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## The immediate perceived needs of family members of trauma patients and how they differ from the nurses' perceptions of needs

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**The immediate perceived needs of family members of trauma patients and how they differ from the nurses' perceptions of needs**

**Case, Suzanne Cecilia, M.S.N.**

**University of Nevada, Las Vegas, 1992**

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THE IMMEDIATE PERCEIVED NEEDS OF FAMILY MEMBERS OF  
TRAUMA PATIENTS AND HOW THEY DIFFER FROM THE  
NURSES PERCEPTIONS OF NEEDS

by

Suzanne C. Case

A thesis submitted in partial fulfillment  
of the requirements for the degree of

Master of Science

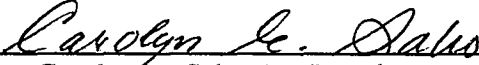
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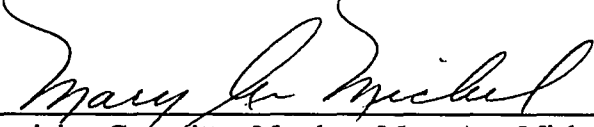
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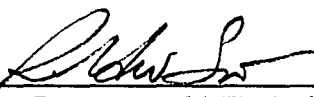
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## ABSTRACT

Trauma is the leading cause of death in the United States for persons under the age of 45. Trauma deaths in the United States exceed 140,000 a year and an additional 70 million persons suffer non-fatal injuries (Committee on Trauma Research, Commission on Life Sciences, National Research Council and the Institute of Medicine, 1985 and Committee on Trauma, American College of Surgeons, 1984). In light of these statistics, the number of people directly related to a trauma patient is staggering and the needs of these family members, while their loved one is hospitalized, are critical to both the family members and the nurses caring for these patients.

The purpose of this study was to identify the immediate perceived needs of family members of trauma patients and to compare these to trauma nurses' perceptions of the needs of family members of trauma patients. This is important to both the nurses and the families. Analysis of the findings will enable nurses to better assist families in coping with the crisis of a loved one's hospitalization by directly addressing those areas that family members have identified as being most important to them.

The study population was 60 nurses at a Level II trauma center, who are directly involved in caring for trauma patients, and the families of 75 trauma patients chosen at random from the approximately 200 trauma

patients admitted to the selected care center per month. Data was collected via questionnaires administered to both study groups. Mean values for each item on the questionnaire were calculated, then t-tests were calculated to assess differences in the responses of the two groups. Findings from the study will contribute to the foundation for support groups specifically created for families of trauma patients.

Findings of the study indicate that the difference between the mean responses of the two groups were not significant. The information however obtained from the study is useful in nursing practice. Recommendations for further study include using a larger sample and questioning the family members at various time intervals during their loved one's hospitalization period.

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## CHAPTER I

### Introduction

Trauma is a sudden unexpected event that is caused by the interaction of specific factors which are amenable to preventative interventions (Thompson, J.M., 1986, Walker, J.A., 1985, & Robertson, L.S., 1983). The magnitude of trauma as a national problem is documented by data which identifies injury as being the primary cause of death in persons under the age of 45 (Trauma Nursing Core Course Manual, 1987). Trauma is a leading cause of death for all age groups surpassed only by heart disease, cancer, and strokes (Committee on Trauma Research, Commission on Life Sciences, National Research Council and the Institute of Medicine; 1985 and Committee on Trauma, American College of Surgeons, 1984). Trauma deaths in the United States exceed 140,000 per year and an additional 70 million people suffer non-fatal traumatic injuries annually (Committee on Trauma Research, Commission on Life Sciences, National Research Council and the Institute of Medicine, 1985; and Committee on Trauma, American College of Surgeons, 1984).

Since trauma occurs suddenly and unexpectedly, the families of trauma patients have no time to prepare for the hospitalization and perhaps impending death of a loved one. Unforeseen injuries and subsequent hospitalization disrupt established roles within the family unit and often force



family members to change and reorganize in order to successfully regain their equilibrium.

Out of necessity, the immediate management of trauma focuses on issues of survival. Although nurses may have intentions of being supportive to family members of trauma patients, in reality, the needs of family members are often not identified or understood by the nursing staff. Consequently, these family needs are not addressed in the time frame immediately following the hospitalization of a trauma victim. Saving a trauma patient's life demands aggressive medical and nursing treatment within an hour following injury; therefore, addressing the needs of family members is frequently not a priority for the nursing staff.

### Problem Statement

At the facility where data collection took place, approximately 25% of all trauma patients are transported directly from the Emergency Department to the Operating Room. Ultimately, 59% of the hospitalized trauma patients are admitted to critical care units (University Medical Center Department of Trauma, 1990). Because time is a critical factor in saving a trauma patient's life, families are frequently left alone for several hours to adjust to the sudden crisis of severe injury to a loved one and the rigid stress of the hospital environment. Staff contact with families is generally brief, fragmented, and carried out by a relatively large number of personnel. Information the

families are given is often that which the nurse (or other personnel) perceive to be significant, and not necessarily what the family see as addressing their most urgent needs. Contributing to the problem of inadequate communication between families and hospital personnel is the large number of physicians, nurses, and other ancillary personnel attending to the patient. Also present are the communication problems associated with health care staff using medical and nursing terminology that family members may not understand. As a result of these issues, the needs of the family members of trauma patients are frequently inadequately met, indicating a necessity to establish what the needs are, in order to manage them appropriately.

#### Purpose of the Study

The purpose of this study was to determine what the immediate perceived needs of family members of trauma patients are, what the nurses perceptions of the families needs are, and to compare the responses of the two groups. This information is important because, during hospitalization, the nurse cares for not only the patient, but the family as well. In order to optimally meet the needs of family members of trauma patients, the nurse must first be aware of what these specific needs are.

The concept of holistic nursing implies that the patient is a significant member of a larger system known as a family. If the nurse is aware of the family's needs, the nurse will help to alleviate actual and potential stressors

the family is encountering by appropriate, specific interventions. This approach could contribute to the development of a more therapeutic relationship between the staff and the family members. A therapeutic relationship between staff and trauma patient's family members will not only alleviate some of the stress for families but may contribute to better patient care.

#### Significance of the Study

Research evaluating the needs of family members while their loved one is hospitalized indicate that frequently their needs are inadequately met or not met at all. With increasing emphasis on holistic patient care, it is important to include family members in the patient's care and assure that their needs are also being addressed. Patients, family members, and nursing staff all benefit by the inclusion of family members in a patient's overall care (Gardner & Stewart, 1978). In order to incorporate families as members of the health care team, the stress and anxiety precipitated by the hospitalization of a loved one must be decreased. In order to accomplish this, the needs of the family members must be appropriately assessed and adequately met. The benefit of meeting family members needs is manifested by the inclusion of families in patient care, resulting in enhanced patient care and overall satisfaction of nurses, families, and patients.

## CHAPTER II

### Review of the Literature and Conceptual Framework

#### Review of the Literature

In recent years, the concept of nurses caring not only for patients but family members as well, has become a focus of interest as documented by the number of studies addressing this in the literature. A comprehensive literature search revealed numerous studies related to this topic; however, none of these studies specifically addressed the families of trauma patients.

Molter (1979) studied the perceived needs of family members of patients in an Intensive Care Unit. The study population consisted of 40 family members, defined as adults greater than 18 years of age. In Molter's study, the family member must have been in the Intensive Care Unit for at least three days with no more than 48 hours on a hospital ward. No description of diagnosis of the patient was included. Molter's study suggested that assessment and intervention can best be met through the identification of what relatives of patients perceive as their needs in a crisis situation such as a loved one's hospitalization. The reliability of the tool that was used was not determined, although family members did not report any other needs when asked. The author further contended that it is essential for the patient to be considered a member of a family unit when assessing the patient's needs within a framework of holistic patient care.

Daley (1984) studied 40 family members who were blood relatives age 18 years or older, of patients with a variety of diagnoses in the Intensive Care Unit. In some cases, more than one family member per patient were included in this study. The patient's age range was five to 80 years and the families were evaluated within 72 hours of Intensive Care Unit admission of their loved one. Daley found that the most significant need among family members was the need for relief of anxiety; specifically, expected outcomes for the patient, explanation of treatment and equipment, and to know the nurses are giving the best care possible. Daley also found that items addressing personal needs of the family members such as having coffee available, bathroom facilities close by, and a place to rest were of lowest priority. These findings coincide with those of Molter (1979).

