unit.

3.5.2 Research on family needs

The needs of critically ill/injured patients' families have been investigated by means of quantitative and qualitative studies. The overall findings of the quantitative and qualitative research are summarised in Sections 3.5.2.1 and 3.5.2.2.

3.5.2.1 Quantitative studies

According to Browning and Warren (2006:87), in 1975 Hampe was the first researcher to investigate the needs of wives grieving for comatose patients. Hampes' studies influenced further research on the needs of critically ill/injured patients' families. According to Fontana (2006:222) and Davidson (2009:30) Molter set a trend by adopting a quantitative approach in conducting a descriptive exploratory survey to identify the needs of families of critically ill/injured patients in 1979. The research question of Molter's study was: "*What are the needs of families of critically ill patients?*" The respondents were asked to rank the list of needs according to order of importance. The top ten needs identified by the family members were to:

- **Priority 1:** feel there is hope;
- **Priority 2:** feel that hospital personnel care about the patients;
- **Priority 3:** have a waiting room near the patient;
- **Priority 4:** be called at home about the patients' condition;
- **Priority 5:** know the prognosis;
- **Priority 6:** have queries answered honestly;
- **Priority 7:** know specific facts about the patients' prognosis;
- **Priority 8:** receive information about the patient once per day;
- **Priority 9:** have explanations given in understandable terms; and
- **Priority 10:** see the patient frequently.



Chien et al. (2006:42) report that Leske (1991) took a step further and modified the instrument by conducting an exploratory factor analysis, and based on the findings, developed a CCFNI, utilising a 5-point Likert scale. The needs were grouped into five main themes:

- information
- assurance
- support
- comfort
- proximity

Other researchers used the multidimensional form of the CCFNI in their studies to identify the needs of families of critically ill patients (Al-Hassan & Hweidi, 2004:64; Kosco & Warren, 2000:61). These findings indicated that the most important needs of families were: assurance, proximity and information (Browning & Warren, 2006:88; Chien, et al. 2006:43; Redley, et al. 2003:92). Knowledge of family needs can assist the nurse practitioners in providing *family-centred* and holistic care to critically ill/injured patients and their families (Fontana, 2006:223).

Lee et al. (2000:46) conducted a study to explore the needs of families with a relative in a CCU in Hong Kong. A convenient sample of 30 family members was recruited to participate. The same researchers used a self-report modified Chinese version of 45 item needs of the CCFNI and semi-structured interviews were utilised to obtain an in-depth understanding of the family needs. The quantitative findings of the study demonstrated that assurance and information were the most important need categories. This revelation was similar to the results of the previously discussed quantitative studies (see Section 3.5.2.1), as it was confirmed that doctors and nurse practitioners were identified as best suited to meet the needs of families.

Using an A&E units' revised CCFNI, Redley et al. (2003:88) conducted a study aimed at appraising a systematic literature review relevant to identifying the needs of the family members who had accompanied the critically injured/ill patient to the

A&E unit. The information gathered was intended to act as an incentive for further research concerning the care of these families. The inclusion criteria of the reviewed studies utilised during the systematic literature review were studies:

- in which the nurse practitioners and the medical staff were the primary caregivers for the family members during the initial management of the critically ill/injured patient;
- in which the critically illness/injury of the patient was sudden or unexpected;
- that were conducted in real clinical practice; and
- that were designed to identify and test the intervention and meet the specific needs of adult family members who accompanied a sudden critically ill/injured patient to an acute hospital setting for emergency treatment.

The samples in the aforementioned studies were all adult family members, 18 years and older. The critically ill/injured patient included neonates, old people with acute medical and surgical trauma, and cardiac and neurological diagnoses. The characteristics were considered to be representative of the client population seen or cared for in an A&E unit. According to Redley et al. (2003:93) the five themes of family needs resulted from factor analysis and were subsequently delineated into the following five themes:

- **Assurance and meaning:** The need to elicit meaning from the experience of a family member's critical illness/injury, especially during the initial stages, ranked high in many of the reviewed studies (Redley, et al. 2003:93). This was partly attributed to the feeling of fear and loss of control, as those feelings are more profound during the early stages of the critically illness/injury. Family needs related to assurance and included: knowing what to expect, feeling of hope for survival, and protecting and maintaining the dignity of the critically ill/injured patient (Redley, et al. 2003:92).
- **Proximity:** The need to be close to the critically ill/injured patient was more profound during the initial stages of the critically illness/injury and lasted to a point until the patient's condition had improved (Redley et al. 2003:94).
- **Information and communication:** Despite the need for information being rated as very important by the families of the critically/injured patient, it was



not met in the A&E unit and CCU. The suggested interventions to assist the nurse practitioners in meeting the information need to include initiating early contact with the family and active listening skills (Azoulay, Pochard, Chevret, Lemaire, Mokhtari, Le Gall, Dhainaut & Schlemmer for the French Famirea Group, 2001:135).

- **Support:** Findings on the support needs indicated that it was not ranked as important as assurance, proximity and information. Support included measures such as encouraging expressing emotion, clearing up misunderstandings and uncertainties regarding the environment, and explaining procedures at the bedside. The suggested intervention to meet this need was to encourage the family member to seek help from support groups or to be referred to the relevant support structures, such as social workers and/or psychologist (Redley, et al. 2003:92).
- **Comfort:** The need for comfort was not ranked as important as the needs mentioned above. Those who rated comfort needs as important were older family members and those who had had previous experience of critical illness/injury. Suggested interventions to meet comfort needs would be providing interventions such as accessible toilet facilities, offering privacy and having a telephone nearby. Redley et al. (2003:95).

In a study conducted by Redley et al. (2003:606) to test the instrument, methods and analysis plan to assess the perceived needs of family members accompanying critically ill/injured patients to an A&E unit, and the perception of emergency staff (nurse practitioners and doctors) in meeting those needs. The results were found to be consistent with other similar studies investigating the needs of critically ill/injured patients' families. The result showed that 90% of the respondents rated the need for assurance and meaning as very important. The proximity need was rated very important by over 70% of the respondents. Redley et al. (2003:613) maintain that they were not surprised by this result, since proximity need dominates the literature on family needs in A&E units.



The communication need was also ranked as important but, surprisingly, the nurse practitioners were not available to convey the desired information to meet this need, and this resulted in the need for information not being met. Where support needs were concerned, doctors and nurse practitioners ranked high concerning availability to meet family members on arrival. This confirms what has already been suggested by other authors such as Gavaghan and Carroll (2002:65), Miracle (2006:122) and Verhaeghe et al. (2005:502) that the health care workers, especially the nurse practitioners and doctors, should avail themselves so that they can support the affected families.

In a descriptive exploratory study to identify and explore the perceived met or unmet needs of 30 adult family members in a medical CCU, Browning and Warren (2006:90) found the support need, that included items such as to have friends nearby and to be told what to do at the bedside, were met and highly ranked under 'always met'. The information need with items like to know how the patient is being treated medically, to know why things were done for the patient, to have a specific person to call at the hospital and to know what is done for the patient, were also met and ranked high by family members. The findings of this study demonstrated that families rank needs differently under different settings and in different circumstances.

Al-Hassan and Hweidi (2004:64) conducted a study to identify the needs of the Jordanian families of hospitalised critically ill/injured patients. A self-administered CCFNI instrument was administered to a 158 family members who visited the hospitalised critically ill/injured patients. The findings of this study revealed that more than 80% of the family members considered the assurance, information and proximity needs as very important. They rated the needs for support and comfort as the lowest.

In a study conducted by Alvarez and Kirby (2006:614) to review the literature on the needs of the families during their CCU experience, the sample size was not indicated. The literature review study included only the recent publications and

excluded literature on studies conducted in the paediatric setting. The findings demonstrated that the respondents ranked the information need as most important, followed by the proximity need. Alvarez and Kirby (2006:616) recommended open communication, improvement of waiting areas and unrestricted visiting hours as a way of meeting family needs.

In a study to explore the A&E unit nurses practitioners' perceptions and experiences of caring for the critically ill/injured patient's families, Hallgrimsdottir (2000:611) found that 91% of nurse practitioners stated that it was important for the families of the critically ill/injured patients to be cared for. It was also found that the nurse practitioners with high educational qualifications supported the need to care for the affected families. Another startling revelation was that information, reassurance and support were most often stated as very important for families by the nurse practitioners, whilst proximity was only perceived by 15% of respondents as one of the very important need for families. This finding is different from how the patients' families rated proximity as a very important need in similar studies, such as the study conducted by Redley et al. (2003:94). This confirms the assertion that, despite the needs raised by family members as important, nurse practitioners continue to provide care according to how they see fit.

3.5.2.2 Qualitative studies

Bond et al. (2003:63) used an exploratory qualitative descriptive design to explore the needs of the families of patients with severe traumatic brain injury. The researchers stated that the use of a quantitative approach as a single measure alone does not provide an adequate assessment of all the needs of families with critical illness/injury, as has been the case with the majority studies. A convenient sample of seven adult family members of a patient with severe traumatic brain injury of whom the Glasgow Coma Scale (GCS) was less than eight, was recruited to participate in the study.

Although each participant had unique situations and needs, the results of the study showed a content analysis of four common themes, namely need to know, need for consistent information, need to be involved in care and need to make sense of the experience.

⇒ **Need to know**

Bond et al. (2003:67) comment that all the participants voiced their need to know about their critically ill/injured family member's outcome. Family members voiced that they preferred to be told the truth about the patients' condition, even if the information compromised their need for hope. This theme is consistent with the need for information rated high by respondents in quantitative studies (Weslien, et al. 2005:19).

⇒ **Need for consistent information**

According to Bond et al. (2003:67) family members voiced their concern about the inconsistent information often received from the attending emergency staff (nurse practitioners and doctors). Some said that they would prefer to be given condensed uniform information to avoid confusion. This assertion is similar to what was found in the quantitative studies, namely that the families need consistent information preferably from one person (Alvarez & Kirby, 2006:615; Appleyard, et al. 2000:42).

⇒ **Need to be involved in care**

The findings demonstrated further the frustration experienced by some participants who preferred to have been consulted to offer help in whatever way they could. One participant was quoted as having said: *"If there's anything we can do physically tell us. The nurses have not volunteered that."* (Bond, et al. 2003:68). The need to be involved in care has been confirmed in the studies by, amongst others, Fontana (2006:229) and Hupcey (1999:253) who declared that the families of the critically ill/injured patients want to be partners, not spectators, in rendering care.

⇒ **Need to make sense of the experience**

The participants in the studies conducted by Fontana (2006) and Hupcey (1999) described how they tried to make sense out of the whole situation as the days passed. One participant was quoted as having said: *"It felt like a roller coaster. We didn't know how to handle the situation, we were told to prepare for the inevitable, and then the next minute we were told to wait."* This assertion is similar to what Fontana (2006:222) had found by comparing the experiences of the families as *"a ride in a roller coaster"*. The findings of Fontana's study indicated that the nurse practitioners continued to misinterpret the needs of the families of the critically ill/injured patients. For the nurse practitioners to provide a holistic approach to care when attending to these families, Bond et al. (2003:71) suggest they abandon the paternalistic model utilised by health care professionals. The nurse practitioners should rather focus on providing a *family-centred* approach to care.

In a phenomenological study conducted by Stayt (2007:623) where the nurse practitioners' experiences of caring for families who have a relative in CCU were explored, it was found that the nurse practitioners caring for such families face a fundamental conflict between role expectations and patient care. Stayt (2007:625) interviewed 12 registered nurse practitioners working in an adult CCU who were purposively sampled. The findings of this study were categorised as: defining the nurse practitioners' role, role expectation, and role conflict. The conclusion drawn from these findings was that the disparity between nurse practitioners' every day family care practices, and the underpinning theories, may contribute to occupational stress.

Lee et al. (2000:46) conducted a study to explore the needs of families with a relative in a CCU in Hong Kong. A convenient sample of 30 family members was recruited to participate. The same researchers used a self-report modified Chinese version of 45 item needs of the CCFNI and semi-structured interviews to obtain in-depth understanding of the family needs. The quantitative findings of the study demonstrated that assurance and information were the most important need categories. This revelation was similar to the result of the previously discussed

quantitative studies (see Section 3.5.2.1), as it was confirmed that doctors and nurse practitioners were identified as best suited to meet the needs of families.

On the contrary, the semi-structured interviews conducted by Lee et al. (2000) resulted in three specific family needs, namely cognitive need, emotional needs and physical needs.

⇒ **Cognitive needs**

The majority of the participants expressed their dislike of over generalised information. They preferred to be given information in a simple and understandable language so that they could understand what was wrong with the patient, and not be bombarded with medical jargon. Others prefer to receive information about the progress of their ill family members from the staff on a regular basis (Lee, et al. 2000:51). These findings are consistent with both qualitative and quantitative studies, in that families needed clear, consistent information.

