A Descriptive Study of the Needs of Family Members of Trauma Patients

Sally Laur Sutkowi

Grand Valley State University

Follow this and additional works at: http://scholarworks.gvsu.edu/theses

Part of the Family, Life Course, and Society Commons, and the Nursing Commons

Recommended Citation
http://scholarworks.gvsu.edu/theses/229

This Thesis is brought to you for free and open access by the Graduate Research and Creative Practice at ScholarWorks@GVSU. It has been accepted for inclusion in Masters Theses by an authorized administrator of ScholarWorks@GVSU. For more information, please contact scholarworks@gvsu.edu.
A DESCRIPTIVE STUDY OF THE NEEDS OF FAMILY MEMBERS
OF TRAUMA PATIENTS

By

Sally Laur Sutkowi

A THESIS

Submitted to
Grand Valley State University
in partial fulfillment of the requirements for the
degree of

MASTER OF SCIENCE IN NURSING
Kirkhof School of Nursing
1995

Thesis Committee Members:
Andrea Bostrom, Ph.D., R.N.
Patricia Underwood, Ph.D., R.N.
Rodney Mulder, Ph.D.
ABSTRACT

A DESCRIPTIVE STUDY OF THE NEEDS OF FAMILY MEMBERS OF TRAUMA PATIENTS

By

Sally Laur Sutkowi

This study examined the perceived needs of family members of trauma patients using Molter's (1979) Critical Care Family Needs Inventory. The ranking of needs of major and minor trauma patients family members were analyzed to determine differences between these two groups.

A convenience sample of 41 family members of trauma patients were surveyed. They included family members of 17 minor trauma patients and 24 major trauma patients. Minor trauma patients were those patients with Injury Severity Scores 12 or less. Major trauma patients had ISSs scores of 13 or greater. All 45 needs were considered very important by at least one subject. Consistent with other studies the need to have questions answered honestly was ranked number one in this study. The need to have directions of what to do at the bedside, have understandable explanations, and know specific facts concerning the patient were ranked significantly different between the two groups.
Dedication

This thesis is dedicated to my husband, children, and mother, for their constant love, encouragement and support.

In Memory
of my father

Clarence E. Laur
Acknowledgements

This research would not have been completed without the assistance and encouragement of my thesis committee members. A special thank you to Andrea Bostrom, Ph.D., R.N., my thesis chairperson, for her invaluable assistance in helping me overcome a few roadblocks I incurred in running my analysis. I am also grateful to Patricia Underwood, Ph.D., R.N., for her assistance with my conceptual framework. Finally, I want to thank Rodney Mulder, Ph.D., for his insight and assistance.

I am extremely grateful to my co-workers and fellow Grand Valley State University students who encouraged and supported me during this long endeavor. They provided me with the strength and encouragement I needed to reach my goal.

A special thank you to Nancy C. Molter for the use of her research tool. Finally, many thanks to the staff of Bronson's Trauma Care Unit, and the family members of trauma patient's who took the time to complete the questionnaire.
# Table of Contents

List of Tables..............................................vii  
List of Appendices..........................................viii  

Chapter  
1 INTRODUCTION.............................................1  
   Previous Studies..................................3  
   Purpose.........................................4  

2 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK.........5  
   Introduction....................................5  
   Review of Literature............................5  
      Trauma: Its Impact on Families..............5  
      Family Needs of Hospitalized Patients....6  
   Conceptual Framework...........................20  
      The Neuman Systems Model................20  
      Crisis Theory...............................24  
   Summary.........................................25  
   Research Questions............................26  
   Definitions of Terms..........................27  

3 METHODOLOGY...........................................28  
   Design.........................................28  
   Sample.........................................29  
   Instruments....................................30  
   Procedure......................................32  

4 DATA ANALYSIS........................................34  
   Sample Characteristics.......................34  
   Responses to CCFNI Questionnaire.............35  
   Differences in Ranking of Needs.............36  
   Additional Findings...........................41  

5 DISCUSSION............................................43  
   Differences in Ranking of Needs.............45
List of Tables