O'Neill-Norris and Grove (1986) compared families' perceptions of their needs with nurses' perceptions of family needs using Molter's instruments. The researchers questioned 55 family members of 20 patients hospitalized in six different Intensive Care Units. No description of the patient's diagnosis was given. The assessment was completed by the family at least 48 hours after admission to the Intensive Care Unit and nurses completed the same instrument. The researchers found that the following needs were perceived more important by families than by nurses: (1) "To feel there is hope"; (2) "To know about the hospital staff taking care of patients";

and (3) "To have questions answered honestly". The two needs, that families identified among the ten most important needs, but nurses did not were: (1) "To have a specific person to call at the hospital when they are not there"; and (2) "To have a telephone in the waiting room". In this same study, nurses felt that "To be told about other people who could help with problems" and "To have visiting hours changed for special conditions" were most important to families (O'Neill-Norris, Grove, 1986).

Bouman (1984) examined and compared responses of blood versus non-blood relatives of Medical Surgical Intensive Care patients 36 hours versus 96 hours after admission. Thirty four family members of 11 patients were questioned, the patients had a broad range of diagnoses. The data were collected at two times (36 hours after admission to Intensive Care Unit and 60 hours after first data collection times). Utilizing an adapted version of Molter's Needs Assessment, Bouman reported no statistical significance in the difference between blood versus non-blood relatives' needs in the 36 or 96 hour period (1984).

Mathis (1984) compared needs of families of critically ill acute brain versus non-brain-injured patients and found significant differences on Chi Square Analysis. Twenty six family members of patients with acute brain injury and 15 family members of patients without acute brain injury were questioned via interview no later than 48 hours after discharge from the

Intensive Care Unit. Again, Molter's 45 Need Statements Instrument was utilized. When the ten most important needs among the two groups were examined, eight needs were placed among the ten most important needs by both groups. Of the needs that led to consensus among the groups, families of patients without brain injury included "To receive information once a day" and "To know progress" among their ten most important needs; whereas, families of patient with brain injury identified "To be told how relative was going to be treated medically" and "To feel accepted by personnel" as being the most important (1984).

Vassar and Coolican (1989) surveyed 150 families of patients with varying diagnoses retrospectively and found that their immediate needs were: (1) The opportunity to see their loved one as soon as possible, no matter what the condition; (2) The opportunity to spend time with their loved one; (3) Information about the patient's condition quickly and frequently; and (4) Immediate contact with the nurse and doctor caring for the patient (1989).

Stover (1990) examined the issue of parents' needs in the Pediatric Intensive Care Unit and compared these to the nurses' perceptions of needs. Utilizing a sample of matched pairs, mother-nurse ( $n = 33$  pair) and father nurse ( $n = 26$  pair), the participants completed the Molter Critical Care Family Needs Inventory within 36 to 72 hours after a child's admission. Data analysis indicated that there was a significant difference ( $p < .05$ ).

Forrester, Murphy, Price and Monaghan (1990) compared the needs of family members with loved ones in the Critical Care Unit to the nurses perceptions of these needs. Data was obtained from 92 family members of adult patients in a variety of Intensive Care Units with varying diagnoses, and 49 nurses who provided care for these patients. Significant ( $p < 0.001$  to  $p < 0.05$ ) differences were detected between the family members' perceptions and the nurses' perceptions of the importance of 15 (50%) of the items on Molter's Critical Care Family Needs Assessment. They concluded that these nurses were only moderately accurate in their assessments of critical care family needs.

In her article, "Discussing The Incorporation Of Family Members Into Care", Hymovich (1974) addressed the issue by stating that "...considering the patient is a member of a family unit is essential when assessing the patient's needs within a framework of the concept of total patient care". Hymovich suggests that to provide optimal patient care, nurses need to bring family members into their mainstream of nursing care.

Unfortunately, literature and research dealing with the issue of family needs while a loved one is hospitalized is somewhat limited, and of these, none of these studies specifically addressed the needs of family members of trauma patients and how they compare to the nurses' perceptions of needs.



### Conceptual Framework

The Neuman Systems Model (1982) was utilized as the conceptual framework for this study. Although the model itself has not been adequately tested through research, the assumptions of the model provide flexibility in the organization management of goal oriented tasks and relationships. The model is broad in scope and diversified. The Neuman Systems Model is a total person approach to patient problems. The person is described as an open system that interacts with the environment to promote "harmony and balance between his internal and external environment" (Neuman, 1982). The person is a composite of physiologic, psychologic, sociocultural, and developmental variables that are viewed as a whole. "No one part can be looked at in isolation...just as the single part influences perception of the whole, the patterns of the whole influence awareness of the part" (Neuman, 1982). Thus, the functioning of any subsystem or part of the system must be evaluated in the context of the entire system (Leddy & Pepper, 1985).

The holistic person described in Neuman's Model is a dynamic composite of a number of variables. Among these are: developmental; sociocultural; psychological; physiological; and spiritual. The holistic system described by Neuman is open. As an open system, it interacts with, adjusts to, and is adjusted by the environment.

According to Neuman (1982), a person is constantly affected by

stressors. Stressors are tension producing stimuli that have the potential of disturbing a person's equilibrium or normal line of defense. This normal line of defense is the person's "usual steady state" and is the way in which an individual usually deals with stressors. Stressors may be (1) intrapersonal, that is, forces occurring from within the individual, (2) interpersonal, that is, forces occurring between individuals, or (3) extrapersonal, that is, forces occurring from outside the individual.

Resistance to stressors is provided by the flexible line of defense, which is the dynamic protective buffer made up of all variables affecting an individual at any point in time. The flexible line of defense functions as a protective buffer against stressors that break through the normal line of defense. The flexible line of defense is accordion-like in function. When it is expanded farthest outward (from the normal line of defense), the greatest degree of protection is offered. As it moves closer to the normal line of defense, its protective mechanism decreases. Multiple stressors which occur concurrently may reduce the effectiveness of this buffer system. Any stress factor may narrow the space between the normal line of defense and the protective line of defense allowing penetration that alters the person's usual steady state. If the flexible line of defense is no longer able to protect a person against a stressor, the stressor breaks through the normal line of defense. In other words, the person's equilibrium is disturbed and there is a

reaction. The reaction may lead toward restoration of balance or toward death, depending on the internal lines of resistance that attempt to restore balance (return the person to the normal state of defense) (Leddy and Pepper, 1985). The internal lines of resistance are the internal resultant forces encountered by a stressor which act to decrease the degree of reaction, by attempting to stabilize and facilitate a return to the normal lines of defense.

The core is defined as a conglomerate of all survival factors common to man as well as unique individual characteristics. Among these factors are temperature range, genetic response pattern, ego structure as well as strength and weakness of body organs. The usual role of the core is protection of the individual.

The goal of the Neuman Systems Model is nursing intervention via primary, secondary, and tertiary prevention. Primary prevention identifies stressors and focuses on strengthening the normal line of defense. Primary prevention involves identification and management of issues or potential issues (stressors) before they become an unmanageable problem and harm an individual. Secondary prevention relates to symptomatology and treatment to strengthen the internal line of defense. Secondary prevention involves active treatment of a stressor that has evolved into a problem. Tertiary prevention seeks to maintain a degree of adaptation or stability. Tertiary prevention is defined as reconstitution and relates to the adaptive process initiated after

symptoms of reaction have occurred. Tertiary prevention moves back toward primary prevention in a circular fashion.

The Neuman Systems Model represents an individual's attempt to adapt and maintain stability so that present and future stressors may be managed appropriately with minimal or no harm to an individual. Should all effort at maintenance of homeostasis fail, the individual's core structure is penetrated and death may result (Neuman, 1982).

The Neuman Systems Model was utilized in the structuring of this study because the goal of the model is to provide a unified focus which allows an individual to identify a problem, or potential problems, understand the basic phenomenon, and intervene to allow the individual to cope effectively, change the situation and thereby decrease the stress. This research study was directed at identifying those needs most important to the family members of trauma patients (actual and perceived stressors) and ultimately minimizing the impact of such stressors via primary prevention and immediate, specific nursing interventions (Neuman, 1982).

A thorough assessment of the situation is absolutely necessary to intervene appropriately. Neuman (1982) has proposed the following three basic principles that must be considered in evaluating a patient's situation:

- 1) Good assessment requires knowledge of all of the factors influencing a patient's perceptual field.

- 2) The meaning that a stressor has to a patient is validated by the patient as well as the care-giver.
- 3) Factors in the care-giver's perceptual field that influence her assessment of the patient's situation should become apparent (Neuman, 1982).