⇒ **Emotional needs**

The majority of the participants voiced their concern about the fear and anxiety they experience, and stated that they depended on the support offered by nurse practitioners for their emotional needs Lee et al. (2000:51).

⇒ **Physical needs**

One third of the participants paid less attention to their physical needs, though they felt that they needed to be physically strong to enable them to offer support to their ill family member (Lee, et al. 2000:51).

The researchers, Verhaeghe et al. (2005:501), conducted a study in the form of a systematic literature review to explore the needs and experiences of the family members of the CCU patient in Belgium with particular focus on comatose patients. Forty-six of both qualitative and quantitative English publications were reviewed.

Verhaeghe et al. (2005:503) chose a new division in classifying the needs categories rather than using the factor analysis used in the majority of studies, and classified themes under five main headings, namely, assurance, proximity, information, comfort and support.

The systematic literature review, conducted by Verhaeghe et al. (2005:502), first started by summarising and categorising the quantitative research, followed by discussing a few qualitative studies. The same researchers, for the purpose of clarity, divided the 45 needs of the CCFNI into four main categories, realising that some needs can be placed in more than one category. The four categories are cognitive, emotional, social and practical needs.

⇒ **Cognitive need**

According to Verhaeghe et al. (2005:504) in almost all the reviewed studies, cognitive and emotional needs appeared among the five most important family needs. Information needs stood out in the majority of the reviewed studies. Information needs appeared to be one of the greatest needs of the family members of the critically ill/injured patient. Family members state that they prefer to receive information from the doctor, rather than from the nurse practitioner. Despite the research findings that the need for information is a priority, it remains clear that this need is not always met in the clinical setting (Verhaeghe, et al. 2005:503).

⇒ **Emotional need**

According to Verhaeghe et al. (2005:504) in almost all the reviewed studies, cognitive and emotional needs appeared among the five most important needs. In some settings, the need for hope and reassurance was greater than the need for information. The need for hope seemed to be greater in situations where the critical illness/injury was sudden and unexpected, and again when there were serious changes in the condition of the critically ill/injured patient, as opposed to cases of chronic illness (Verhaeghe, et al. 2005:503). In relation to the need for



reassurance, family members stated that they wanted to be sure that the patient was receiving the best possible care and was as comfortable as possible. The need for reassurance was also found to be more important for families of critically injured patients and patients presenting with neurological deficits than in the case of families of patients with other conditions. In addition it was concluded that the emotional needs focusing directly on one's own dealing with the situation, for example to be encouraged to cry and to talk about the situation, were ranked lower than other emotional needs. The main concern for family members was clearly for the patient, and not for themselves. Both doctors and nurse practitioners were found to generally underestimate the emotional needs of family members (Verhaeghe, et al. 2005:504).

⇒ **Social need**

Social needs are considered to be the needs that concern relationships between patients, his or her family members and friends. Reviewed studies indicated that social needs were considered less important than other needs. Verhaeghe et al. (2005:505) observed that the items related to the patients' need or benefit were scored highly by family members. This indicated that the needs that could benefit the family members counted less to them than those of the patients, which is supported by the view of Weslien et al. (2005:18). One example of a social need falling into the new category was the proximity need. The need for proximity was rated high by family members while the need to have other family members and friends with them was rated less important by the majority of the participants (see Section 3.5.2.1).

⇒ **Practical need**

According to Weslien et al. (2005:18) examples of practical needs includes comfort needs, such as a room with a working telephone, toilet facilities and refreshments. The participating family members found their own material needs least important. It was also reported by Weslien et al. (2005:19) that hospitals gave low priority to



meeting practical needs, for example, restricted visiting hours which were regarded by the hospitals as time consuming and burdensome in the sense that they awarded the nursing practitioners less time to attend to the critically ill/injured patients' needs. When Verhaeghe et al. (2005:506) reviewed the qualitative studies, the researchers distilled the results into four phases namely hovering, searching for information, tracking and gathering resources:

- **Hovering:** This can be described as standing around or waiting. Verhaeghe et al. (2005:506) and Walker (2001:19) assert that this waiting is characterised by the tension, stress and confusion that the family members experience while waiting to gain access to an A&E unit and/or until they can speak to the doctor or the nurse practitioner about the patients' condition. The family members are, at this point, unaware of their own needs, for example eating or sleeping, and also the lapse of time. The need for hovering is similar to the proximity need in quantitative studies (see Section 3.5.2.1).
- **Searching for information:** In this phase, the family members become more active to search for information with regard to the general condition and progress of the critically ill/injured patient. The family members usually look for somebody to have an honest discussion with until they get answers (Wilkes, et al. 2000:41). Meeting of this need, according to Verhaeghe et al. (2005:506) will allow the affected families to proceed to the next phase, namely 'tracking'. The family members in this study said that not knowing was the worst part, and that the intense feeling of anxiety and distress remained with them until sufficient information had been given.
- **Tracking:** According to Verhaeghe et al. (2005:506) in this phase the family members observed, analysed and evaluated every detail concerning patient care. They wanted to see their critically ill/injured family member comfortable and free from pain. The family members also wanted to observe the care given to the patient (Walker, 2001:18).
- **Gathering resources:** Verhaeghe et al. (2005:507) maintain that in this phase the family members found strength from outside sources as well as within themselves to provide support for the patient. They sought support, privacy and personal space. Burr (in Verhaeghe, et al. 2005:505) discovered that the two



major needs of “the need to protect the patient and the need to provide reassurance and support to the patient” were not represented in the CCFNI. These needs can be summarised as ‘maintaining vigil’. The need to gather resources entails a strong need to be with or nearby the patient in case something happens. The participants stated that they would not have been able to forgive themselves if something should have happened to their critically ill/injured family member while they were not there. This possibly explains why family members endure waiting without resentment. The “patient takes precedence,” is a theme that shows that all the family members’ energy is directed towards the patient (Verhaeghe, et al. 2005:505).

3.6 NEEDS OF CHILDREN AS PART OF THE FAMILY UNIT

Children are integral parts of the family system and are not exempt from the stress of critical illness of a family member (Cullen, et al. 2003:62). Research has shown that, just like adults going through a crisis situation, children too have needs of their own (Clarke, 2000:330; Clarke & Harrison, 2001:64; Shudy, Lihinie de Almeida, Ly, Landon, Groft, Jenkins & Nicholson, 2006:204; Wheeler 2005:56). Understanding and having knowledge of communicating with children as well as their developmental psychology will enable the nurse practitioners to foster specific nursing interventions based on each developmental stage (Wheeler 2005:58).

According to Clarke and Harrison (2001:64) nursing literature focusing on the specific needs of children visiting CCU and other acute care areas, originated in North America in the 1980s. The majority of these studies were in relation to siblings visiting the paediatric and neonatal CCU. Reports from these studies demonstrated no adverse effects on children visiting their critically ill/injured siblings. However, limited research was conducted with regard to children visiting family and friends in adult CCU’s and other acute care settings. The researchers point out that visits to these areas were found to benefit children in relation to



increased understanding and involvement in the crisis situation within the family units (Clarke & Harrison, 2001:64).

Shudy et al. (2006:204) reported that feelings of helplessness, guilt, separation and abandonment were also reported to be reduced when children were allowed to visit their adult critically ill/injured family member. It was found by Clarke (2000:336) that visiting provided the child with the reassurance that the critically ill/injured family member was alive, and had not left them permanently. Furthermore, the misconception about the hospital environment and the family members' critical illness/injury was reportedly reduced. Clarke and Harrison (2001:64) maintain that children, like adults, need information, reassurance and the opportunity to express and share mutual feelings with those close to them.

Clarke and Harrison (2001:64) holds further that the results of qualitative studies demonstrated that participating children perceived the critical illness/injury of a close family member as an overriding threat, producing feelings of vulnerability, intense emotions and physical illness. Other qualitative studies have shown that children who were mentally prepared in advance before visiting the critically ill/injured family member in a CCU, were not intimidated and frightened by what they saw (Clarke, 2000:331). Their fears were related to the possibility that their parents or family member might die, and not to the environment. They expressed the desire to know more about the situation.

According to Clarke and Harrison (2001:64) other findings from the pilot study using a quasi-experimental intervention, showed that the children who visited their critically ill/injured family member in adult CCU did not exhibit more negative behavioural and emotional changes than their peers who did not visit the adult CCU. The same authors suggest that the children visitation intervention programme, which incorporates coping behaviours and age appropriate developmental tasks, will enable the nurse practitioners to provide specific nursing interventions and also identify the needs of the children adequately.



Gavaghan and Carroll (2002:68) assert that children should be allowed to visit critically ill/injured family members in the CCU and other acute care settings, since isolating them will prevent them from coping effectively with the stress of critical illness/injury. According to Clarke (2000:331) denying the children the choice to visit their ill family member may predispose them to imagine and hypothesise about things that may be worse than reality.

3.7 CRITICAL ILLNESS/INJURY

The critical illness/injury of a loved one is considered a crisis situation that has a compound effect on the family system unit encompassed in the Family System Theory. This view is shared by Davidson, Powers, Hedayat, Tieszen, KonShepard, Spuhler, Todres, Levy, Barr, Ghandi, Hirsch and Armstrong (2007:608). A crisis is defined by Appleyard et al. (2000:41) as “an acute emotional upset stemming from a variety of sources that results in temporary inability to cope”. Noyes (1999:432) adds that a crisis is “a turning point when individuals face problems that cannot readily be solved using existing coping mechanisms”. A crisis intervention is based on the assumption that specific behaviours can be directly related to certain crisis events (Appleyard, et al. 2000:41).

According to Gavaghan and Carroll (2002:64) a crisis can endanger the family because of its negative influence on health; it can also benefit the family during the critical illness/injury period, because individuals may be more receptive to therapeutic interventions. Bond et al. (2003:64) state that an unresolved crisis situation can result in families having PTSD. Applying crisis intervention strategies can prevent this.

The families of the critically ill/injured patient undergo psychological crisis. Attending to their anxieties and concerns form an integral part of psychosocial nursing. In order to allay their anxieties, adequate and specific information that addresses their specific needs should be provided (Chien, et al. 2006:40).



3.7.1 Impact of critical illness/injury on the patients' families

A critical illness/injury has been found to have “catastrophic effects that often cripples a family’s equilibrium, and has the potential to precipitate crisis even within a stable family system” (Al-Hassan & Hweidi, 2004:64; Bernal, 2006:143; Hallgrimsdottir, 2000:611; Stayt, 2007:624). Studies have shown that families of the critically ill/injured patient undergo catastrophic feelings of shock, guilt, helplessness and confusion (Calleja, 2007:28; Chui & Chan, 2007:372; Noyes, 1999:427).

According to Redley et al. (2003:89) the impact of critical illness/injury is even worse and more devastating when the onset is sudden and warrants admission to an A&E unit. The affected families usually describe their ordeal as a crisis situation. If the nurse practitioner comprehends the impact a critical illness/injury can have on a family, it will enable him or her to understand how the family unit responds to the critical illness/injury and the dynamics thereof, as well as the ecological perspective related to the family system undergoing a crisis situation (Tomlinson, et al. 2002:161; Wheeler, 2005:56).

In an attempt to understand the impact of critical illness/injury on families, Auerbach et al. (2005:202) conducted a study on the assessment of satisfaction with needs that were met, signs and symptoms of acute stress disorder, perceptions of the health care team to the family needs, level of optimism and emotional distress in patient’s family members during critical illness. The purpose of the study was to assess the impact of critical illness/injury on the family members by determining the signs and symptoms of acute stress disorder. To achieve this, the researchers administered an acute stress disorder questionnaire and a brief symptoms inventory scale to forty families representatives of patients admitted in trauma CCU.

Auerbach et al. (2005:207) reported that the families of the critically ill/injured patient experienced moderate to high levels of emotional distress on admission.



The mean acute stress disorder (ASD) score of 44:65 was approximately at the same levels as those of patients admitted to a psychiatric unit for PTSD. Acute stress disorder is described as an acute form of PTSD that occurs in the early stages after exposure to a traumatic stressor such as critical illness/injury.

High levels of depression and anxiety have been reported in families of critically ill/injured patients (Auerbach, et al. 2005:203). Because of their indirect exposure to trauma, families may experience emotional distress only slightly less comparative to that of the patient. The results of Auerbach et al.'s study demonstrated the elevation in dissociative symptoms that serve as distinctive criteria for diagnosing ASD. The conclusion drawn from the study was that the families of the critically ill/injured patients suffer stress levels similar to those of PTSD.