Table

1  Age and Sex Characteristics of Family Members of Major and Minor Trauma Patients...........35
2  Ranking of Needs From Most Important to Least Important........................................37
3  Need Differences Between Major and Minor Subjects....................................................41
4  Ranking of Top 10 Need Statements for Comparision.................................................42
List of Appendices

Appendix
A  Permission letter..................................51
B  General information sheet.........................52
C  Cover letter.......................................53
CHAPTER 1
INTRODUCTION

The leading causes of traumatic death in the United States each year are motor-vehicle accidents, falls, drownings, and fires (National Safety Council, 1988). In the United States, trauma injuries kill more people between the ages of 1 to 44 years old than cancer, heart disease, autoimmunodeficiency syndrome (AIDS) or any other disease (American Trauma Society, 1989). Death from trauma related injuries now ranks fourth as the leading cause of death among Americans in all age groups (Uzych, 1990). According to the American Trauma Society (1989), every six minutes someone dies from a traumatic incident and every four seconds someone in the United States will be injured. In 1990, more than 140,000 Americans died of injuries sustained in an accident (Uzych, 1990). In addition to this, another 80,000 people, in 1990, became permanently disabled from spinal and brain injuries (Uzych, 1990).

Since 1966, when the National Academy and Research Council first reported that accidental death and disability had become the neglected disease of modern society, a steady evolution has occurred in the delivery of trauma care.
The trauma system is an intricate network of components which provide rapid prehospital care, immediate acute care, and rehabilitation care for trauma victims. Trauma patients who receive immediate and proper emergency care within the first sixty minutes (often referred to as the Golden Hour) after a serious injury not only have a greater chance of survival, but also show a reduction in the severity of their injuries. Emergency care providers across the nation are extremely proud to be a part of the trauma system network that has revolutionized emergency care so that the trauma patient is no longer considered a neglected victim of modern society. The families of trauma patients, however, continue to be neglected victims within this intricate trauma system network.

The sudden, unforeseen impact of trauma disrupts the entire family unit and hurls each family member onto an emotional rollercoaster that can ultimately destroy the family's ability to balance or maintain equilibrium. Families of trauma patients have a common bond. They have been unexpectedly uprooted from their daily lives and catapulted into an often overwhelming situational life crisis. In the trauma system network, "the critically ill patient enters the hospital in biological crisis, while the family enters the hospital or critical care unit in psychological crisis" (Roberts, 1976, p. 354).

During the initial admission of a patient to the
critical care unit, most of the medical staff's time and energy is directed toward the immediate and ongoing needs of the critically ill patient. Essentially, the family members are left alone to deal with their own needs and their unanswered questions regarding the outcome of their loved one's life.

According to Daley (1984), "time factors, a lack of knowledge on how to deal with family members, or a lack of understanding of their needs contributes to this dilemma" (p. 231). In this age of high technology, nurses and physicians are constantly retrained in their technical skills, but no training is offered to educate them in meeting the psychological needs of both the patient and his/her family members.

Previous Studies

In the past decade, many studies have been conducted to identify the needs of family members of critically ill patients in the intensive and coronary care units (Rukholm, Bailey, Contu-Wakulczyk, & Bailey, 1991; Koller, 1991; Forrester, Murphy, Price, & Monaghan, 1990; Chartier & Contu-Walkulczyk, 1989; Leske, 1986; Daley, 1984; Stillwell, 1984; Molter, 1979; Epperson, 1977). No published studies investigating the needs of family members of trauma patients were found.

In an unpublished study by VanDongen (1987), a convenience sample of 30 family members was utilized to
identify the family needs of trauma patients. Further studies are needed to support the findings of that study.

**Purpose**

The purpose of this study was to determine the perceived needs of family members of trauma patients who were hospitalized 24 to 120 hours in the Trauma Care Unit (TCU). This study also examined whether perceived needs differed for family members of major versus minor trauma patients.
CHAPTER 2
REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

Introduction

Trauma, illness, and hospitalization of a family member can adversely affect the entire family, predisposing its members to a situational crisis. These stressful events impact not only the patient, but also each family member. Through research, nurses have begun to examine family member needs in an effort to provide total patient/family care.