In order for the nursing staff to adequately meet the needs of the family members during their loved one's hospitalization, they must be aware of what those needs are. The first step in the process involves identification of needs of the family members and then a systematic approach must be taken to meet such needs.

This study looked at the relationship between nurse and family member (of hospital trauma patients) perceptions of needs during the initial hospitalization period. The unique relationship between a nurse caring for an individual's loved one allows for the possibility of working toward the congruent goal of decreasing stressors or the impact of stressors. Conversely, if the needs of the family members are not assessed properly, the result may be working toward opposite goals which may increase stress. For the purpose of this study, two groups of interest were studied: A) the nursing staff caring for trauma patients; and B) the family members of hospitalized trauma patients.

Neuman's Systems Model is the synthesis of knowledge derived from

several disciplines: (1) de Charden's philosophical beliefs about the wholeness of life; (2) Marxist philosophical views of the oneness of man and nature; (3) Gestalt and Field theories of the interaction between person and environment; (4) Selye's theoretical formulations of stress and adaptation, general systems theory of the nature of living open systems; and (5) Caplan's formulation of levels of prevention. The Neuman Model has four essential concepts that are defined as follows:

- (1) Person - a composite of physiological, psychological, sociocultural, and developmental variables. Person has a central core of survival factors unique to each individual but within a common range with other humans. Among these factors are temperature range, genetic response pattern, ego structure as well as strength and weakness of body organs. The core of an individual is protected from stressors by the flexible line of defense, a dynamic rapidly changing protective buffer that prevents stressors from breaking through the normal line of defense. The normal line of defense represents a state of wellness of the particular individual, a state of adaptation that the individual has maintained over time. When the cushioning factor of the flexible line of defense is no longer capable of protecting a person against a stressor, the stressor breaks

through the normal line of defense. When penetration occurs, the lines of resistance attempt to foster the return of person to the normal line of defense. Many factors impact an individual's reaction to a stressor. Among these are the strength of the normal lines of defense and line of resistance, as well as the nature and intensity of the stressor (Neuman, 1982).

- (2) Environment - Neuman identifies man and environment as the basic phenomena of her conceptual model. Environment considers (a) the occurrence of stressors; (b) the reaction of the organism to stressors; and (c) the organism itself. Thus, stressors, which are a prominent feature of the model, comprise the environment. Neuman uses Selye's (1950) definition of stressor, "tension producing stimuli with the potential of causing disequilibrium, situational or maturational crises or the experience of stress within an individual's life". Neuman further states that stressors are intrapersonal (forces occurring within the person), interpersonal (forces occurring between one or more individuals), and extrapersonal (forces occurring outside the person) (Neuman, 1982).
- (3) Health - Neuman does not explicitly define health. She states that the person retains "varying degrees of harmony and

balance" between the internal and external environments through a "process of interaction and adjustment". Neuman refers to wellness, variances from wellness, and stability of the client's system. Wellness is equated with stability which exists when the person's flexible line of defense have prevented penetration of the normal lines of defense. Illness is variance from wellness that occurs when stressors penetrate the flexible lines of defense. Neuman further states that intrapersonal, interpersonal, and extrapersonal factors are considered in the person's reaction to stressors and these factors are viewed in the context of physiological, psychological, sociocultural, and developmental variables. Reconstitution refers to movement from a variance from wellness to the desired wellness level and client stability. Reconstitution factors are intrapersonal, interpersonal and extrapersonal and are considered within the context of the four variables previously mentioned (Neuman, 1982).

- (4) Nursing - Neuman (1974) defines nursing as a unique profession "that is concerned with all the variables effecting an individual's response to stressors". The central concern of nursing is total person. The primary goal of nursing is retention or attainment



of client system stability. According to Neuman, this is accomplished by three steps: (1) nursing diagnosis; (2) nursing goals; and (3) nursing outcomes. Diagnosis of actual or potential variances from wellness and available resources leads to formulation of nursing goals which are negotiated with the client for changes to correct these variances. Nursing outcomes are determined by nursing intervention using one of three modes: primary, secondary, and tertiary prevention as previously discussed (Neuman, 1982).

For the purpose of this study, the health care system is "environment", "person" is the family members, "health" is the immediate perceived needs of the family members, and "nursing" is the nursing staff.

#### Assumptions

- 1) The questionnaire will be answered truthfully.
- 2) Family members will have needs that nurses will attempt to meet.
- 3) Trauma results in a crisis situation for the injured person's family.

#### Research Question

The abruptness with which trauma occurs allows the family little time to confront the issue of a seriously injured loved one. The seriousness of

traumatic injury as well as the potential death of a loved one further compounds the stress of a family confronted with a loved one's hospitalization.

"...the crisis of a family precipitates a crisis and the hospital staff's reaction increases the stress of the family. A reduction or ineffectiveness in patient care, not to mention the immense dissatisfaction of all persons concerned occurs rapidly. A spiraling disequilibrium between the staff and the family occurs with the result being the person experiencing the most stress is seldom the hospitalized but rather the supposedly healthy family member."

(Williams, 1974)

In order for the nurse to assist the family in adjusting to the crisis of a loved one's traumatic injury and subsequent hospitalization, nurses must be aware of the families' needs. Again, unmet needs will serve as stressors to the family of the trauma patient. To accurately intervene with the family, congruency between nurse and family member's perception of stressors (needs) is imperative. Although available literature comparing family versus nurses views on this subject is limited, past research suggests that perception of needs of family members and nurses may be different.

The research questions studied were:

- (1) What is the relationship between the nurse's perception and the family member's perceptions of stressors (needs) associated with

hospitalization of a loved one following trauma?

- (2) What is the relationship between selected family member characteristics and their perceptions of stressors (needs) associated with hospitalization of a loved one following trauma?
- (3) What is the relationship between selected nurse characteristics and their perceptions of stressors (needs) associated with hospitalization of a loved one following trauma?

#### Definition of Terms

For the purpose of this study, the terms utilized were defined as follows:

- 1) Trauma - a sudden unexpected event that is caused by the interaction of specific factors which are amenable to preventable interventions (Thompson, J.M., 1986; Walker, J.A., 1985; & Robertson, 1983).
- 2) Trauma patient - an individual admitted to the hospital following injury that meets at least one of the following criteria as defined by the American College of Surgeons Committee on Trauma:
  - a) Survives a fall of a distance of 20 feet or greater.
  - b) A victim of an auto versus pedestrian accident.
  - c) Sustains penetrating trauma to chest, abdomen or head.

- d) Prolonged extrication from a motor vehicle following a motor vehicle accident.
  - e) Intrusion of 18 inches or more into the passenger space following a motor vehicle accident.
  - f) Fracture of two or more long bones.
  - g) Loss of consciousness following injury or lateralizing neurological status following injury.
  - h) Documented death of an individual involved in the same motor vehicle accident at the scene of a motor vehicle accident.
  - i) Systolic blood pressure less than 90mm of mercury with a pulse of greater than 120 beats per minute following injury.
- 3) Family member - an individual 18 years or older, spouse, parent, sibling, aunt/uncle, cousin, grandparent or child who visits the trauma patient within seventy two hours following admission to the hospital.
  - 4) Significant other - in the absence of a family member an individual 18 years or older, friend, lover or fiancé who visits the patient within 72 hours following admission to the hospital.
  - 5) Nurse - an individual who is licensed by the Nevada State Board

of Nursing to practice as a registered nurse. The nurse must care for an identified trauma patient within 72 hours after their admission to the hospital and have direct contact with the family members of trauma patients.

- 6) Immediate needs - physiological or psychological requirements of a family member or significant other within 72 hours after admission of a relative to the hospital following trauma (Daley, 1984).

For the purposes of this study, the spiritual aspect of the Neuman System Model of Nursing was not addressed.

### Limitations

Limitations of this study have been identified and include the following.

- (1) The sample size is small ( $n = 60$  for the nurse group,  $n = 75$  for the family member group) and this may diminish the external validity or decrease generalizability to the non-study population.
- (2) Different members of the same family may have different needs; therefore, in order to adequately address the needs of the family, multiple family members of a single patient should be surveyed.
- (3) Further, because the term trauma addresses injury and not etiology, trauma resulting from different etiologies may produce different need responses from family members, that is suicide attempts versus a fall while at work.
- (4) In addition, different diagnoses of trauma patients

may produce different need response of family members; for example, the patient with isolated fractures generally has a better prognosis than a comatose patient with a closed head injury. In spite of these limitations, the potential value of the study is obvious and will help nurses in assisting family members to cope and adjust while their loved one is hospitalized.