Shudy et al. (2006:204) conducted a study on the impact of childhood critical illness/injury on the family. The study's design was a systematic literature review. A total of one hundred and fifteen reports were reviewed. Shudy et al. (2006:205) assigned five categories characterising the impact of critical illness/injury under the following themes: stressors, needs, impact on specific domains of psychology, physical and social, and coping and intervention. The reviewed reports showed the devastating effects the paediatric critical illness/injury has on the entire family (parents, siblings, and marital cohesion). The majority of the reviewed studies reported that the needs of the family such as nutrition, rest and communication, were not met. The permanent impact on siblings was also found to be detrimental (Shudy, et al. 2006:209).

Shudy et al. (2006:211) reviewed and evaluated twenty-seven studies to assess the impact of critical illness/injury on three specific domains, namely psychology, physical and social. The majority of these studies specified the physical and social impacts on families of children during the latter's critical illness/injury period and after discharge. The limitation of these studies, according to Shudy et al. (2006:205), was that they excluded non-English-speaking families, the sample was

largely whites and the mothers were married, thus excluding single parents. The impact of a critical illness/injury on the three particular domains are discussed in Sections 3.7.1.1 to 3.7.1.2.

3.7.1.1 Psychological impact

According to Shudy et al. (2006:211) eighteen of the reviewed studies described the psychological impact on the families of the critically ill/injured children. Six articles focused mainly on the impact on mothers. The results indicated that a higher percentage of mothers than fathers exhibited psychiatric disorder and symptoms and/or of PTSD on admission and after discharge of the child from the paediatric intensive care unit (PCCU). The reports also indicated an increase in psychological distress and a decrease in the well-being of mothers of critically ill/injured children when compared to the mothers of children with time-limited illness/injuries. Another finding from the report was that the parents of the critically ill/injured children received support more often from the health care professionals than those of children with chronic illness (Shudy, et al. 2006:211).

3.7.1.2 Physical health impact

On the aspect of physical impact, seven studies reported deterioration in the physical health of both mothers and fathers when compared to their adult peers (Shudy, et al. 2006:211). The physical reaction experienced by parents, were numbness, malaise, fatigue, headache and irritability. Other stress-related symptoms such as sleep deprivation, low energy, anxiety and loss of appetite were also found to be as a result of stress related to critical illness/injury (Shudy, et al. 2006:211).

3.7.1.3 Social impact

Shudy et al. (2006:211) state that, on the aspect of social impact, eighteen studies were evaluated. The researchers categorised the social impact of a critical illness/injury of a child on the family under several areas: economics, family roles, function, cohesion and interpersonal relationships. Arnevale cited by Shudy et al. (2006:211) found the attachment strength increased shortly after the admission of the critically ill/injured child to PCCU, and, at the same time, changes in relationships were more evident as the critical illness/injury became more severe. Over and above, a critical illness/injury was found to have a more negative impact on the social arenas than a positive impact. Only one study reported on the financial stress, employment loss and overall negative socioeconomic impact on families of the critically ill/injured child. Shudy et al. (2006:211) concluded by stating that the family functioning, adaptability and resilience are affected by many factors, such as family functions, before a critical illness/injury.

Fontana (2006:222) conducted a descriptive phenomenological study to describe the experiences of the families of a patient with a sudden life-threatening medical crisis. The researcher used a metaphor of a roller coaster ride to describe those experiences. The experiences of these families were equated to the beginning of a roller coaster ride of emotional ups and downs. The purpose of the study was to describe the experience of a sudden life threatening medical crisis from the family's perspective. According to Fontana (2006:225) the findings indicated the emergence of themes that formulated meanings. The metaphor of the roller coaster ride was evident as the participants described the ups and downs, the feeling and reality of having no control over the terrifying experience of a sudden life-threatening medical crisis. The emerging themes are tabulated and discussed in Table 3.1.

Table 3.1: Summary of the themes formulating meaning

Theme	Discussion
1. Inability to feel	The participants described how they suddenly found themselves strapped in a frightening path. They described the experience as not feeling real and how they felt numb, shocked and terrified
2. Terrified waiting	All the participants described how the waiting took its toll on them. Waiting to see whether their critically ill/injured family members would recover was exhausting and emotionally taxing.
3. Understanding the unspoken	The participants described how they could tell by the actions and attitudes of those around them whether the ride was slowing down or whether it was about to stop. Several participants described how they were able to read the severity of the situation by the tone of the nurse practitioners' and the attending physicians' voices and the expressions on their faces.
4. Controlled information seeking	Participants described how they dealt with seeking information. Some said they did not want to know the truth, others wanted to know the truth, but could then not handle knowing the truth. Some participants mentioned that they wanted information, but did not want answers to certain questions for fear of what the answers would do to them; for example, answers that would make them lose all hope.
5. Protecting others	Participants described how they had to deal with their fears, hiding them from other family members; for example, like hiding certain details from children in an effort to protect them.
6. Isolated and alone	Participants described how they realised that they were alone on that ride, despite having the support of other family members and friends. They said that they felt alone because they knew that those offering them support did not feel what they were feeling.
7. Busy mode	Participants described how being idle was getting to them. They wanted to keep themselves busy just to keep their minds away from the crisis situation.



Theme	Discussion
8. Fighting the system	All of the participants described how they had to advocate for their loved ones and the difficulties they faced trying to negotiate for the best possible care, especially when cost containment overrode the patient's needs.
9. The saturation point	All the participants described the physical and mental exhaustion they experienced when the ride was coming to an end. They described how they felt sick themselves and needed treatment.
10. A new normal	The participants described how they felt at the end of the ride, when the roller coaster had stopped. All of them knew that the experience had left an everlasting impact on their lives that changed altogether. They all said that they could not go back to the way things were before the onset of the critical illness/injury.

Knowledge of what the family in crisis goes through is an initial step in the right direction to provide appropriate care for both the patient and the family (Stayt, 2007:625). In addition, Fontana (2006:223) points out that understanding of the impact of a critical illness/injury on the family unit will enable the nurse practitioner to assess the situation holistically and provide the relevant crisis intervention strategies. It is crucial for the nurse practitioners working in an A&E unit to be conversant with the theory behind critical illness/injury so that the nursing care can be based around it (Wheeler, 2005:58).

3.7.2 Family's response to critical illness/injury

The families undergoing a stressful situation such as critical illness/injury respond differently to the crisis situation (Tomlinson, et al. 2002:162). Studies, for example those conducted by Chui and Chan (2007:373) and Stayt (2007:625) that related to the family needs during critical illness/injury, have shown that the affected



families engage in a variety of coping strategies in an attempt to deal with the stress of the situation. Though some may apparently find it easy to adapt to the stressful situation, others battle to pull through. According to Noyes (1999:428) the process by which the families in crisis adapt and surmount the crisis situation, is referred to as 'coping'. Noyes asserts that critical illness/injury is a crisis situation, and that an understanding of how the family respond to a crisis, can assist the nurse practitioner to better appreciate and recognise the dynamics and profile of critical illness/injury.

3.7.2.1 Coping

Chui and Chan (2007:373) define coping as "cognitive and behavioral efforts used to manage a stressful situation such as critical illness/injury". Appleyard et al. (2000:42) assert that all families of the critically ill/injured patient experience stress, however, they each respond differently to it. Some are better prepared to handle the stress of the critical illness/injury than others. Their coping mechanisms also differ. Studies have provided insight into the family vulnerabilities and strengths exhibited in response to a crisis situation such as critical illness/injury (Appleyard, et al. 2000:42; Bernal, 2006:143; Goodell & Hanson, 1999:85; Stayt, 2007:623). Some of the coping mechanisms used by families during critical illness/injury are as follows: family vulnerability and family strengths.

⇒ Family vulnerability

According to Appleyard et al. (2000:41), the majority of families of the critically ill/injured patients use containment in an effort to try to manage the stress of the situation. Containment implies the narrow perception that the families of the critically ill/injured patient relate to the situation. Affected families may regard the critical illness/injury as a passing phase holding full recovery, resulting in false expectations. Appleyard et al. (2000:42) comment further that containment may be helpful initially as it reduces anxiety, but can nonetheless be dangerous if continued beyond the early days of the critical illness/injury. This results in failure to view the



situation realistically and appraisal of the situation is often avoided and recourse not properly mobilised. Family units may have difficulty communicating feelings of fear, anger and suppressed guilt.

Some affected families focus their attention and energy on the critically ill/injured family member, neglecting their own needs (Goodell & Hanson, 1999:79). Physical and emotional strain may only emerge at a later stage. Financial burdens may also put a strain on the affected families and will only be evident later. Despite going through the stress of critical illness/injury, some family systems have a potential for growth and unity. This will only happen when the affected family unit capitalise on their existing strengths (Appleyard, et al. 2000:42).

⇒ **Family strengths**

From the family system's point of view, there are two major strengths that the family system possesses, namely 'cohesion' and 'flexibility' (Swedish Society of Nursing, 2004:5). Cohesion is regarded as the love and affection shared by the family system. The love and affection that they have for one another makes them look out for one another (Appleyard, et al. 2000:42; Hupcey, 1999:254). Flexibility refers to the way the family members are able to delay and sometimes reshuffle their programmes in order to be there for their critically ill/injured member. Family members are sometimes forced to change their lifestyle, roles and responsibilities to accommodate the needs of their ill/injured family member. Flexibility can be demonstrated by the ability of the family members to restructure their plans, goals and ambitions in order to accommodate changes brought by critical illness/injury (Appleyard, et al. 2000:42).

In an attempt to understand the coping strategies used by families during critical illness/injury, Chui and Chan (2007:373) conducted a study to investigate the stress and coping strategies of Chinese families in Hong Kong during a critical illness/injury period. The findings of the study demonstrated a variety of coping



strategies used by the participating families. Each coping strategy is described briefly.

The study participants were reportedly using a **reframing strategy** called 'fatalistic voluntarism', which basically means that people accept without questioning what is offered to them. Chui and Chan (2007:377) assert that this coping strategy originated in Buddhism and Taoism, and is embedded in the assumption that life situations are predetermined by fate or former life. This belief system is characterised by a harmonious attitude towards nature and complying or adjusting to nature, thus accepting the influence of fate without resistance. In fatalistic voluntarism, it is assumed or believed that if one can withstand and overcome the present difficulties, one will have opportunities in future. Applying an element of positive thinking, fatalistic voluntarism allows people to create a positive outlook in a situation. Fatalistic voluntarism is a positive strategy because it allows one to have hope and confidence for a better future despite present difficulties.

The study reported that the strategy of **seeking social support** was ranked by the participants only as the third and fourth frequently used strategy as it was against their culture (Chui & Chan, 2007:379).

According to Chan and Chui (2007:379) the results of their study also showed that the participants who were patients' parents experienced increased levels of stress and used **passive appraisal** more as a coping strategy. It was further reported that the participants whose family member had had an acute and sudden onset of critical illness/injury, also used passive appraisal. This development was attributed to the sudden onset of the critical illness/injury, thus leaving no time for the families to prepare. Chui and Chan (2007:379) declare that passive appraisal can be beneficial in the beginning, but can prove problematic if continued for longer periods.

Chui and Chan (2007:379) maintain that participants with strong **religious belief** sought support from their religious groups. The conclusion that can be drawn from



the results of Chui and Chan's study, is that the different coping strategies depend on factors such as culture, religious belief, age, relationship to the critically/injured member and the family system functioning. According to Gavaghan and Carroll (2002:66) the initial assessment of the family unit can enable the nurse practitioners to identify the coping strategies used by the family, allowing them thus to be in a position to foster the relevant crisis intervention strategies needed to appraise the situation. This view is shared by Sims and Miracle (2006:179).

Clinical practice guidelines for the support of the family compiled by Davidson et al. (2007:612) indicate that doctors and nurse practitioners should receive training in awareness of spiritual and religious issues so that they are able to assess the these needs of patients and their families.

3.8 CONCLUSION

This chapter discussed the literature review on the needs of the critically ill/injured patients' families. Other related topics such as the concept of a family unit, the impact of critical illness/injury on the family, the role of the family during a critical illness/injury and the coping strategies often used by these families to withstand the stress of critical illness/injury, were also discussed. The literature review demonstrated that the needs of the critically/injured patients' families have been widely researched in different settings, under different settings and in different countries with different cultures. The results of all the reviewed studies demonstrated that the families of the critically ill/injured patient, irrespective of their different backgrounds, exhibit the same needs. However, it seemed as if these needs are still not sufficiently met by the health care providers. The reviewed literature relating to this study guided the researcher on the research methodology used in this study. Chapter 4 discusses the research methodology of this study.



4. RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter describes the steps, procedures and strategies that were used for gathering the data in this study. The research design, research methods involving the population, sample, sampling procedure and data collection instrument used by the researcher to guide this research are discussed. Data analysis and the ethical principles relevant to this study are also outlined.

Research methodology is the application of all steps, strategies and procedures for gathering and analysing data in a research investigation in a logical and systematic way (Burns & Grove, 2003:27). The selection of the research methodology - or strategy - is the core of a research design and is probably the single most important decision the investigator has to make. The research methodology must include the research design, definition and selection of the population of interest, the definition of variables (characteristics of the individuals in the population), their status and relationships to one another, the data collection instrument and the data analysis procedure (WHO, 2001a:11).

Henning, van Rensburg and Smit (2005:36) state that methodology refers to "*the coherent group of methods that complement one another and have the goodness of fit to deliver data and findings that will reflect the research question and suit the research purpose*". This statement allows the researcher to characterise methodology as the complete process of research, rather than one specific element or phase thereof. The research methodology in this study, therefore, includes the research design and research method.



4.2 AIM AND OBJECTIVES OF THE STUDY

The overall aim of this study was to assess the needs of the families of the critically ill/injured patients in an A&E unit. Based on the identified needs, recommendations were made with regard to a *family-centred-care* approach as a relevant resilience-based strategy suitable to these families.

In order to achieve the aim of this study, the objectives were to:

- explore and describe the needs of the families of the critically ill/injured patients in the A&E unit; and
- compile recommendations with regard to *family-centred-care* as relevant for the support of the critically ill/injured patients' families in the A&E unit.

4.3 RESEARCH DESIGN

According to Brink et al. (2006:92) and Burns and Grove (2009:218), a research design is "the set of logical steps taken by the researcher to answer the research question". It forms the "blueprint" of the study and determines the methodology used by the researcher to obtain sources of information, such as respondents', elements and units of analysis, to collect and analyse data, and to interpret it". Mouton (2004:55) defines research design further as "a plan or blueprint of conducting a research". It focuses on the end product, determines formulation of the research problem and guides the logic of the research. De Vos et al. (2002: 138) maintain that the research design does not only refer to the decision made when planning the study, but it also entails the sampling, sources and the procedure for collecting data, measurement issues and the manner in which data is analysed. The research design provides the control that increases the probability of study results that are accurate and reflect the reality (Burns & Grove, 2003: 195).



In this study, the researcher employed a quantitative, non-experimental, exploratory and descriptive design in an attempt to answer the research question and to reach the objectives of the study.

4.3.1 Quantitative design

Burns and Grove (2003:27) define quantitative research as "*a formal, objective, systematic process in which numerical data are utilized to obtain information and describe variables and their relationships*". According to de Vos *et al.* (2002:138), a quantitative design includes experiments, surveys and content analysis. Quantitative design has its basis on the assumption that attitudes, preferences and perceptions of individuals can be quantified. Polit and Beck (2006:178) point out that quantitative research encompasses key methodological decisions concerning the fundamental form of a study and stipulates the procedures and the strategies the researcher employs to develop accurate and interpretable data. The same authors assert further that quantitative design requires a highly structured, formal, rigorous, objective and systematic approach in order to develop world views.

In this study, quantitative information on the needs of the critically ill/injured patients' families was collected with the use of a structured interview schedule. The researcher gathered empirical evidence, rooted in the objective reality of the A&E unit, and gathered the data directly from family members. This strategy is consistent with quantitative research as depicted by Polit and Beck (2010:16). Quantitative research was appropriate for this study to provide quantifiable data of the families of critically ill/injured patient in an A&E unit. The data were then measured objectively to assist in the identification and description of the families' needs.

In addition, quantitative designs are essential to develop the body of knowledge needed for evidence-based practice as stated by Burns and Grove (2009:33). In this study, the objective to "compile recommendations with regard to *family-*



centred-care as relevant for the support of the critically ill/injured patients' families in the A&E unit" are based on the evidence in the clinical setting and aimed at practice development.

4.3.2 Non-experimental design

According to Polit and Beck (2010:71) and Stommel and Wills (2004:144) there is a distinction between quantitative experimental research and non-experimental research. In experimental research, researchers introduce an intervention or treatment to manipulate the results, whereas in non-experimental research, researchers collect data without treatment or intervention. Brink et al. (2006:103) assert that in non-experimental research, there is no manipulation of the independent variable and the setting is not controlled as is the case with experimental research. An experimental study is usually referred to as a controlled trial or clinical trial (Polit & Beck 2010:71).

In this non-experimental design, the researcher did not intervene in any way. The researcher was interested in the needs of the families of the critically ill/injured patients in an A&E unit. The researcher was therefore regarded as a bystander, collecting data without introducing treatments or making changes as suggested by Polit and Beck (2010:71). In addition, Brink et al. (2006:102) point out that even though non-experimental research is less likely to determine cause and effect due to the lack of experimental control like in experimental research, they are, however, highly useful in generating knowledge in a variety of situations that are not favourable to experimental research.

In this study, the researcher did not intervene in any way neither controlled the setting when the phenomenon being investigated was assessed. The study was carried out in an A&E unit of a Level III public hospital in Gauteng province of South Africa and was considered natural as there was neither manipulation of the respondents nor control of the setting.

4.3.3 Exploratory design

Polit and Beck (2010:22) and Brink et al. (2006:120) describe exploratory research as one that is conducted when there is limited information about the phenomenon under investigation. In exploratory designs, an attempt is made to look at different dimensions of the phenomenon under investigation; the way it manifests and other factors that may be related to it. De Vos et al. (2002:109) explain further that exploratory research is conducted to gain more insight into a situation or the phenomenon being investigated. They assess that, in an exploratory research, an attempt is made to answer the “what” of a question. Exploratory designs are therefore not intended for generalisation to large populations. It is designed to increase the knowledge of the field of study as suggested by Burns and Grove (2009:358).

The use of an exploratory design in this study assisted the researcher to explore and gain an insight into the needs of the critically ill/injured patients’ families in an A&E unit. The research question of this study posed as, *What are the needs of the critically ill/injured patients’ families in an A&E unit?*, was also answered. Factors affecting those needs were rigorously explored by conducting an extensive literature review.

The researcher conducted the literature review with the aid of the CINAHL and Medline (Ovid) database bibliographies, which are regarded as reputable, dependable and reliable as they provide research based on up-to-date information needed for rigorous literature review.

Keyword combinations used for CINAHL and Medline were varied in the search to obtain as much information as possible. The manner in which the search was conducted is illustrated in Table 4.1

Table 4.1: Databases, number of searches and keyword combinations

Databases	Search	Keywords
CINAHL	1	Family combined with needs
	2	Critical illness/injury
	3	Accident & emergency nursing
	4	Trauma nursing
	5	Emergency nursing
Medline	1	Coping
	2	Crisis
	3	Trauma

Other search strategies included physical searches from located studies and library searches in the available journals specialising in A&E nursing and critical care nursing. The assistance of a professional librarian was also obtained in the search for relevant literature.

4.3.4 Descriptive design

According to Burns and Grove (2003:200) descriptive design is aimed at gaining more knowledge about the phenomenon of interest to the researcher within a particular field of study. It is used again to develop theories, identify problems with the current modalities, justify current practices and provide insight into others' way of doing things. Brink et al. (2006:102) declare that the descriptive design provides descriptions of variables in order for the research question to be answered. The same authors emphasise that the collection of data in descriptive studies is through structured observations, questionnaires, interviews or surveys.



In this study, the descriptive element in the design assisted the researcher in identifying and describing the needs of critically ill/injured patients' families in an A&E unit. The respondents were requested to describe their needs during the critical illness/injury phase when they accompanied their critically ill/injured family member to an A&E unit.

4.4 RESEARCH METHOD

Research method refers to the framework of theories and principles on which methods and procedures are based (Holloway & Wheeler, 2002:287; Polit & Beck 2010:567). According to Polit and Beck (2006:504), the research method can be described further as "the steps, procedures, and strategies for gathering and analyzing data in a research investigation". Cohen (2000:44) refers to the research method as a "systematic way of gathering data from a given population so as to understand a phenomenon and to generalize facts obtained from a large population". Du Plessis, Appelbaum and Pretorius (2001:23) posit that the research method is concerned with the logic of the research.

This section outlines the research methods followed in this study. It includes population, sample and sampling technique, inclusion and exclusion criteria, data collection, validity and reliability and ethical considerations applicable to this study.

4.4.1 Population

According to Polit and Beck (2010:306) a population refers to the entire aggregation of cases in which the researcher is interested. According to de Vos et al. (2002:198), the population is the one that sets boundaries with regard to the elements or subjects to be investigated. This is consistent with a target population



which is defined as the population to whom the researcher wishes to generalise the research findings (Polit & Beck 2010:208).

The accessible population, according to Brink et al. (2006:123) and Polit and Beck (2010:307), is the population that the researcher has access to, rather than the target population having common characteristics. Because it is sometimes impossible to study the target population due to its size, location and other practical reasons, the accessible population becomes practical for the researcher to investigate (Brink, et al. 2006:124; Burns & Grove, 2003:233).

In this study, the accessible population was utilised and consisted of all adult family members who accompanied a critically ill/injured patient to the A&E unit of a public hospital in the Gauteng province of South Africa.

4.4.2 Sample and sampling

According to Polit and Beck (2010:307) and Rossouw (2003:108) a sample is a small portion of the population that the researcher is investigating at a particular setting, which is consistent with the views of. Rossouw (2003:108) postulates further that the selected individuals in the sample should represent the characteristics of the population as closely as possible. Polit and Beck (2006:56) caution that the risk of collecting data from a sample but not the population is that it will not adequately reflect the whole population's traits.

The sample of this study consisted of all adult family members of the critically ill/injured patient who were attended to at the A&E unit of the hospital where the study was conducted during the data collection period.

Brink et al. (2006:207) and Rossouw (2003:108) describe sampling as a process of selecting a study group by deciding who will participate based on certain criteria. In order to allow every element of the study an opportunity to be selected, a sampling



frame is used. A sampling frame is a list of sampling criteria defining eligibility for the study (Burns & Grove, 2003:241; Polit & Beck 2010:308).

The inclusion criteria for this study were that the family member had to:

- be an adult member 18 years or older who fitted the definition of the family;
- have accompanied the critically ill/injured patient to the A&E unit of the public hospital during the data collection period (01 June 2008 to 30 September 2008);
- have been present during the management of the critically ill/injured patient in the A&E unit;
- consent to taking part in the study;
- be able to speak or understand English, Afrikaans and all the other nine official black languages in South Africa, as these are the languages commonly spoken by people being attended to in the A&E unit in question.

The families of patients who had died whilst being attended to in the A&E unit of a public hospital were excluded from this study:

The respondents were selected by using a sampling plan. According to Burns and Grove (2003:242) and Polit and Beck (2006:56) a sampling plan applies two methods when selecting respondents for a study, namely: a probability sampling method and a non-probability sampling method. Probability sampling increases the representativeness of the sample and grants every element or member of the population a probability greater than zero to be selected for the sample. Non-probability sampling, on the other hand, decreases the chances of members to be selected for the sample (Burns & Grove, 2003:246-247). Brink et al. (2006:134) caution that non-probability sampling may or may not accurately represent the population; however, it is convenient and economical and, moreover, appropriate when it is impossible to locate the entire population.

In this study, non-probability, purposive and convenience sampling was used for selection of respondents. Purposive sampling, according to Brink et al. (2006:133) and Polit and Beck (2010:309), is a non-probability sampling method in which the

researcher employs personal judgement when deciding on the sample representative of the population. Purposive sample was selected on the grounds of the researcher's existing knowledge of the study population.

Convenience sampling involves choosing readily available respondents for the study; hence it is referred to as accidental or availability sampling (Rossouw, 2003:113-114). The convenience element of the sample was based on the easily accessible population during the data collection timeframe as the researcher works as a nurse practitioner in the A&E unit.

See Section 4.5.1 for the process undertaken to identify the respondents.

4.4.3 Sample size

Brink et al. (2006:135) point out that most researchers find the selection of the required number for the study daunting. The same researchers postulate further that there are no hard and fast rules pertaining to the determination of sample size, but they advise researchers to apply both scientific and pragmatic factors that have an influence on the sample size when deciding on the number of respondents considered for the study.

The first 100 adult family members of critically ill/injured patients who gave consent to participate in this study during the data collection timeframe (01 June 2008 to 30 September 2008) formed the sample size of the study. The sample size was recommended by the statistician of the University of Pretoria.