The following topics will be discussed in this chapter: the impact of trauma on families; family needs in critical care units; Caplan's (1961) Crisis Theory and Neuman's (1989) Systems Model. The implications these studies have on future assessment and interventions to meet family member needs will also be discussed.

Review of Literature

Trauma: Its Impact on Families

Trauma is the leading cause of nonfatal injuries and disabilities for persons in all age groups in the United States (Uzych, 1990). In 1990, more than 140,000 people in this country died from their injuries (Uzych, 1990). The impact of trauma can be devastating for both patients and family members, because of its sudden and unforeseeable
nature. A traumatic event sends shock waves through even the most stable families and can destroy the family unit if the family’s emotional and physical needs are ignored by the health care team (Frese, 1985; Lee, 1970).

Presently, no published studies that directly examined the needs of family members of trauma patients were located. VanDongen’s (1987) was the only study found that examined the needs of family members trauma patients in a trauma care unit. Several studies (Rodgers, 1983; Bouman, 1984; Daley, 1984; Leske, 1986; Leske, 1991) of family members combined the family members of surgical or acutely ill patients.

Family Needs of Hospitalized Patients

Spouse needs: Studies of acute and terminal patients. Several researchers have conducted studies investigating the needs of spouses of terminally and acutely ill patients. Hampe (1975), Breu and Dracup (1978), and Gardner and Stewart (1978) were some of the first researchers to recognize that spouses had needs. Hampe (1975) concluded from her investigation that spouses had needs which were not being met during the course of a loved one’s illness. The purpose of Hampe’s study was to determine if spouses of terminally ill patients recognized their own needs during the period of crisis involving the death of their spouse. Hampe interviewed 27 subjects whose mates were terminally ill or had recently died. From these interviews eight needs were consistently identified by all 27 spouses:
1) need to be with the dying person
2) need to be helpful to the dying person
3) need for assurance of the comfort of the dying person
4) need to be informed of the mate’s condition
5) need to be informed of the impending death
6) need to ventilate emotions
7) need for comfort and support of family members
8) need for acceptance, support, comfort from health professionals (p. 116-117).

This study was limited with regard to small sample size, one geographic location, and the time frame immediately surrounding the death of a spouse. Regardless of these limitations, the findings of this study did indicate that family members do have needs that should be assessed and met during a period of crisis.

Further studies by Breu and Dracup (1978) and Gardner and Stewart (1978) also used the interview format to determine the needs of spouses with mates who had an acute illness. The results of their studies suggested that spouses of ill patients had needs similar to those identified by Hampe (1975).
Family needs: Critical care units. Several researchers have conducted studies investigating the needs of family members of hospitalized patients. In 1976, Molter conducted one of the first studies directed at examining the needs of relatives of critically ill patients utilizing the Critical Care Family Needs Inventory (CCFNI). Although the 1976 study is unpublished, Molter did conduct a major study in 1979 replicating the original 1976 investigation. Using a descriptive research design for this study, Molter (1979) examined three specific problems:

1) what perceived needs do relatives of critically ill patients have?
2) what is the importance of these needs?
3) are these needs being met?

Over a two month period, 40 relatives of Intensive Care Unit (ICU) patients were interviewed using a structured format consisting of the CCFNI 45 need statements. Each statement was rated according to importance on a scale of 1 (not important at all) to 4 (very important). At the end of the interview participants were asked if they had any other needs not covered during the interview and if so to rate their importance.

All 45 needs were considered very important by at least one relative. The need for hope was rated very important by all 40 participants. Thirty-nine of the participants believed it was very important to feel that hospital
personnel cared about the patient. Thirty-four of the relatives felt having the waiting room near the patient was very important. Thirty-five family members felt it was very important to be called at home regarding changes in the patient's status and to know the patient's prognosis. Of the 45 needs statements 25 were considered to be very important/important by half of the family members interviewed.

Relatives of critically ill patients were able to easily identify their needs during the first three days of admission to the intensive care unit. The majority of needs were perceived as being met. Most family members agreed that nurses played a major role in meeting their perceived needs.