## CHAPTER III

### Methodology

#### Research Design

Descriptive research methodologies were utilized for this study. Each of the two groups, the nurses and the family members, were surveyed in the form of a questionnaire to ascertain the immediate perceived needs of family members of trauma patients. The responses of the two groups were then compared and rank ordered according to importance. The items on the questionnaire were grouped according to category domain consistent with Neuman's categoration of stressors (interpersonal, intrapersonal, and extrapersonal). Items were analyzed for each individual group categorically. The demographic data of the families was evaluated utilizing the data gained from questions regarding (1) whether or not they are a local resident or a visitor, (2) relationship to the patient, and (3) sex. For the nurses, the demographic data questions utilized were (1) number of years in nursing, (2) level of education in nursing, and (3) whether or not they have had a family member as a trauma patient.

#### Research Setting

Data was gathered from two separate groups of subjects for this study. The subjects were drawn from a large acute care facility in an urban area of a southwestern state. The facility is a designated Level II trauma center and

a regional burn referral center. The facility from which the subjects were drawn provides treatment for 150 to 200 trauma patients a month with approximately 94% of those patients being admitted to the hospital. The first group to be assessed were the nurses directly involved in the care of trauma patients (within 72 hours of hospital admission). This group included registered nurses only. The subjects were drawn from nurses working in the Emergency Department, Burn Care Unit, Intensive Care Unit, Intermediate Care Unit, and two selected Medical-Surgical Units. All trauma patients admitted to this facility, are admitted to one of these units. The second group of subjects were the family members or significant others of trauma patients admitted to the facility with a diagnosis of trauma. The criteria for admission as a trauma patient was determined by the trauma team, in accordance with standards set forth by the American College of Surgeons Committee on Trauma (Committee on Trauma, American College of Surgeons, 1984). Only the family members of those patients admitted to the hospital were approached regarding participation in this study. Only those individuals who read, write, and speak English fluently were considered for this study.

### Sample

### Human Subjects Rights

Prior to participating in this study, all individuals from both groups (family and nurse) were informed of the purpose of the study, procedure, and



potential complications of participating in this study (none have been identified). Each subject was given the opportunity to ask questions or clarify any misunderstandings before consenting to participate in the study. The subjects were informed that there are no consequences or repercussions if they choose not to participate, and they may withdraw from participation in the study at any time. Those individuals who consented to participate were advised that they will not be reimbursed monetarily or otherwise for doing so. Those subjects who consented to participate in this study were also given the option of receiving a summary of the results at the conclusion of data collection if they so desire (Appendix A). The subjects were asked to sign the consent form prior to participation in this study.

The sample was a convenience sample. Criteria for sample selection was as follows: the questionnaires were distributed to all nurses who work with trauma patients in the hospital and one family member per trauma patient to whom the researcher had access during the data collection period. Those questionnaires that were returned were utilized. Confidentiality was maintained by not coding the response sheets and by having the researcher being the only person with access to the returned questionnaires. The returned questionnaires are kept at the researcher's home in a locked cabinet with the researcher being the only person having a key.

## Data Collection Methods

### Techniques

Data was collected from approximately November 1991 to January 1992 via the identified tool ("Needs of Relatives of Critically Ill Patients") and the demographic sheet. The instrument that was used for data collection is the "Needs of Relatives of Critically Ill Patients" as developed by Nancy C. Molter (Molter, 1976) (Appendix B). The instrument measures four variables: 1) the needs of relatives of critically ill patients who are in an intensive care unit; 2) how important the relatives perceived each need to be; 3) whether or not the need was met; and 4) if the need was met, by whom. Data was gathered by a questionnaire which consists of 45 declarative statements. Each statement relates to a specific need a critically ill patient's relative may have during the time the patient was assigned to a critical care unit.

### Instrument

The instrument was based upon crisis theory and Maslow's Hierarchy of Needs Theory. The items were based upon a review of literature, the professional experience of the author, and that of her graduate student nurse peers. The author polled 23 graduate student nurses asking each to list five important needs of relatives of critically ill patients they had observed or experienced. Based upon the results of that poll and the author's experience, the interview schedule was developed. The final schedule was reviewed by

two nurses who specialize in intensive care nursing and a nurse who had a relative as a patient in an intensive care unit (Molter, 1979).

The instrument was originally developed to be used as an interview guide. The investigator explains the purpose of the interview to the subject, gives the subject a five by eight inch card on which the possible responses are stated, and then reads each statement to the subject and records each response of the subject on the answer sheet. The questionnaire has space for the respondents to record: (1) their perception of each of the 45 "need" statements using a Likert type scale (1 = not important, 2 = slightly important, 3 = important and 4 = very important); (2) A check mark under a column headed "YES" or a column headed "NO" to indicate whether or not the need was met; (3) column headed "BW", if the need had been met, by whom (A = doctor, B = nurse, C = chaplain, D = other relative, E = friend, F = visitor, G = other). There is also space for recording an answer to open ended questions regarding needs not covered by the 45 items. Demographic data about the respondent was also collected.

For the purpose of this study, the interview guide was converted to a questionnaire and columns 2 and 3 (described previously) were deleted. Demographic data about the respondents were collected. The questionnaires were distributed to the nurses during their monthly staff meetings and to the families within 72 hours of their loved one's admission to the hospital.

Reliability of the instrument has been recorded according to Cronbach's Alpha with internal consistencies of 0.85 to 0.98 (Leske, 1989). Test retest measures include a correlation of  $R = 0.99$  for two intervals (within 36 hours and 96 hours of critical care admission). Percent agreement uncorrected for chance ranged from 64.7 to 96.1 for each need statement between two intervals (within 24 hours and 48 hours of critical care admission). Content validity was established by the use of professional nurses to compile the list of need statements. Content validity was further established by having the questionnaire reviewed by the nurses (two intensive care nurse specialists, one had a relative in an Intensive Care Unit). The development and use of the instrument was described by Molter (1976) in her Master's thesis "The Identification Of Needs Of And The Importance To Relatives Of Critically Ill Patients". Molter's sample consisted of 40 subjects (30 males and 10 females). Molter did not address any possible limitations due to uneven gender split.

Assessment of the variables was accomplished by distributing a questionnaire to all of the nurses on all of the units that care for trauma patients. The nursing staff identified what they perceive to be the immediate needs of the family members. For each trauma patient that was admitted to the hospital, if a family member was present at the hospital or presented to the hospital within 72 hours of admission of their loved one, a questionnaire

was given to them in a sealed envelope by the nursing staff, and they were requested to complete it and place it in an envelope, seal the envelope, and place it in a collection area identified on each of the floors.

Each of the items on Molter's questionnaire was assigned a category to identify the type of stressor (according to Neuman's definition): intrapersonal; extrapersonal; or interpersonal. Validity for assignment of stressors to categories was accomplished by having nurse educators with expertise in Neuman's model evaluate the assignment of these stressors.

#### Data Analysis

Analysis of the data was accomplished through T-tests that were calculated to detect significant differences between the family member's perceptions and the nurses assessments of the importance of the need item. The previously mentioned demographic items were analyzed through descriptive techniques to determine their impact on responses to the items.

## CHAPTER IV

### Data Analysis and Findings

This chapter consists of the analysis of the data. Included in this chapter are the responses of the nurses, the responses of the families, comparisons of the responses of the two groups, and the assignment of the items on The Needs of Relatives of Critically Ill patients questionnaire to a category according to the Betty Neuman Systems Model of Nursing.

#### Sample

One hundred and fifty questionnaires were distributed to the nursing staff on selected units of a 450 bed acute care facility. Sixty (40%) usable questionnaires were returned. Of the four returned questionnaires that were discarded, three had the same response marked for all items and one was incomplete. The nurses who responded were from the Intensive Care Unit, the Intermediate Care Unit, the Burn Care Unit, the Emergency Department, and two Medical-Surgical Units.

The demographic data of the nurse respondents is presented in Table 1. Three percent of the nurse sample ( $n = 2$ ) were between the ages of 18 and 25, 45% ( $n = 27$ ) were between the ages of 26 and 39, 47% ( $n = 28$ ) were between the ages of 40 and 55, and 5% ( $n = 3$ ) were age 55 and older. Fifteen percent ( $n = 9$ ) were male nurses and 85% were female nurses.