4.4.4 Data collection instrument

The data collection instrument was the structured interview schedule from which questions were asked to each respondent. (See Annexure C). Burns and Grove

(2003:498) describe the structured interview as a formalised interview in which the researcher has increasing control over the content by using strategies such as questionnaires. Many authors use the terms 'researcher administered questionnaire' and 'interview schedule' as synonyms (Brink, et al. 2006:151; Burns & Grove, 2003:498). The same researchers explain that the interview schedule is the questionnaire used to collect data during structured interviews.

For the purpose of this study, the term 'structured interview schedule' will be used. The structured interview schedule consisted of closed-ended or fixed alternative questions. The structured interview schedule compelled the researcher to ask the respondents the questions in the same order and same manner. The researcher and the recruited research assistants (see Section 4.5.1) collected data on the set date using a structured interview schedule.

The structured interview schedule consisted of three sections (see Annexure C), namely:

- **Section A:** Demographic information
- **Section B:** First contact in the A&E unit
- **Section C:** Needs of family members accompanying critically ill/injured patients

4.4.4.1 Motivation for use of structured interview schedule

The structured interview schedule as a method of data collection was chosen for the reasons stated by Polit and Beck (2006:294). The reasons and the application thereof in this study are summarised as follows:

- the structured interview schedule is relevant for obtaining data from a large group of people - 100 respondents were included;
- respondents feel a greater sense of anonymity - the respondents were advised not to give their names to the researcher or research assistants during the structured interviews (see Annexure C);

- the literacy level of the majority of the study population where the study was conducted was low, and most of them found it difficult to express themselves in English. The researcher observed the literacy level limitation during her time working with the study population. Most of the time the nurse practitioners working in the A&E unit where the study was conducted, assisted in translation between doctors and patients or their families during history taking. Therefore, the researcher saw it fit to use the structured interview schedule; and
- the structured interview schedule is economical and less time consuming - this study was a self-financed project.

However, Brink et al. (2006:147) concede that there are some disadvantages of using a structured interview schedule as a data collection technique. The disadvantages are:

- the instrument does not give in-depth information about the topic being investigated due to the fact that the interviewer does not have the latitude to deviate from fixed questions; and
- the fixed alternative questions may compel the respondents to select options that are not actually their preferred choice.

These disadvantages were acknowledged, but due to the increased validity and reliability of the structured interview schedule (see Section 4.4.4.2) based on Redley's questionnaire these disadvantages were limited.

4.4.4.2 Development of the instrument

The researcher, in consultation with the statistician and the supervisors, agreed not to develop a new data collection instrument for this study, but to use an already existing one. The instrument used by Redley and Beanland (2004:99) in Australia to assess the needs of family members accompanying a critically ill/injured patient to the A&E unit, was adapted for this study. The origin of the instrument is the CCFNI. (This was explained in detail in the literature review - see Section 3.5.1).



Following correspondence with Redley, permission to use the instrument for this study was granted by Redley (2006) via an email. However, the researcher did not use the instrument in its original form, but, to enhance reliability and validity, modified it to suit the culture and the context of the South African population for the following reasons:

- The Australian population, on which the instrument was tested, is different from the South African population in terms of the socioeconomical status, the cultural background and the educational level (see Section A); and
- The usage of some English words, phrases and terminologies is different to that used in South Africa?

Section A of the structured interview schedule was adopted according and with the assistance of a professional editor, the entire structured interview schedule was edited to ensure that the language used were consistent with the South African English language. In addition, a separate chart displaying simple visuals was created. (See Section 4.4.4.3 and Annexure D).

4.4.4.3 Structure of the instrument

The structured interview schedule (see Annexure C) comprised three parts:

- **Part 1:** Respondent's information leaflet and informed consent form
- **Part 2:** This part was sub-divided into three sections, namely:
 - **Section A: Demographic information:** Demographic and personal information (V1-V7), which consisted of closed-ended questions and included:
 - 1 age of the respondent;
 - 2 age of the critically ill/injured patient;
 - 3 gender of the respondent;
 - 4 ethnic group of the respondent;
 - 5 highest level of qualification attained by the respondent;
 - 6 religious affiliation; and



7 marital status of the respondent.

- **Section B: First contact in the A&E unit:** Information pertaining to the respondents' first contact in the A&E unit. It included the following times: the arrival time of the respondent in the A&E unit and the time spent in the unit.
- **Section C: Needs of family members accompanying critically ill/injured patients:** Information from the respondents about their needs while they were waiting for their critically ill/injured family member in the A&E unit (V17-58). In this section, ranking and Likert scales were used to quantify the responses.

A 4-point Likert scale was utilised since it is the most widely used instrument for determining the attitudes or feelings of respondents (Brink, et al. 2006:153). The scale contains a number of declarative statements after each statement. The purpose of the scale is to "quantitatively discriminate among people with different opinions by assigning a numerical score to respondents in order to place them on a continuum with attributes being measured." (de Vos, et al. 2002: 187).

In this study, the four alternatives according to order of importance, were:

- **1** Not important
- **2** Slightly important
- **3** Important
- **4** Very important

The last part comprising question fifty-nine (V59) was an open-ended question. According de Vos et al. (2002:179) an open-ended question has the advantage of granting the respondents an opportunity to elaborate on their opinions while, at the same time, the researcher has the advantage of exploring the variables even further, which may in turn contribute to the research findings.

The literacy level of the majority of the accessible population was taken into consideration, when the structured interview schedule was compiled. To make the ratings easy to understand for the illiterate respondents, a separate chart

displaying simple visuals was created. The visuals were in the form of a box, increasing in size according to the level of importance. (See Annexure D).

Burns and Grove (2003:284) point out that in some cases during structured interviews, the researcher can elaborate on the meaning of the question – or modify the way the question is asked – in order for the respondents to understand it better. Therefore, in order to aid respondents' understanding and to guarantee that relevant information was obtained, a separate chart with simple visuals was used in this study. Furthermore, multilingual research assistants who could explain questions in the respondent's own language, and elaborate when the latter did not understand, was utilised. The original instrument was translated into simple English by a professional translator at the University of Pretoria. The translation was done to ensure reliability of the instrument and also to address the low literacy level of the study population.

4.4.4.4 Reliability and validity of the instrument

For the results of the research data to be of quality, both reliability and validity of the data collection technique should be observed (Brink, et al. 2006:158). The methods used to ensure both the reliability and the validity of the instrument, are discussed next.

⇒ Reliability of the research instrument

Polit and Beck (2006:324) assert that the "reliability of an instrument is the degree of consistency with which it measures the attributes it is supposed to measure". Burns and Grove (2003:399) point out that "an instrument is considered reliable if it yields similar results on separate occasions". The reliability of the structured interview schedule was ensured by means of "internal consistency" and also by pre-testing before commencing the main enquiry.



According to Brink et al. (2006:164) internal consistency is referred to “as ‘homogeneity’. Internal consistency addresses the extent to which the same variable is measured by all items on the data collection instrument”. The researcher ensured that internal consistency was maintained during the development of the structured interview schedule for this study. This was achieved by including all questions relating to the needs of critically/injured patients’ families as they were addressed in the original instrument by Redley and Beanland (2004:102). Internal consistency was tested in the original instrument and the Cronbach alpha coefficient for the revised instrument was 0.90, which indicated that the revised instrument could be regarded as reliable (Redley & Beanland, 2004:102).

⇒ **Validity of the research instrument**

Polit and Beck (2006:328) indicate that “the validity of an instrument is the degree to which it measures what it is supposed to measure”. The attributes of the phenomenon under investigation was strengthened by the extensive literature available on the domain of inquiry, namely, ‘the needs of critically/injured patients’ families’ in A&E units and in critical care units. There are different ways of assessing the validity of an instrument. The different methods to assess the validity of the structured interview schedule of this study are outlined:

- **Content validity** - is concerned with the sampling adequacy of the content area being measured. Areas covered by the instrument should represent a wide area of the topic being studied (Polit & Beck, 2006:329). In this study the researcher ensured content validity when the instrument was developed by utilizing the help of experts in an A&E field, as well as the supervisors and the statistician.
- **Face validity** - Brink et al. (2006:160) state that *face validity* is “the weakest form of validity as it is merely based on the judgments of the experts in the field. It is, however, greatly useful in determining readability and clarity of the content”. In this study, face validity was ensured by sending the questionnaire for coding by the statistician.
- **Construct validity** - is aimed at determining how well the instrument reflects the concept being studied (Burns & Grove, 2003:274). Construct validity was

achieved in this study by reflecting on the results of the pre-testing of the instrument and making corrections accordingly.

4.4.4.5 Pre-testing of the research instrument

The research instrument was pre-tested before commencing with the full-scale data collection. Polit and Beck. (2006:296) describe pre-test as a trial run to determine whether the instrument is appropriate to generate worthwhile information. The structured interview schedule was pre-tested on ten respondents, each of whom spoke one of the languages mentioned under the inclusion criteria. (See Table 1.1 in Chapter 1). A pre-test was conducted to investigate:

- how long it took to complete the structured interview schedule;
- to clarify the questions and adapt them appropriately; and
- to determine whether the respondents had suggestions for change and/or other comments.

The results of the pre-test were used to validate the structured interview schedule before being administered to the full sample. No recommendations were made and it remained unchanged. The respondents who were interviewed during the pre-test were not included in the main enquiry.

4.5 DATA COLLECTION

Burns and Grove (2003:298) define the data collection process as “a procedure of recruiting research subjects and the collection of data for the study by means of a data collection technique”. The data collection procedure for this study was conducted in two phases.



4.5.1 Phase 1: Preparation

The researcher obtained permission to conduct this study from the hospital authorities and the unit managers in the A&E unit. (See Annexure B). The researcher summoned the assistance of a team of five research assistants who were multilingual and willing to participate in the study to collect data in order to minimise costs and time. Research assistants who were fluent in English, Afrikaans, and other South African black languages were recruited to participate in the study.

According to Brink et al. (2006:143) people outside the research team may sometimes be used to collect data and training should be provided to ensure consistency and validity of the collected data. It is also stated in Module 12: Plan for data collection (International Development Research Centre [IDRC], [n.d.]:5) that, "if the researcher or the research team find it difficult to carry out the entire study alone or by themselves, it is advisable to employ the assistance of the research assistants to assist in simple but time consuming tasks". Research assistants were recruited from student nurse practitioners who were willing to help with data collection during their off duty time. The researcher enabled the research assistants by first explaining the aim and objectives of the study. Secondly, the entire structured interview schedule, the respondent information leaflet and the ethical considerations were explained. Related questions from the research assistants were answered by the researcher. Thirdly, the research assistants were coached regarding the interview process. The importance of obtaining unbiased data was emphasised.

The respondents who participated in this study were recruited through the use of the hospital records. For the respondents to be accessed, the researcher used the patients' register to obtain their particulars. The following information, which was obtained from the register, was documented:

- o the name of the family member(s) who accompanied the critically ill/injured patient to the A&E unit. This was done with the permission of the authorities of the hospital in which the study was conducted;



- the family member(s) contact numbers so that he or she could be contacted telephonically in case they could not be found on follow up in the ward to which the critically ill/injured patient was admitted; and
- the name of the ward to which the critically ill/injured patient had been admitted in order to follow up on the respondent(s).

After obtaining the abovementioned information about all the prospective respondent(s) from the hospital records, a list was then compiled for the purpose of follow up of the family members in the respective wards to which their critically ill/injured family member had been admitted.

It is worth mentioning that the family members' particulars were obtained specifically in order to enable the researcher to make contact with them at a later stage, when informed consent were obtained (see Section 4.5.2).

4.5.2 Phase 2: Data collection

Data was collected from 01 June 2008 to 30 September 2008. During this timeframe, follow-up on the family members' reactions and conditions were done from the compiled list (see Section 4.5.1) - one or two days after the critical phase in the A&E unit - in the respective wards to which the critically ill/injured patients had been admitted. The delay was specifically designated to avoid distressing the family members at such a vulnerable time.

Contact with the family member(s) was made during hospital visiting time. The family member(s) who could not be accessed in the ward were contacted telephonically by the researcher to explain the purpose of the study and to obtain informed consent. The family member(s) whom the researcher managed to access and who agreed to participate in the study were interviewed in a private room in the hospital.



One family member for every critically ill/injured was interviewed. The researcher and the research assistants conducted the structured interview with each respondent. Though research assistants were allowed to request help with more than one structured interview schedule, in this study the researcher was asked to help only with the first structured interview schedule. The research assistants were then allowed to continue with the structured interview schedules on their own.