Table 1

Nurse Demographic Data

Age	No.	%	Sex	No.	%
18 - 25	2	3	Male	9	15
26 - 39	27	45	Female	51	85
40 - 55	28	47			
55 and Up	3	5			
Years in Nursing	No.	%	Years Caring for Trauma Patients	No.	%
1 - 5	10	17	1 - 5	30	50
6 - 10	15	25	6 - 10	13	22
11 - 15	10	17	11 - 15	9	15
16 - 20	11	18	16 - 20	5	8
20 and Up	14	23	20 and Up	3	5
Family Member/Trauma Patient	No.	%	If Yes, How Long	No.	%
Yes	17	28	Less than 1 year	5	29
No	43	72	1 - 2 years	1	6
			3 - 4 years	4	24
			More than 5 years	7	41
Level of Education in Nursing	No.	%			
Associate Degree	26	43			
Bachelor Degree	18	30			
Diploma	16	27			
Masters Degree	0				

Seventeen percent of the nurse respondents ( $n = 10$ ) had one to five years of experience in nursing, 25% ( $n = 15$ ) had six to ten years of experience in nursing, 17% ( $n = 10$ ) had eleven to fifteen years of experience, 18% ( $n = 11$ ) had sixteen to twenty years of experience in nursing and 23% ( $n = 14$ ) had twenty years or greater experience in nursing.

Fifty percent of the nurses ( $n = 30$ ) had one to five years of experience caring for trauma patients, 22% ( $n = 13$ ) had six to ten years of experience in caring for trauma patients and 15% ( $n = 9$ ) had eleven to fifteen years of experience caring for trauma patients, 8% ( $n = 5$ ) had sixteen to twenty years of experience caring for trauma patients and 5% ( $n = 3$ ) had twenty years or greater of experience in caring for trauma patients. Forty-three percent of the nurse respondents ( $n = 26$ ) had an Associate Degree in Nursing, 30% ( $n = 18$ ) had a Bachelor of Science in Nursing, 27% ( $n = 16$ ) had a diploma in nursing, and none of the respondents had a Masters Degree in Nursing.

Twenty-eight percent of the nurse respondents ( $n = 17$ ) had a family member who was at one time a trauma patient. Seventy-two ( $n = 43$ ) of the respondents had not had a family member who was a trauma patient. Of the respondents who had a family member as a trauma patient, 29% ( $n = 5$ ) had occurred less than a year ago, 6% ( $n = 1$ ) had been within one to two years, 24% ( $n = 4$ ) had been three to five years ago, and 41% ( $n = 7$ ) had been more than five years ago.



One hundred and fifty questionnaires were distributed to the family members of the trauma patients. Seventy-five (50%) of the questionnaires that were returned were usable. Six were discarded as unusable because of incompleteness. The questionnaires were given to the families within seventy-two hours of admission of their loved one to the hospital. A summary of the demographic data of the family member respondents is presented in Table 2.

Of the family members who responded, 74% ( $n = 56$ ) were local residents, while 26% ( $n = 19$ ) were visitors. Of the visitors who responded, 42% ( $n = 8$ ) were staying with family in Las Vegas and 31% ( $n = 6$ ) were staying in a hotel or a motel. For the family member respondents, 58% ( $n = 44$ ) noted that this was the first time their family member had been hospitalized. For 42% ( $n = 31$ ), their family member had a previous hospitalization.

Thirty-six percent ( $n = 27$ ) of the family respondents were spouses of the patient, 20% ( $n = 15$ ) were parents of the patient. Nine percent ( $n = 7$ ) were siblings, 12% were children of the patient, and 3% ( $n = 2$ ) were cousins of the patient. Three percent ( $n = 2$ ) were an aunt/uncle of the patient, 6% ( $n = 5$ ) were grandparents of the patient, 9% ( $n = 7$ ) were lover/fiance, and 2% ( $n = 1$ ) were a grandchild of the patient.

Table 2

Family Demographic Data

Age	No.	%	Sex	No.	%
18 - 25	11	15	Male	34	45
26 - 39	39	52	Female	41	55
40 - 55	14	19			
55 and Up	11	17			
Residential Status	No.	%	If visitor, are you staying	No.	%
Local	56	74	with family	8	42
Visitor	19	26	with friends	5	26
			hotel/motel	6	31
Education Level	No.	%	Relationship to Patient	No.	%
Elementary			Spouse	27	36
School Graduate	0		Parent	15	20
Some High School	0		Sibling	7	9
High School			Child	9	12
Graduate	18	24	Cousin	2	3
Some College	26	34	Aunt/Uncle	2	3
College Graduate	20	26	Grandparent	5	6
Post College			Lover/Fiance	7	9
Graduate	11	16	Grandchild	1	2
First Time Family Member Hospitalized	No.	%			
Yes	44	58			
No	31	42			

Of the family member respondents, 15% ( $n = 11$ ) were between the ages of 18 and 25, 52% ( $n = 39$ ) were between the ages of 26 and 39, 19% ( $n = 14$ ) were between the ages of 40 and 55, and 17% ( $n = 11$ ) were age 55 and up, further, of the family member respondents, 45% ( $n = 34$ ) were males and 55% ( $n = 41$ ) were females.

Of the family member respondents, 24% ( $n = 18$ ) were high school graduates, 34% ( $n = 26$ ) had some college, 26% ( $n = 20$ ) were college graduates, and 16% ( $n = 11$ ) were post college graduates. None of the family member respondents had a maximum of an elementary school education or a high school diploma.

### Results

To determine need importance, a mean was calculated for each need statement on the Needs of Relatives of Critically Ill Patients questionnaire for each of the two groups of respondents the nurses and the family members. The possible range of scores on the questionnaire was (1 = least important to 4 = very important). Table 3 presents the calculated mean value for each need statement for each of the two groups of respondents.

For the nurse respondents, the mean range was 2.12 to 3.78 with a total mean score of 2.99 (standard deviation, 0.95). For the family respondents, the mean range was 1.41 to 3.90 with a total mean score of 2.78 (standard deviation, 1.03).

Table 3

Mean Scores for Nurse and Family Member Respondents on the Needs of Relatives of Critically Ill Patients Questionnaire

Item	Mean		Item	Mean	
	Nurse	Family		Nurse	Family
1	3.00	2.54	24	3.12	2.45
2	3.78	3.90	25	2.82	3.18
3	3.02	3.48	26	3.23	3.26
4	2.55	1.68	27	3.37	3.70
5	3.15	2.76	28	2.83	2.40
6	3.05	3.13	29	2.93	1.96
7	2.87	3.53	30	3.30	2.96
8	2.75	2.62	31	2.43	1.74
9	2.85	2.06	32	2.35	2.30
10	2.75	2.70	33	2.82	2.86
11	2.12	2.33	34	3.60	3.81
12	3.68	3.76	35	3.60	3.82
13	2.77	2.65	36	3.07	3.40
14	2.35	1.44	37	2.30	2.58
15	3.75	3.81	38	2.40	1.48
16	3.67	3.82	39	3.23	3.58
17	2.70	1.76	40	3.58	3.58
18	3.37	3.26	41	2.63	2.54
19	3.57	3.62	42	2.23	1.41
20	3.50	3.40	43	2.53	1.94
21	3.10	2.73	44	3.43	3.33
22	3.38	2.82	45	2.35	1.57
23	2.92	1.52			

1 = not important at all to you  
2 = slightly important to you

3 = important to you  
4 = very important to you

A t-test was done to test for significance of differences between the means of the nurse respondents and the family respondents. The difference in the total means was not significant at the 0.5 level (calculated  $t = 1.2302$ ,  $df = 133$ ).

According to the calculated mean value for each need statement, the items were rank ordered for importance for each of the two groups of respondents. The top ten need statements, their mean scores and standard deviations for each of the two groups of respondents is presented in Table 4 (refer to appendix C for the complete need statement).

For the items ranked in the top ten, seven of the items (70%) were ranked in the top ten by both groups of respondents but in different rank order. The seven items that were ranked in the top ten by both groups were: item 2 (to have questions answered honestly); item 15 (to know exactly what was being done for my relative); item 12 (to feel that the hospital personnel cared about my relative); item 16 (to know how my relative was being treated medically); item 34 (to have explanations given in terms I can understand); item 35 (to need reassurance that the best care possible is being given to my relative); and item 19 (to know why this was being done for my relative). According to Leske (1989), the 45 need statements on the Needs of Relatives of Critically Ill Patients Questionnaire can be psychometrically divided into categories: (1) Support needs; (2) Comfort needs; (3) Information

Table 4

Top Ten Needs Identified by Nurse and Family Member Respondents on the Needs of Relatives of Critically Ill Patients Questionnaire

Rank	Item	Nurses <sup>1</sup>		Item	Family <sup>2</sup>	
		$\bar{x}$	SD		$\bar{x}$	SD
1*	2	3.78	0.52	2	3.90	0.29
2	15	3.75	0.47	16	3.82	0.41
3	12	3.68	0.53	35	3.82	0.44
4	16	3.67	0.57	15	3.81	0.42
5*	34	3.60	0.55	34	3.81	0.42
6	35	3.60	0.61	12	3.76	0.54
7	40	3.58	0.67	27	3.70	0.58
8*	19	3.57	0.62	19	3.62	0.56
9	20	3.50	0.62	7	3.53	0.75
10	44	3.43	0.74	3	3.48	0.57

<sup>1</sup>n = 60      <sup>2</sup>n = 75

\*Denotes item that was ranked in the same position by both groups

1 = not important at all to you

2 = slightly important to you

3 = important to you

4 = very important to you

needs; (4) Proximity needs; and (5) Assurance needs. Consistent with this subscale, of the seven items that were ranked in the top ten by both groups of respondents, three (42%) were information needs and four (57%) were assurance need.