The interviews lasted about 30 to 45 minutes each. Ethical considerations were respected throughout. All the respondents reacted favourably, resulting in 100% completed structured interview schedules

4.5.3 Measures taken to minimise errors

It is stated in Module 12: Plan for data collection of the IDRC ([n.d.]:7) that “the possible sources of data distortion, or errors (bias), can be prevented by applying precautionary measures before embarking on data collection events”. According to Brink et al. (2006:158) sources of errors in data collection can be due to factors related to the subjects, the researcher, the environment and the instrument. The measures that were taken to control and minimise these factors in this study are outlined.

4.5.3.1 Subject factors

“Subjects who are tired, hungry, angry and irritable may cause distortion of data/facts in the collected data” (Brink, et al. 2006:159). To control this type of error, the researcher avoided interviewing the respondents immediately following the critical illness/injury incident due to the sensitive nature of the problem. The respondents were followed up two days later to avoid distressing them. The respondents’ right to privacy was respected. The researcher also ensured that the interviews were not lengthy.



4.5.3.2 Researcher factors

Brink et al. (2006:159) postulate that the researcher can influence the results of the study in many ways because of his or her particular behaviour. A researcher who is overworked and tired can also be a source of data distortion. The researcher ensured that the research assistants did the minimum interviews per day.

4.5.3.3 Environmental factors

According to Brink et al. (2006:159) environmental factors such as weather, temperature, noise and interruptions can result in random errors in measurements. The researcher ensured that the respondents were interviewed in a quiet and well-ventilated area.

4.5.3.4 Instrument factors

Causes of random errors can also result from the instrument of data collection. Unclear questions, unclear directions on how to answer the questions, the format of the questions and the manner in which the question are worded, can all contribute to being sources of errors in the data collection instrument (Brink, et al. 2006:159). Measures taken to control and minimise instrument factor errors were ensured by maintaining reliability and validity of the data collection instrument.

4.5.4 Measures to maintain consistency

Burns and Grove (2003:298) assert that the key to collect accurate data is by maintaining consistency. This can be ensured by maintaining the data collection pattern as it had initially been developed for each data collection event in the research plan. The researcher went through the structured interview schedule with the research assistants before and after pre-testing it. This was done in order to



maintain uniformity and consistency in administering the instrument and the interpretation thereof. The process of how consistency was maintained is discussed with regard to measures of ensuring consistency and the supervision of research assistants. To avoid or minimise biases and maintain consistency, the research assistants were provided with:

- o guidelines on sampling procedure;
- o a clear explanation of the purpose of and procedures of the study which had to be used at the start of the structured interview;
- o theoretical training on the objectives of the study, the data collection instrument to be used, the sampling procedure and the plan for data analysis;
- o training in interviewing skills; and
- o an arrangement for ongoing supervision. Brink et al. (2006:152) postulate that it is of utmost importance to supervise the research assistants' performance so as to guarantee the quality of the collected data. This was achieved by accompanying them on selected visits and making sure that the interviewer's name or code appeared standard on the structured interview schedule.

4.6 DATA ANALYSIS

Data analysis is the breaking down of data into constituent parts to answer the research question (de Vos, et al. 2002:223). The assistance of the Department of Statistics of the University of Pretoria was sought for the data analysis. The computer package: SPSS program version 12 and EPI-info were used for data analysis.

According to Polit and Beck (2006: 350) quantitative research "involves assigning numbers to objects or elements to represent varying degrees of some attributes". Data was coded and entered according to the identified or defined variables. Demographic variables were presented in the form of measures of central tendency and variations mode, median and standard deviation. The remaining data were presented in the form of graphs, charts and tables. The open-ended questions were



categorised and analysed manually. See Chapter 5 for detailed discussion on data analysis.

4.7 ETHICAL CONSIDERATIONS

According to Burns and Grove (2005:177), research ethics are based on the principles as described by the ten provisions of the Nuremberg Code. The Code provides a basis for the Declaration of Helsinki in 1964, which was subsequently adopted by many countries engaged in health care research.

To ensure a high standard of research, ethical standards and measures are set to direct the research (Brink, et al. 2006:30). For this study to meet the ethical requirements set out by the University of Pretoria, Faculty of Health Sciences Research Committee, the researcher outlined the ethical principles that the study will adhere to prior to data collection.

4.7.1 Institutional approval to conduct the study

Permission to undertake the study as well as permission to access client records was sought from the Faculty of Health Sciences Research Ethics Committee, University of Pretoria (see Annexure A) as well as the hospital (see Annexure B).

4.7.2 Respect for human dignity

According to Polit and Beck (2006:88) human beings should be treated as autonomous agents capable of taking their own decisions. What this principle entails is that the potential respondents have the right to participate willingly in a study, ask questions and withdraw from the study at any time without adverse consequences.



In this study, the respondents were informed about the purpose of the study, the procedure to be followed and their autonomous rights as respondents. The respondents were assured that they were under no obligation to participate in the study and that they were allowed to withdraw from the study at any time without prejudice.

4.7.3 Obtaining informed consent

Burns and Grove (2003:176) describe consent as “an agreement by the research subject to take part in the study”. Informed consent involves: disclosure of study information to the respondents; understanding of this information by the study respondents; competency of the respondents in giving consent and, lastly, voluntary participation in the research project (Polit & Beck, 2006:93).

In this study, informed verbal consent was sought from the respondents after having explained the aim of the study, the method of data collection and the significance of the study in detail to them. Voluntary participation in the study was emphasised to the respondents.

4.7.4 Right to privacy

The right to privacy is “safeguarded either through anonymity or through confidentiality” (Polit & Beck, 2006:95). The right to privacy was ensured by addressing the principles of anonymity and confidentiality.



4.7.4.1 Maintaining anonymity

According to Polit and Beck (2006:95) anonymity implies a situation whereby all concerned with the study, even the researcher who conducted the study, cannot link information to a respondent. In this study, anonymity was ensured by a covering letter to the respondents guaranteeing them anonymity. Respondents were not required to furnish their names in order to maintain anonymity. The list with the names of families and contact details as well as the completed structured interview schedules was stored in a safe place until they were sent to the statistician for analysis. Each structured interview schedule was assigned a number to further enhance anonymity.

4.7.4.2 Maintaining confidentiality

Confidentiality is maintained when the respondents are promised that the information they provide will not be given to people who are not involved in the research (Polit & Beck, 2006:95). Confidentiality in this study was ensured by keeping the completed structured interview schedules as well as the lists, with the names and contact details of the families, compiled in a safe place until they were sent to the statistician for analysis.

4.7.5 Principle of beneficence

Polit and Beck (2006:87) hold that the principle of beneficence is one of the most fundamental ethical principles in research. This principle imposes a duty on the researchers not to expose the study respondents to any harm. This study was not regarded as harmful to the respondents in any way as this was a non-experimental study. The respondents were assured that their decision to participate or not would not influence any relationship they or their family may have with the hospital at any time. The researcher's contact details, as well as a list of available support and

counseling services, accompanied the structured interview schedule. None of the respondents contacted the researcher, nor did they access the available support services during the data collection timeframe.

4.8 LIMITATIONS OF THE RESEARCH METHODOLOGY

Burns and Grove (2003:486) define the limitation of a study as theoretical and methodological restrictions that may limit the generalisation of the study results. The methodological limitations identified in this study were:

- the study was conducted in one A&E unit of a public hospital and the results can therefore not be generalised to other areas;
- the convenient method of sampling is not considered representative;
- there were deaf people among the study population that were managed at the A&E unit where the study was conducted during the data collection period who were not included in the selection criteria; the reason being that the health care workers could not communicate in sign language. It would have been interesting to know their needs as well; and
- although measures were put in place to control extraneous variables, the researcher wonders if the use of multilingual research assistants was not in itself limiting.

4.9 CONCLUSION

In this chapter the research methodology employed to collect data for this study was discussed. The ethical principles applicable to this study as well as the methodological limitations were also presented.

Chapter 5 of the study discusses the data analysis and findings of this study.



6. CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The overall aim of this study was to assess the needs of the critically ill/injured patients' families in an A&E unit. In order to fulfill this aim, the researcher endeavoured to explore and describe the needs of the families of patients in the A&E unit of a selected public hospital in Gauteng (see Sections 6.2.1 to 6.2.3) and, in addition, to make recommendations with regard to *family-centred-care* as relevant for the support of the critically ill/injured patients' families in an A&E unit (see Section 6.3).

The researcher used the Family Resilience Framework grounded in the Family System Theory as guide to identify, explore and describe the needs of the critically ill/injured patients' families in an A&E unit of the hospital where the study was conducted. This conceptual framework (see Chapter 2 for a detailed discussion) is a valuable tool in fostering prevention and intervention efforts which support and strengthen vulnerable families in relevant stressful situations. The questionnaire developed by Redley specifically for the emergency setting was utilised to collect the data.

Studies related to the needs of the critically ill/injured patient's families indicated that they experience tremendous stress in unison with their ill/injured family member when the latter is admitted to the A&E unit. These family members have unique needs, and support based on these needs should be provided to enhance their resilience.



This Chapter concludes this study and addresses the limitations and recommendations based on the research findings.

6.2 CONCLUSIONS

The findings are discussed according to the sections of the structured interview schedule. The sections included:

- **Section A:** Demographic information, which included the age of the respondents and of the critically ill/injured patient, their gender, ethnic groups, educational levels, religious affiliations and their marital status.
- **Section B:** First contact in the A&E unit.
- **Section C:** Needs of family members accompanying critically ill/injured patients.

The needs of family members of the critically ill/injured patient were categorised under five domains, namely: *support, communication, comfort, meaning/assurance and proximity*.

6.2.1 Section A: Demographic information

The demographic information revealed that the age distribution of the majority of the respondents who accompanied the critically ill/injured patients or their critically ill/injured family member) was older than 50 years. The majority of the critically ill/injured patients (33%) were older than 60 years. One's age has the potential of influencing one's needs.

Females (54%) were in the majority where accompanying the critically ill/injured patients was concerned. This is consistent with the traditional view that females are regarded as the predominant caregiver in the family.

Thirty-nine per cent (39%) of the respondents were Tswana, which is consistent with the ethnic population distribution in the area where the study was conducted.



Ethnicity and cultural background can greatly influence family needs as was found in both the supportive literature and in this study (see Section 5.2.1.4).

The educational level of respondents varied from no formal education (8%) to tertiary education (16%). However, the majority (46%) of the respondents had attended high school. Literature maintained that individuals with high educational levels set higher standards regarding needs fulfillment.

The religious affiliation indicated that 87% of the respondents were Christians. This coincided with the information provided in South African Government Information (2007) that 88% of the South African population comprises Christians. Of the respondents 43% were married and 43% were single. This could also influence the family needs – married couples offer emotional support to each other during crisis situations.

6.2.2 Section B: First contact in the A&E unit

The majority of the respondents (88%) had accompanied their critically ill/injured family members to the A&E unit. Forty-four per cent (44%) of the respondents were attended to immediately in the A&E unit. Supportive literature indicated that the initial contact between the nurse practitioners and the family members help to reduce the latter's anxiety and uncertainty, thus increasing satisfaction with steps taken to care for the critically ill/injured patient. However, delay in attending to the affected families can greatly influence their needs.

The study results revealed that 28% of the respondents waited for 3 to 4 hours and 15% of them waited for 5 to 6 hours before their critically ill/injured family member could be admitted. Previous studies have shown that the critically ill/injured patients often have to wait for longer periods in the A&E unit for their conditions to be stabilised, especially if the intervention of other multidisciplinary teams was required. Prolonged stay for the families in the A&E unit without support and update about the patient's progress can influence their needs.



The findings of this study demonstrated that the majority (63%) of the respondents were met at the hospital by the nurse practitioners, (8%) were met by a doctor and the rest by other staff members. It was also found that 87% of the staff members did not introduce themselves to the respondents. Supportive literature suggested that the families of the critically ill/injured patient should receive prompt attention from any member of the staff, preferably doctors and nurses, as this promotes a trusting and respectful relationship between them. Lack of timely debriefing to explain and clarify misconceptions in an environment perceived as threatening, predisposes increased anxiety and stress levels and this can consequently influence their needs.

The majority of the respondents in this study, (26%) were siblings while (23%) were parents. Few of the respondents (15%) were spouses and (17%) were single. The remaining respondents (19%) were related to the critically ill/injured by association. These findings are in accordance with the definition of a family (see Section 1.7.4.4). The needs of the critically ill/injured patients' families are influenced by the relationship to the patient. Supportive literature revealed that parents experience higher stress levels when compared to other family members.

The results of this study indicated that 67% of the respondents had no previous hospital experience, while 33% of them had visited the hospital before: 39.39% were patients, 57.58% were escorts while 3.03% were visitors. Supportive literature indicated that previous hospital experience can affect the perception of family needs in an A&E unit. This coincided with some of the comments made by the respondents in this study.