Of the seven items that were ranked in the top ten by both groups of respondents, three of the items had the same rank number. Item number two (to have questions answered honestly) was ranked as the most important by both groups. A t-test was done to determine if the difference between the means was significant. There was no significance at the 0.5 level, but the difference between the means was significant at the .10 level ( $t = 1.5993$ ,  $df = 133$ ,  $p = 1.282$ ).

For item number 34 (to have explanations given in terms I can understand) which was ranked fifth by both groups of respondents, the difference between the means was significant at the .01 level ( $t = 2.4427$ ,  $df = 133$ ,  $p = 2.326$ ).

For item 19, (to know why things were being done for my relative), which was ranked eighth by both groups, the difference between the means was not significant ( $t = .4861$ ,  $df = 133$ ).

Table 5 presents the ten least important needs identified by the nurse and family member respondents on the Needs of Relatives of Critically Ill Patients questionnaire. The items were ranked ordered according to the

Table 5

Ten Least Important Needs Identified by Nurse and Family Member Respondents on the Needs of Relatives of Critically Ill Patients Questionnaire

Rank	Item	Nurses <sup>1</sup>		Item	Family <sup>2</sup>	
		$\bar{x}$	SD		$\bar{x}$	SD
1	11	2.12	0.93	42	1.41	0.54
2	42	2.23	0.96	14	1.44	0.59
3	37	2.30	0.97	38	1.48	0.64
4	14	2.35	0.98	23	1.52	0.64
5	32	2.35	1.01	45	1.57	0.55
6	45	2.35	0.96	4	1.68	0.75
7	38	2.40	1.05	31	1.74	0.68
8	31	2.43	1.01	17	1.76	0.63
9*	43	2.53	0.94	43	1.94	0.83
10	4	2.55	0.92	29	1.96	0.82

<sup>1</sup>n = 60      <sup>2</sup>n = 75

\*Denotes item that was ranked in the same position by both groups

1 = not important at all to you  
2 = slightly important to you

3 = important to you  
4 = very important to you



calculated mean value for each statement for the two groups of respondents.

For the ten least important needs, only one need item, item 43 (to be told about someone who could help with my family problems) was ranked in the same position by both groups of respondents, ninth. Seven of the ten items (70%) were ranked in the bottom ten by both groups of respondents in different positions on the rank order. According to the psychometric subscale (Leske 1989), all seven of those items ranked in the bottom ten by both groups of respondents were classified as support needs.

A t-test was done on the common ranked item (item number 43 ranked 9th by both groups), to determine if the difference between the means was significant. The difference between the means was found to be significant at the .0005 level ( $t = 3.8187$ ,  $df = 133$ ). Overall, the mean values for the family member respondents of the ten least important needs were lower than those of the nurse respondents.

The demographic data of the nurse respondents were analyzed for a correlation between mean total scale score on the questionnaire and number of years in nursing, educational level in nursing, and whether or not the nurse respondent had ever had a family member as a trauma patient. These data are presented in Table 6.

The nurses who had twenty years or greater experience in nursing had

Table 6

Mean Total Scale Scores on the Needs of Relatives of Critically Ill Patients  
Questionnaire Broken Up by Nurse Respondent Demographics

	<u>Variable</u>	<u>Mean</u>
a.	<u>Number of Years in Nursing</u>	
	1 - 5	2.60
	6 - 10	3.04
	11 - 15	2.01
	16 - 20	2.82
	20 and Up	3.43
b.	<u>Level of Education</u>	
	Associate Degree	3.07
	Bachelor Degree	2.74
	Diploma	2.77
	Masters Degree	0
c.	<u>Family Member/Trauma Patient</u>	
	Yes	3.13
	No	2.79

1 = not important at all to you  
2 = slightly important to you

3 = important to you  
4 = very important to you

the highest total mean score on the questionnaire ( $\bar{x} = 3.43$ ). The nurses who had 11-15 years of experience in nursing had the lowest total mean score on the questionnaire ( $\bar{x} = 2.01$ ).

The nurses with an associate degree in nursing had the highest total mean score ( $\bar{x} = 3.07$ ) and the nurses with a bachelors degree in nursing had the lowest total mean score ( $\bar{x} = 2.74$ ).

For the nurse respondents, the nurses who had a family member as a trauma patient had a significantly higher mean ( $\bar{x} = 3.13$ ) at .05 level of significance, than those who did not ( $\bar{x} = 2.79$ ).

The demographic data of the family members were also analyzed for a correlation between residency status, relationship to the patient, and sex of the respondent and the total mean score on the Needs of Relatives of Critically Ill Patients questionnaire. The total scale mean scores on the questionnaire for each of these subgroups were calculated (Table 7).

Of the family members who were visitors, the total mean score was ( $\bar{x} = 2.84$ ) which is higher than the total mean score for the local family member respondents ( $\bar{x} = 2.36$ ). The total mean score for the parent family member respondents was the highest ( $\bar{x} = 2.99$ ). The cousin family respondents had the lowest total mean score for the family member respondents ( $\bar{x} = 2.09$ ). The second highest score was a tie between the

Table 7

Mean Total Scale Scores on the Needs of Relatives of Critically Ill Patients  
Questionnaire Broken Up by Family Member Respondent Demographics

	<u>Variable</u>	<u>Mean</u>
a.	<u>Residential Status</u>	
	Local	2.36
	Visitor	2.84
b.	<u>Relationship to Patient</u>	
	Spouse	2.89
	Parent	2.99
	Sibling	2.66
	Child	2.66
	Cousin	2.09
	Aunt/Uncle	2.11
	Grandparent	2.56
	Lover/Fiance	2.89
	Grandchild	2.42
c.	<u>Family Member/Trauma Patient</u>	
	Yes	3.13
	No	2.79

1 = not important at all to you  
2 = slightly important to you

3 = important to you  
4 = very important to you

spouse respondents ( $\bar{x} = 2.89$ ) and the lover/fiance respondents ( $\bar{x} = 2.89$ ). The sex of the family member respondents was not significant in determining total mean scores (male  $\bar{x} = 2.59$ , female  $\bar{x} = 2.80$ ).

The items on the Needs of Relatives of Critically Ill Patients questionnaire were placed into one of three categories according to the Betty Neuman Systems Model of Nursing: Interpersonal, Intrapersonal and Extrapersonal by this researcher (Table 8). Each of the ten items identified as most important by the nurse and family respondents was also placed into one of these three categories.

According to Neuman's model, seven (70%) of the top ten items identified by the family members were Interpersonal concerns. Three (30%) were Intrapersonal concerns and none were Extrapersonal concerns. For the nurse respondents, eight (80%) were interpersonal concerns, two (20%) were intrapersonal concerns, and none were extrapersonal concerns.

Of the ten least important items identified by the family respondents, four (40%) were interpersonal, five (50%) were intrapersonal and one, (10%) were extrapersonal. Of the ten least important needs identified by the nurse respondents, two (20%) were interpersonal, four (40%) were intrapersonal and four (40%) were extrapersonal.

Table 8

Categorization of Items on the Critical Care Family Needs  
According to Neuman's Model of Nursing

	<u>Category</u>	<u>Item Number</u>
a.	<u>Interpersonal</u>	1, 2, 3, 6, 9, 10, 12, 15, 16, 20, 21, 22, 23, 24, 25, 27, 29, 30, 35, 36, 38, 40, 41, 44, 45
b.	<u>Intrapersonal</u>	4, 7, 8, 14, 17, 18, 19, 26, 28, 31, 33, 34, 39, 42
c.	<u>Extrapersonal</u>	5, 11, 13, 32, 37, 43

## CHAPTER V

### Summary, Conclusions, and Recommendations

#### Summary

A descriptive comparative study was conducted. The purpose of the study was to determine what the immediate perceived needs of family members of trauma patients were, and how they differed from the nurses caring for these patients perceptions of needs, and to determine if need perception is influenced by certain demographic data.