According to the results forty-one per cent (41%) of the respondents arrived alone in the A&E unit. As a result they needed support from the nurse practitioners, unlike those who had close family members and friends with them who they could turn to for support. Studies have shown that during crisis situations, families mobilise other family members and close friends as a coping strategy. The lack of support structures affects the perception of family needs.



6.2.3 Section C: Needs of family members

The results of this study revealed that the respondents ranked the *communication* domain as the most important one, followed by *support*, *meaning/assurance* and *comfort* in this order. *Proximity* was ranked as the least important domain.

6.2.3.1 Sub-section C1: Communication needs

The respondents in this study chose the *communication* domain as the most important one. The findings of this study were in accord with the results in other studies investigating the needs of the critically ill/injured patients' families. Consistent with the supportive literature, 83% of the respondents in this study said they would appreciate doctors and nurses using understandable terms and providing honest information. The need for information or communication entails providing the affected family with timely, accurate and consistent information, enabling them to enhance their coping capabilities. The lack of timely, clear and concise information induces hypothesising about the patients' outcomes and thus, as has been reported, affecting their own needs.

6.2.3.2 Sub-section C2: Support needs

The respondents in this study rated support as second in importance where their needs were concerned. The results showed that 70% of the respondents were kept in the A&E waiting area, without support from the staff, for 2 to 6 hours before their critically ill/injured family member could be admitted. Contrary to this finding, in studies conducted on this same phenomenon in first world countries, such as Australia, Asia, the United Kingdom and the USA, it was found that support needs were ranked as the fourth important domain. Families undergoing a crisis situation such as a critical illness/injury of a loved one need support to maintain their optimal family functioning. Failure on the part of the nurse practitioners to foster support can affect this need. The findings of this study suggested that the affected families needed to be supported emotionally during the crisis situation.



6.2.3.3 Sub-section C3: Meaning/assurance needs

Meaning/assurance was ranked as the third most important domain by the respondents in the current study. This result differs from those of similar international studies on the same topic in which the meaning/assurance domain was rated the either the most, or second most, important domain after information. Of note under this domain is that, despite the fact that meaning/assurance was rated as the third most important domain by the respondents in this study, they at the same time rated some of the items falling under this domain highly (see Section 5.2.3.6.3). Meaning/assurance entails the strategy of alleviating stress by maintaining hope about the critically ill/injured patients' prognosis and recovery. Failure to provide the affected family with assurance in order to maintain hope can influence their needs.

6.2.3.4 Sub-section C4: Comfort needs

The domain ranked as the fourth most important by the respondents was comfort needs. Supportive literature indicated that the domain of comfort has been ranked the lowest in most studies pertaining to the needs of the critically ill/injured patients' families. However, items falling under this domain that would benefit the critically ill/injured patient were rated as very important by the respondents in this study (see Section 5.2.3.6.4). The conclusion that can be drawn from this is that the families in this study were less concerned about their personal comfort than that of their critically ill/injured family member. This finding was consistent with supportive literature. Factors such as the overall décor of the waiting area and the lack of toilet facilities and refreshments can influence the family needs. Some items such as the décor, better toilet facilities and availability of refreshments can influence family needs and this was consistent with supportive literature.



6.2.3.5 Sub-section C5: Proximity needs

The findings of this study demonstrated that the domain of proximity was ranked as the least important by the respondents in this study. This finding was in contrast to what is reported in the literature. The proximity domain has been ranked as the second most important need in the A&E settings and the third most important need in critical care settings. It has been found in previous studies that differences in cultural background, among others, influence family needs. What the results of the current study signified is that the families of the critically ill/injured patients were less concerned about being close to their family member than being kept informed regularly concerning the latter's condition and progress.

6.2.3.6 Sub-section C6: Additional needs

The respondents in this study mentioned new needs that have not been identified in other studies (see Section 5.2.3.7). For example, they indicated that they would like to be treated with respect, kindness, compassion and equally. The findings of this study suggested that over and above the five general domains, these needs should also be considered when care options are implemented.

6.3 RECOMMENDATIONS

Based on the research findings, recommendations are made regarding intervention strategies to enhance the continued improvement of nursing practice to support and promote the resilience of the families of the critically ill/injured patients in an A&E unit, thus advancing *family-centred-care*. The researcher believes that nurse practitioners can assist these families by providing vital support; initiating in them a growth process towards acceptance and understanding, which, in turn, can help the family to provide support to the critically ill/injured patient.

In relation to addressing family needs, a multidisciplinary approach should be employed based on the national guidelines with regard to the provision of adequate



resources that would enable health care providers to render quality care to the critically ill/injured patients and their families. The proposed recommendations are delineated in Sections 6.4.3.1 to 6.4.3.3.

Recommendations with regard to supportive actions that promote resilience of the patients' families may include involvement of the affected families in care.

6.3.1 Management

Management involved in the hospital (top management) and A&E unit (middle management) should prioritise and acknowledge families' needs in the A&E unit and ensure that there are standards and guidelines in place clearly stipulating the view of the institution regarding *family-centred-care*.

The following recommendations are delineated pertaining to management:

- support *family-centred-care*;
- implement functional structures for continuous education and training for all the health care providers regarding families' needs in the A&E unit;
- evaluate families needs through continuous auditing;
- provide constructive feedback to nurse practitioners and doctors regarding the extent to which families' needs are met in the A&E unit;
- encourage multidisciplinary formal meetings to assess service delivery in the A&E unit pertaining to *family-centre-care*;
- distribute adequate numbers of nurse practitioners and doctors to cope with the work load – where there is staff shortage, mandatory overtime should be an option to enable nurse practitioners and doctors to provide *family-centred-care*; *and*
- recruit and retain nurse practitioners and doctors in order to curb shortage of staff, consequently allowing these professionals to provide and enhance *family-centred-care* in the A&E unit.



6.3.2 Education

Education on practice development and caring attitudes should be a key component to all providing service to the patients and their families. Education should be directed to health care providers and patients' families.

6.3.2.1 Health care providers

Nurse practitioners and doctors working in the A&E unit should be educated on a continuous basis regarding the following topics:

- recognise that one should move towards *family-centred-care*;
- recognise the family as central to the critically ill/injured patient admitted to the A&E unit;
- acknowledge the uniqueness and diversity of patients and their families in the A&E unit;
- acknowledge cultural differences and a sensitivity towards patients and their families;
- familiarise oneself with the principles applied during crisis management involving family members accompanying critically ill/injured patients to the A&E unit;
- acknowledge that patients' families regard the *communication needs* as their first priority
- develop communication skills pertaining to family members of critically ill/injured patients;
- consult family members first before decisions about their critically ill/injured family members are taken;
- explain procedures to family members in an understandable language before they are asked to sign any documents or papers; and
- apply the principles of Batho Pele and the Patients' charter throughout *family-centred-care*.



6.3.2.2 Patients' families

Printed information in all eleven official languages that orientate the affected families to the A&E units' policies should be available at all times. Information to patients' families should be clear, concise and consistent. Medical staff and nurse practitioners should refrain from using medical jargon when communicating with the affected families. In a case where there is a language barrier, translators should be used.

Information to be contained in the guidelines should cover:

- specific facts about the A&E unit;
- what to expect when visiting the A&E unit;
- what is expected of family members at the bedside; and
- a description of the expertise of the personnel attending to the critically ill/injured family member.

6.3.3 Nursing practice

Nurse practitioners should attempt to be available at all times in order to meet the families of the critically ill/injured patients when they arrive at the A&E unit. A platform for the affected families to voice their insecurities should be created. Nurse practitioners should be encouraged to involve the affected families in care of their critically ill/injured family member as well as to help them in making informed decisions.

The recommendations to provide *family-centred- care* in A&E units are outlined:

- Consider the demographic data, such as age, gender, religion and marital status when attending to the needs of family members who accompany critically ill/injured patients.



- Initiate nurse-family interaction in the A&E unit as soon as possible in order to form a mutual and trusting relationship between nurse practitioners and the affected families.
- Encourage professional behaviour and treat patients and their families with courtesy.
- Emphasise *family-centred-care*.
- Assign a nurse practitioner to attend to families in the A&E unit waiting area to provide them with regular updates concerning the progress of their critically ill/injured family member. Queue marshals or quality assurance staff members can be utilised to assist in performing this function if the nurse practitioners are unavailable. Personnel considered for this task must be provided with training in communication skills.
- Explain the relevance and significance of a treatment area in the A&E unit to affected families visiting their critically ill/injured family member in the unit.
- Encourage support groups which can be used to help affected families to deal with the crisis situation. In cases where the nurse practitioners are unable to offer support to the affected families, expert assistance such as social workers, religious groups and psychologist could be obtained.
- Provide family members with honest answers when questions are asked relating to their critically ill/injured family member.
- Explain and provide reasons for specific treatments and investigations.
- Provide assurance about the condition of their family member, as this will help to allay their fears.
- Address the A&E unit waiting area, where families are seated. The area should be made comfortable – it should be warmed during winter and the surrounding environment should be enhanced. Family members who have traveled far should be provided with a place to sleep during the night.
- Provide refreshments for families who have to wait for extended periods – through the hospital or by means of a cafeteria where families are able to purchase food and drinks.
- Provide toilet facilities within easy reach.



- Allow family members without cellular phones to access a telephone in the A&E unit should the need arise.
- Allow the families of the critically ill/injured patients to see their family member as soon as possible, as this will reassure the patient and the families.
- Develop unit policies addressing family presence during procedures to allow families who wish to be present during procedures to do so.
- involvement of , staff and the public in organisational and clinical decision making – this will enable management in identifying the needs of internal and external customers;
- Encourage flexible visiting times for family members.

6.4 FUTURE RESEARCH

Future research that could be conducted in the A&E unit based on the study findings is recommended and should be encouraged. The topics include the:

- influence of culture on the specific needs of family members accompanying critically ill/injured patients;
- needs of disabled family members, especially deaf family members;
- innovative strategies to implement the recommendations and evaluate the effect thereof; and
- perceptions of nurse practitioners and doctors working in the A&E unit regarding the needs of family members.

6.5 LIMITATIONS

Despite the insightful findings in this study, the following limitations should be noted:

- This study was conducted at one selected Level III hospital in the Gauteng province in South Africa. This implies that the results might not be generalisable to other hospitals in South Africa.



- Only 100 respondents out of a possible one thousand and fifty two (1,052) from a total of three thousand two hundred and seventeen (3,217) were involved in the current study. The findings can therefore not be generalised.
- This study was only conducted over a four month period, which might have influenced the findings.

However, it is vital to recognise that this study provides valuable information for A&E staff, hospital management and future researchers.

6.6 SUMMARY

This study was conducted to assess the needs of the family of the critically ill/injured patient in an A&E unit. When encountering a traumatic situation like this, family members become vulnerable and even confused. Their level of resilience is often determined by the way health care personnel act towards them during a crisis situation.

A concerted effort should be made by those in the health care profession to move away from the entrenched view of *patient-centred-care* towards a *family-centred-care* approach in which the needs of the families are considered. Fundamental to this approach is that health care providers in an A&E unit should not only be acquainted with the needs of the family members of the critically ill/injured patient in a specific setting, but should also be encouraged and enabled to effectively address these needs.



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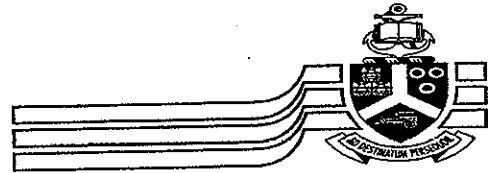
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University of Pretoria

Faculty of Health Sciences Research Ethics Committee
University of Pretoria

Tel: (012) 339 8619 Fax to E-Mail: 086 6516047

E-Mail: deepeka.behari@up.ac.za

Date: 25/04/2007

Soutpansberg Road
MRC Building
Room 2 - 20

Private Bag x 385
Pretoria
0001

Number : **S27/2007**

Title : The needs of patient's families during critical illness/injury in an accident and emergency (A & E) unit

Investigator : L Phiri, Department of Nursing Science, University of Pretoria (SUPERVISOR: T HEYNS)

Sponsor : **None**

Study Degree: **M. Cur (Clinical)**

This Student Protocol has been considered by the Faculty of Health Sciences Research Ethics Committee, University of Pretoria on 24/04/2007 and found to be acceptable.