The setting for the study was a 450 bed public, teaching hospital. The subjects were 75 family members of patients admitted to one of six selected nursing units in the hospital following a traumatic injury.

Family members of patients who had been in the hospital for less than 72 hours were asked to participate in the study. Family members of patients with injuries from attempted suicide were not included. Family members in the process of deciding on the termination of life support systems were not approached regarding participation. Family members meeting the sample criteria and who consented were asked to complete the Needs of Relatives of Critically Ill Patients questionnaire.

At the same teaching facility, nurses caring for trauma patients on the following units were also asked to complete the same questionnaire: Emergency Department; Intensive Care; Intermediate Care; Burn Care; and

two medical-surgical units.

Data were analyzed using descriptive statistics comparing the results of the two groups of respondents, the nurses and the family members. T-tests were done on those items that were ranked the same to determine if the difference between the means was significant.

### Discussion and Conclusions

Findings of this study indicate that the identified needs of family members of trauma patients were generally consistent with those needs identified by the nurses according to the instrument utilized. The total mean scores of each of the two groups of respondents on the questionnaire were different, but the difference between the means was not found to be significant at the .05 level.

Assurance and information needs were the most important needs identified by both groups of respondents and supportive needs were identified as the least important. Interpersonal needs were also identified as the most important and extrapersonal were the least important according to the Neuman subscale.

For the family members, several factors may account for the importance given to the needs. Those needs identified as the least important by the family members may become more important as time goes by. Because of the sudden, unexpected nature of trauma and the time period the data was



collected in (within 72 hours following admission of the loved one to the hospital), the family members may still be responding to the initial stressor of the traumatic event itself. The importance of the needs ranked low may increase as hospital routines, unique characteristics, and rules of the hospital become more familiar.

Also, the hospital environment itself could have influenced the results. If a bathroom, waiting area, telephone, chaplain, or financial and psychological counselors were not readily available and easily accessible; the importance attached to these items by the family members may increase significantly.

Because the average lay person does not know a great deal about medicine and medical care, the majority of the ten most important needs identified by the family members dealt two principle areas; (1) being reassured about the care their relative was being given; and (2) explanations being given in easily understandable terms of how and why things were being done for their loved one. Generally, the unknown is an area of fear for many people, and the unfamiliar terrain of a hospital may cause anxiety in people making them want information.

Of the least important needs identified by the nurse respondents, the majority of the needs addressed issues related to the physical needs of the relatives. It may be possible that because of their nursing experience, nurses were able to see that these items had no bearing on the outcome of the

patient. Nurses may have placed items relating to personal physical comfort needs low because traditionally, nurses are individuals who care for the needs of others before themselves.

Of the ten most important needs identified by the nurse respondents, most dealt with issues surrounding the patient's condition, treatment plans, transfer plans, and rationale for the aforementioned. This could be from the experience of seeing the results of these issues NOT being addressed with family members or perhaps being a family member of a hospitalized person and not receiving this information. Overall, there was little variance identified between the two groups. The small sample size however could have affected this.

The demographic data showed a significant difference between the nurses with varying amounts of nursing experience and also between the nurses who had a family member as a trauma patient and those who had not. For the family member, the only item of demographic data that significantly affected the mean was the relationship of the respondent to the patient.

Results of this research appear to support the findings of other similar studies on family needs. Information needs were the most important needs identified in the study done by Norris and Grove (1986). The study by Norris and Grove concluded that there were also differences between the top ten responses ranked by the nurses and the family members. The ranking of the

ten least important need responses by the two groups in their study was also different which is consistent with the findings of this study. However, Norris and Grove found that the three least important needs were: "to talk about my feelings"; "to talk about the possibility of the patient's death" and "to have visiting hours changed for special conditions". These findings are different from the low ranking needs identified in my study.

In a study done by Daley (1984) on the needs of family members of hospitalized patients, information needs were identified as being the second most important. Daley divided her responses by need categories and found that the need category "the need for relief of anxiety" had the highest significance and information needs, the second highest. In my study, information needs were ranked the highest.

"To have questions answered honestly" was the response ranked number one by the respondents in the study by O'Malley, (1991). The study by O'Malley looked at the responses of ICU nurses on four separate units and found significant differences among the responses of nurses on different units. My study did not examine the responses of nurses by unit. However, "to have questions answered honestly" was ranked number one by the respondents in O'Malley's study and in mine.

These findings are further supported by Price, (1991) in which "to have questions answered honestly" was ranked number one by the respondents. All

of the needs on the questionnaire in Price's study were ranked as either important or very important by the family members ( $n = 213$ ). This differs from my study in which some needs were ranked as slightly important or not important at all.

The original study that looked at needs of family members of hospitalized patients by Molter, (1979) indicated that "the need for hope" was the most important need. Possible differences between the results of my study and Molter's could be attributed to variances in the time of data collection of the nature of the illness of the hospitalized family member.

During a time of crisis such as the admission of a loved one to the hospital as a trauma patient, relatives must adapt and adjust to this disruption of equilibrium. Many factors influence how people adjust to meet these tasks. The needs identified by the family members in this study and the difference between them and those identified by the nurses, however small, give critical insight into how nursing professionals can facilitate the adjustment of family members of trauma patients to their new role. The time that nurses have to spend with family members of trauma patients is limited by necessity. The results of this study can help assure that nurses are assisting family members to meet their priority needs.

The most important needs identified by the family member respondents and the nurse respondents were 70% in agreement. The least important

needs identified by the nurse respondents and the family member respondents were also 70% in agreement. The single most important need to both groups of respondents was to have questions answered honestly. Informational needs as a group and interpersonal needs as a group were the most important needs identified by both groups of respondents. Supportive and extrapersonal needs as a group were found to be the least important by both groups of respondents. The relationship of the respondent to the hospitalized patient affected the total mean scores. Number of years of experience and whether or not the nurse respondent had a family member as a trauma patient influenced the nurse respondents total mean score.

The most important needs identified in this study were similar to those identified in previous research on family needs.

### Recommendations

A number of recommendations may be made following review of this research study.

Replication of this study with a larger sample of both groups because small sized sample groups make it difficult to generalize to the population.

Replication of the study using random sampling techniques to control for the influence of extraneous variables. Extraneous variables significantly influence responses of participants and controlling these variables may alter the outcome of the study.

Replication of the study in various geographical locations to determine if needs vary with geographical location and hospital size.

Replication of the study examining the difference in responses at different time frames of data collection so that meeting needs may be structured according to the responses.

Further research correlating more demographic variables to responses to determine further differences among various study samples.

## APPENDIX A

Dear Family Member of Hospitalized Trauma Patient,

My name is Suzanne Case, I am a registered nurse currently pursuing a Masters degree at the University of Nevada, Las Vegas. My thesis involves studying what family members of hospitalized trauma patients needs are while their loved one is in the hospital. I will then be comparing those identified needs to the nursing personnel's perception of what your needs are.

I am asking you to assist in this study by completing the attached questionnaire, placing it in the attached envelope, sealing it, and placing it in the large response envelope. By completing the questionnaire, you agree to participate.

You are in no way obligated to participate in this study and may withdraw at any time. Neither you nor your family member will suffer any consequences if you choose not to participate. All responses to this survey are completely anonymous and the results will be reported only as group data. I am the only person who will see or have access to the completed questionnaires. There is no risk involved to you or your family member for participating. Thank you very much for agreeing to participate.

Suzanne Case, BSN, RN, CEN, CCRN  
UNLV Department of Nursing  
739-3360

## APPENDIX B

Dear UMC Nurse,

My name is Suzanne Case, I am a nurse here at UMC currently involved in a Master's thesis studying the needs of family members of trauma patients during the hospitalization period, and how the families identified needs compare to the nurses' perception of these needs.

I am writing this letter to request your participation in the study by completing the attached questionnaire. There is no risk involved in participating, all responses are completely voluntary and anonymous and the results will be reported only as group data.

By completing the attached questionnaire and returning it to me, you agree to participate. The questionnaire requires approximately 10-15 minutes to complete and I would greatly appreciate your assistance by participation.

Sincerely,

Suzanne Case, RN  
UNLV, Department of Nursing  
739-3360



PLEASE NOTE

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

58-62, Appendix C - Needs of Relatives of  
Critically Ill Patients

University Microfilms International

## Appendix D

Family Demographic Data

Please circle the most appropriate response.