Advocate AG Nienaber	(female)BA(Hons) (Wits); LLB; LLM (UP); Dipl.Datametrics (UNISA)
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Dr N K Likibi	MB.BCh.; Med.Adviser (Gauteng Dept.of Health)
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Mrs E.L. Nombe	(female) B.A. CUR Honours; MSC Nursing – UNISA (Lay Member)
Snr Sr J. Phatoli	(female) BCur (Et.Al) Senior Nursing-Sister
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Prof C W van Staden	MBChB; Mmed (Psych); MD; FTCL; UPLM; Dept of Psychiatry
Prof TJP Swart	BChD, MSc (Odont), MChD (Oral Path) Senior Specialist; Oral Pathology
Dr AP van der Walt	BChD, DGA (Pret) Director: Clinical Services, Pretoria Academic Hospital

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SECRETARIAT of the Faculty of Health Sciences
Research Ethics Committee
University of Pretoria

DR L SCHOEMAN; Bpharm, BA Hons (Psy), PhD
CHAIRPERSON of the Faculty of Health Sciences Research
Students Ethics Committee – University of Pretoria

APPLICATION TO CONDUCT RESEARCH STUDY



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty Health Sciences Research Ethics Committee

University of Pretoria

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E-Mail: ethics@ethics.up.ac.za - Student Committee

Centers for Disease Control and Prevention - Pretoria

PO Box 105 - Pretoria - 0001

GAUTENG HEAD OFFICE USE

DATE RECEIVED	
PROTOCOL NUMBER	
REPORT DUE DATE	
FILE REFERENCE	

GENERAL INFORMATION AND AGREEMENT BY APPLICANT

APPLICANTS

Primary investigator

Ms Lesego Phiri

Supervisor

Ms Tanya Heyns

Department of Nursing Science

Faculty of Health Sciences

P O Box 667

Pretoria 0001

Tel: 354 2132

FULL TITLE OF STUDY

The needs of patients' families during critical illness/injury in an accident and emergency unit.

ANY SPECIAL PRECAUTIONARY MEASURES TO BE TAKEN AND BY WHOM?

In this study the needs of patients' families during critical illness/injury period in an accident and emergency Unit will be identified and described through the use of structured inview schedule. Voluntary participation and anonymity will be ensured by means of informed consent by the participants during data capturing and analysis. Publication will not contain any information that will link the hospital or the participants to the study during collection procedure.

INDICATE EXPECTED DATE OF REPOF



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

DAY	MONTH	YEAR
31	NOVEMBER	2007

INDICATE NUMBER OF PATIENT INVOLVED

100	
-----	--

THE NAME OF THE HEAD OF THE DEPARTMENT: Dr N.P TSHABALALA

AGREEMENT BY APPLICANT

The applicant agrees as follows

- To conduct the study recorded in and under the conditions set out in this application form.
- To conduct this study at no additional expense to the Gauteng Department of Health whatsoever.
- To inform the Superintendent General: Gauteng Department of Health and other relevant authorities should it be deemed necessary to deviate from protocol or stop this study.
- To make available without delay all the results of this study to the Superintendent General: Gauteng Department of Health.

I understand that the Superintendent-General: Gauteng Department of Health having allowed this study to be conducted places himself or herself or the Gauteng Department of Health under no obligation whatsoever and to leave the final choice of the institution where the trial/ evaluation will be conducted to the Superintendent- General: Gauteng Department of Health.

APPLICANT		
NAMES	SIGNATURES	DATE
Ms LESEGO PHIRI	<i>Lelego Phiri</i>	15/02/07



INITIAL CONSENT BY DEPARTMENT

I, Dr N.P. Tshabalala head of Accidents & Emergency department of _____ hospital in consultation with the Chief Executive Officer / Superintendent of this Hospital grant permission to submit an application to conduct a study to the Chairperson of the Ethics, Research and Therapeutic Committees of this Hospital.

The researcher conducting the study will be Ms L.M PHIRI (University of Pretoria)

CLINICAL HEAD OF DEPARTMENT (EMERGENCY UNIT)		
NAME	SIGNATURE	DATE
Dr N.P. Tshabalala		19/02/2007

APPROVAL BY HOSPITAL CHIEF EXECUTIVE OFFICER:

I, **MR D.G.M. RAMAFOKO** Chief Executive Officer / superintendent of the Dr George Mukhari Hospital, hereby agree that this study be conducted in the Emergency Unit of this hospital.

C		
NAME	SIGNATURE	DATE
MR D.G.M. RAMAFOKO		2007/02/19

GAUTENG DEPARTMENT OF HEALTH

SUPERINTENDENT GENERAL		
NAME	SIGNATURE	DATE
P. SHEMEBE		2007/02/19

PARTICIPANT'S INFORMATION LEAFLET & INFORMED CONSENT FORM

Researcher's name: Ms LESEGO M PHIRI

Student Number: 21304034

Department of Nursing

University of Pretoria

Dear Respondent

STUDY TITLE

THE NEEDS OF CRITICALLY ILL/INJURED PATIENTS' FAMILIES IN AN ACCIDENT AND EMERGENCY UNIT

I am currently a Masters Student in Trauma and Emergency Nursing at the Department of Nursing Science at the University of Pretoria. You are invited to volunteer to participate in my research project.

This letter is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the researcher. You should not agree to take part unless you are completely happy about what is expected of you.

The purpose of the study is to identify and describe the needs of critically ill / injured patients' families in an accident and emergency unit.

You will be interviewed by the researcher or research assistants, questions will be asked and answers completed on your behalf by the researcher or research assistants. Your name will not be written on the questionnaire to maintain anonymity. The completion of the questionnaire may take about 30 minutes. The questionnaire will be kept in a safe place after completion to ensure confidentiality and destroyed on completion of the research project.

The study protocol was submitted to the Research Ethics Committee of the University of Pretoria, Faculty of Health Sciences as well as to the George Mukhari Hospital. Both the committee and the hospital have granted written approval.

Your participation in this study is voluntary and you can refuse to participate or stop at any time without stating any reason. Your withdrawal will involve no penalty or loss of benefits, but as data is anonymous, you must understand that you will not be able to recall your consent, as your information will not be traceable.

The implication of completing the questionnaire is that informed consent has been obtained from you. Data that may be reported in scientific journals will not include any information that identifies you as a participant in this study. All information during the course of this study is strictly confidential. If you have any questions which are not fully explained during this study, please do not hesitate to approach me or my supervisors.

I sincerely appreciate your help

Yours truly

LESEGO PHIRI

Contact numbers: Home tel number: (012) 702 5146.
Cell phone number: 082 443 7666



INTERVIEW SCHEDULE

A researcher administered questionnaire to identify and describe the needs of the patient's families during critical illness/injury period in an accident and Emergency (A&E) unit.

SECTION A

This section asks the respondents about their demographic data. The researcher or research assistant will either write the respondents response or tick the appropriate box.

Respondent's Number	V0
Social Demographic Data	
1. Age of respondent (years)	
1. 18-24	
2. 25-29	
3. 30-34	
4. 35-39	
5. 40-44	V1
6. 45-49	
7. >50	
2. Age of the critically ill patient (years)	
1. 0-9	
2. 10-19	
3. 20-29	
4. 30-39	
5. 40-49	V2
6. 50-59	
7. >50	
3. Gender of the respondent	
1. Female	V3
2. Male	
4. Ethnic group.....	V4



5. Highest Level of education attained by the respondent

- 1. None
- 2. Primary
- 3. Secondary level
- 4. High school
- 5. Other (please specify).....

V5

6. Religious affiliation

- 1. None
- 2. Christian
- 3. Muslim
- 4. Hindu
- 5. Other.....

V6

7. Marital status

- 1. Single
- 2. Married
- 3. Divorced
- 4. Widowed
- 5. Separated
- 6. Live-in-partner

V7



SECTION B

This section asks the respondent about the time in the A&E unit

- Arrival time and time spent in the A&E unit. The person who was critically ill/injured will be referred to as your “ill family member

- **.ARRIVAL IN THE A&E UNIT-TIME**

8. When did you arrive in the A&E unit?

1. Before your ill family member
2. With your ill family member
3. After your ill family member

V8

9. How soon after arrival at the hospital were you attended to by the hospital staff?

1. Immediately
2. Within 15 minutes
3. Between 15-30 minutes
4. 30-45 minutes
5. > 45 minutes
6. Do not remember

V9

10. Approximately how long did you wait in the A&E unit’s waiting-area before your ill family member was admitted?

1. 0 - 29 minutes
2. 30 - 60 minutes
3. 1- 2 hrs
4. 3 - 4 hrs
5. 5 - 6 hrs
6. > 6hrs
7. Do not remember

V10

11. Which health care worker did you meet on arrival at the hospital?

1. Doctor
2. Nurse
3. Queue marshals
4. Clerical staff
5. Porter
6. Unidentified

V11



12. Did the staff introduce themselves when they met you?	
<ol style="list-style-type: none"> 1. Yes 2. No 	V12
TIME SPENT---GENERAL	
13. What is your relationship to the critically ill/injured patient?	
<ol style="list-style-type: none"> 1. Husband or Wife 2. Defacto or Partner 3. Mother or Father 4. Brother or Sister 5. Son or Daughter 6. Friend 7. Neighbour 	V13
14. Have you visited the unit before?	
<ol style="list-style-type: none"> 1. Yes 2. No 	V14
15. If yes, state the nature of your previous visit	V15
<ol style="list-style-type: none"> 1. Patient 2. Escort 3. Visitor 	
16. Who else was with you in the A&E unit?	V16.1
<ol style="list-style-type: none"> 1. No one 	V16.2a
<ol style="list-style-type: none"> 2. Other family member (a) number (b) 	V16.2b
<ol style="list-style-type: none"> 3. Close friends: number (a) number (b) 	V16.3a
<ol style="list-style-type: none"> 4. Other (please specify).....(a)... number (b) 	V16.3a
	V16.3b
	V16.4a
	V16.4b



SECTION C

This section asks about your needs while you accompanied your ill family member in the A&E unit. Please rate each of the following statements. The person who was critically ill/ injured will be referred to as “your ill family member”.

How Important is each of the following needs to you while you accompany your ill family member to the A&E unit?				
	1.	2.	3.	4.
	Not Important	Slightly important	Important	Very Important
SUPPORT NEEDS				
17. For a doctor or nurse to meet you on arrival at the hospital				V17
18. For a person to look after the family				V18
19. To be allowed to have other friends and/or family members with you while in the emergency department waiting area				V19
20. For the treatment area to be explained to you before you go into it for the first time to see your ill or injured family				V20
21. To have a staff member with you when you visit your ill or injured family member				V21
22. To be told what to do at the bedside				V22
23. To feel accepted by hospital staff				V23
24. To be told that it is good to cry or show how you feel (express emotions)				V24
25. To be told that it is normal to feel that way				V25
26. To tell the staff how you feel				V26



	1. Not Important	2. Slightly important	3. Important	4. Very Important	
COMMUNICATION NEEDS					
27 To find out about the condition of your ill / injured family member before you have to sign papers					V27
28. For doctors and nurses to explain using words / terms that you understand					V28
29. To be kept updated					V29
30.To know precisely how your ill or injured family member is doing					V30
31. To talk to a doctor					V31
32. To talk to a nurse					V32
33. To know what special skills or knowledge the staff have who care for your ill or injured family member					V33
34. To feel helpful by participating in caring for your ill or injured family member					V34
35. To be consulted when decisions are made					V35
36 To be told how to contact staff at a later stage to ask questions					V36
COMFORT NEEDS					
37. To have a private waiting room					V37



	1.	2.	3.	4.	
	Not Important	Slightly important	Important	Very Important	
38. To be told that your ill or injured family member receive the best possible care					V38
39. To feel certain that your ill or injured family member is physically comfortable and free from pain					V39
40. To have food and refreshments nearby					V40
41. To have a telephone in or near the waiting room					V41
42. To have toilet facilities nearby					V42
43. Not to see or hear things that upset you about your ill member					V43
MEANING / ASSURANCE NEEDS					
44. To know why things are done for your ill or injured family member.					V44
45. To know about the expected outcome					V45
46. For staff to be honest when they answer your questions					V46
47. To be treated as an individual					V47
48. To feel that hospital staff care about your ill or injured family member					V48
49. To feel that there is hope					V49



	1. Not Important	2. Slightly important	3. Important	4. Very Important	
50 To be told about religious (church) services					V50
51 To be allowed to use other services(traditional healers)					V51
PROXIMITY NEEDS					
52. To be told about transfer plans while they are made					V52
53. Not to interfere while your family member is treated					V53
54 To see your ill or injured family member as soon as possible					V54
55. To see what is happening to your ill or injured family member					V55
56 To visit your family member at any time					V56
57.To spend time alone with your ill or injured family member					V57
58 To be allowed to perform cultural rituals for your ill family member					V58



59 Do you have any other thing that you would have liked to be done for you?		V59.a
		V59.b
		V59.c
		V59.d

VISUAL BOXES ACCORDING TO DEGREE OF IMPORTANCE