1. Are you                      Local                      Visitor
2. If visitor, are you staying  
     with family  
     with friends  
     hotel/motel
3. Is this the first time your family member has been  
     hospitalized?                      Yes                      No
4. What is your relationship to the patient?  
     Spouse,                      parent,                      sibling,                      child,                      cousin,  
     aunt/uncle,                      grandparent,                      lover/fiance,  
     grandchild
5. What is your age?    18-25                      26-39                      40-55                      55-up
6. What is your sex?    M                      F
7. What is your educational level?  
     elementary school graduate  
     some high school  
     high school graduate  
     some college  
     college graduate  
     post college graduate

Appendix E  
Nurse Demographic Data

Please circle the appropriate response.

1.    Age    18-25                  26-39                  40-55                  55 & up
2.    Sex    M        F
3.    Number of years in nursing:  
      1-5                  6-10                  11-15                  16-20                  20 & up
4.    Number of years caring for trauma patients:  
      1-5                  6-10                  11-15                  16-20                  20 & up
5.    Level of education in nursing:  
      Associate Degree  
      Bachelor Degree  
      Diploma  
      Masters Degree
6.    Have you ever had a family member who was a trauma  
      patient?                  Yes                  No
7.    If "yes" to question 6, how long ago?  
      Less than 1 year        1-2 years        3-4 years        more than 5 years

## APPENDIX F

February 12, 1990

Ms. Nancy Molter  
9526 Millers Ridge  
San Antonio, Texas 78239

Dear Ms. Molter,

I am writing this letter to formally request your permission to utilize your tool "Needs of Relatives of Critically Ill Patients" for a study I am planning to begin in the spring of this year.

I am a student in the Masters of Science in Nursing program at The University of Nevada at Las Vegas and the title of my proposed thesis is "The Immediate Perceived Needs of Family Members of Trauma Patients and How Do They Differ from The Nurses Perception of Needs?".

I have found your tool to be the most comprehensive for collecting the data I wish to analyze. I am planning to have the subjects complete the questionnaire as opposed to an interview schedule, if you do not object to that.

I will be more than happy to share a summary of my results with you if you wish. If I can be of any assistance to you or if I can answer any questions regarding this study, please do not hesitate to contact me. I look forward to hearing from you in the near future.

Sincerely,

Suzanne Case, BSN, RN, CEN

## APPENDIX G

I, Nancy C. Molter grant permission for Suzanne C. Case to utilize my tool "Needs of Relatives of Critically Ill Patients" for her research study regarding trauma patients. The permission is granted with the understanding by both parties that full credit for the development of the tool will be given to myself, Nancy C. Molter and Jane Leskey.

Signed Nancy C. Molter  
Nancy C. Molter

Date 20 Feb 1990

## APPENDIX H

February 12, 1990

Ms. Jacqueline Taylor  
University Medical Center  
1800 W. Charleston Blvd.  
Las Vegas, Nevada 89102

Dear Ms. Taylor,

I am writing to formally request your permission to conduct a nursing research study at University Medical Center.

The study will take place from approximately April 1990 to January 1991. It will involve having nurses on selected nursing units fill out an anonymous questionnaire relating to their perception of the needs of family members of trauma patients. I will also be asking family members of trauma patients to complete a questionnaire asking what their needs were while their loved one was hospitalized, this also is anonymous. I would like to question approximately 50 families.

The ultimate goal of this endeavor is to (via the surveys) identify the needs of the family members and then apply that knowledge as the foundation for a support group for trauma patients and their families and create an information booklet for family members of trauma patients to help ease the stress during their loved one's hospital stay.

I would like to meet with you at your earliest convenience to further discuss this issue and clarify any questions you may have. I think this project and the outcome will be highly beneficial to University Medical Center and those family members it seeks to help. I look forward to your support in this endeavor. Please advise me when a meeting would be convenient for you.

Thank you very much for your consideration in this matter.

Sincerely,

Suzanne Case, BSN, RN, CEN

Extension 2092

## APPENDIX I

BOARD OF TRUSTEES

William U. Pearson, Chairman  
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Karen Hayes



I, Jacqueline Taylor, Senior Associate Administrator of Professional Services at University Medical Center grant my permission to Suzanne Case to conduct her proposed study at this facility. I have received the proposed outline and consent forms for the study "The Immediate Perceived Needs of Family Members of Trauma Patients and How They Differ From the Families Perception of Needs".

Permission is granted with the understanding by myself and Suzanne that permission to do this study may be withdrawn at any time by myself in the event that the outlined terms are violated.

Signed, 

Jacqueline Taylor,

Senior Associate Administrator  
University Medical CenterDate April 2, 1990

## APPENDIX J

SUBMIT TO OFFICE OF THE GRADUATE DEAN: Original and  
11 copies of the Protocol Form (pp. 1-3) plus one  
copy of the entire research proposal.

DATE RECEIVED: \_\_\_\_\_

LOG # \_\_\_\_\_

TYPE OF REVIEW

☐ Expedited☐ Regular

FUNDING SOURCE:

☐ University☐ State☐ Federal☒ Other/None

UNIVERSITY OF NEVADA, LAS VEGAS

PROTOCOL FORM

FOR RESEARCH INVOLVING HUMAN SUBJECTS

INVESTIGATORS: List person principally responsible for  
the investigation on line a). If principal investigator  
is a student, list faculty advisor on line b).

Investigator	Department	Phone
a) Suzanne C. Case	Nursing	658-0515
b) Carolyn Sabo	Nursing	739-3342
c)		
d)		

UNLV status of Principal Investigator (circle): Faculty/Post-doctoral/Graduate  
/Undergraduate/Other \_\_\_\_\_

TITLE OF PROJECT The Immediate Perceived Needs of Family Members of Trauma Patients

NAME AND ADDRESS of sponsoring agency or foundation (if other than UNLV) \_\_\_\_\_

University Medical Center of Southern Nevada, 1800 W. Charleston, Las Vegas, 89102

CONTRACT OR GRANT NUMBER (if known) \_\_\_\_\_

DURATION OF STUDY (Protocols must be renewed annually) ☒ Start \_\_\_\_\_ Conclude \_\_\_\_\_

TYPE OF SUBMISSION ☒ New ☐ Continuation ☐ Renewal (attach progress report)  
☐ Modification ☐ Previous Log # (if any)

LOCATION(S) OR FACILITIES where study will take place Las Vegas, NevadaUniversity Medical Center of Southern Nevada

Site \_\_\_\_\_

Principal Investigator's Signature \_\_\_\_\_

Site \_\_\_\_\_

Department Chair or Unit Head's  
Signature \_\_\_\_\_

Site \_\_\_\_\_

Faculty Advisor's Signature  
(if warranted) \_\_\_\_\_



SUBJECTS: (Please estimate numbers)

70

<u>0</u> Patients as experimental subjects	<u>0</u> Prisoners, incarcerated subjects
<u>0</u> Patients as controls	<u>100</u> Normal adult volunteers
<u>0</u> Minors (under 18)	<u>0</u> Persons whose first language is not English.
<u>0</u> INLV students	<u>0</u> Other (please specify)
<u>0</u> Pregnant women or fetuses	
<u>0</u> Mentally disabled	<u>100</u> TOTAL ANTICIPATED SUBJECTS

PROCEDURES: (ATTACH relevant materials, such as questionnaires, interview schedules, written test instruments, etc.)

<u>x</u> Survey, questionnaire(s)	<u>    </u> Investigational Drug*
<u>x</u> Interview: phone/in-person	<u>    </u> Approved Drug, New Use*
<u>    </u> Medical or other personal records	<u>    </u> Investigational Device (attach relevant info)
<u>    </u> Filming, taping, recording	<u>    </u> Placebo
<u>    </u> Observation	<u>    </u> Ionizing Radiation (attach CURRENT approval)
<u>    </u> Participant observation	<u>    </u> Surgery
<u>    </u> Anthropological fieldwork	<u>    </u> In vitro fertilization
<u>    </u> Psychological intervention	<u>    </u> Venipuncture
<u>    </u> Incomplete disclosure of purpose	<u>    </u> Other body fluids, excreta
<u>    </u> Payment of subjects	<u>    </u> Abortus, placenta, excess tissue
<u>    </u> Costs to subject/third parties	<u>    </u> Other (please specify)
<u>    </u> Brief Explanation of Procedures:	
<u>    </u>	
<u>    </u>	
<u>    </u>	
<u>    </u>	
<u>    </u>	

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