Limitations in this study included a small sample size and the inconsistent availability of the investigator during visiting hours. The interviewing of some family members 48 hours or less after the patient was transferred to a general floor may have resulted in altered rating of needs due to change in patient status.

The pioneering studies by Molter have made a significant contribution in the identification of family needs in the critical care settings. Molter's research provided the foundation for studies conducted by several nurse researchers (Rodgers, 1983; Bouman, 1984; Daley, 1984; Mathis, 1984; Norris & Grove, 1986; VanDongen, 1987; Leske,
Rodgers (1983) conducted a descriptive study to determine the needs of relatives of cardiac surgery patients during the critical postoperative period. She also investigated their needs satisfaction, along with who assisted them to obtain fulfillment of the identified needs. In this study, Rodgers (1983) utilized a self administered questionnaire in which demographic data were obtained and the 45 CCFNI statements were listed for the relative to rate on a scale as 1 (not very important) to 4 (very important). Each relative was also instructed to indicate if the need was satisfied and by whom. This study investigated the needs of 20 relatives of 11 cardiac surgical patients in a 450 bed metropolitan teaching hospital. All family participants completed the questionnaire in the intensive care (ICU) waiting room at least 24 hours after the surgery, but no longer than 48 hours after transfer from the ICU. According to Rodgers (1983), all 45 needs were rated as very important by at least two relatives. This was consistent with Molter's (1979) results. The need ranked number one by all 20 subjects was the assurance of being notified at home if changes occurred in the patient's condition. This was followed by the need for a caring attitude by staff toward the patient and answering questions honestly. Discussing financial matters was the least important concern at the time of the survey.
Bouman (1984) adapted the 45 CCFNI statements from Molter's (1979) study and classified the needs under the following three categories: cognitive, emotional, and physical. The purpose of Bouman's (1984) study was to determine the perceived needs of family members of critically ill patients and to utilize this information to develop interventions to meet their needs.

This study was the first to interview family members at two points in time: within the first 36 hours and then again 96 hours after admission of the patient to either the medical or surgical intensive care units. Thirty-four subjects were interviewed (28 family members and 6 significant others) over a four month period. During the interview, Bouman (1984) asked each subject to place the printed need statement cards in the box slots labeled (1) not very important to (4) very important.

It was found in this study that demographic variables (such as age, sex, education, and socioeconomic class) had no significant effect on subjects' needs responses. Although no statistically significant differences were found, Bouman (1984) noted a tendency for blood relatives to rate needs as more important than significant others. In addition, the mean importance values for all need statements were lower 96 hours after admission to the ICU. Bouman (1984) hypothesized that the lowered mean values after 96 hours were indicative of the family members feeling they had
gained a sense of control over the patient’s admission to the hospital. She theorized that this occurred because the family members were given specific information regarding the patient’s condition and course of treatment.

Again the small sample size and the lack of random sampling limited the researcher’s ability to generalize about the study. The researcher failed to mention whether the status of those patients whose families were interviewed after the 96 hours following admission was still critical. This may explain why the needs after 96 hours were rated lower.

Daley (1984), using a structured interview format, developed an instrument which consisted of 46 need statements. These need statements were based on previous studies and on personal experience (which she did not define). The original 46 need statements were then regrouped under the following six categories:

1) personal needs
2) the need to decrease anxiety
3) the need for support and ventilation
4) the need for information
5) the need to be with the patient
6) the need to be helpful (p. 233).

Daley’s (1984) sample consisted of 40 family members of 28 critically ill patients. All family members were interviewed within the first 72 hours of the patient’s
admission to the ICU. During this time frame, Daley determined the perceived needs of ICU family members. She also asked family members whom they perceived as the person most likely to meet their needs.

The need statements were rated on a five point scale. The results of the data analysis revealed that the highest ranked needs category was the "need for relief of anxiety, followed by the need for information; the need to be with the patient; the need to be helpful to the patient; the need for support and ventilation; and least of all personal needs" (Daley, 1984, p. 233). Needs of a personal nature, such as eating, were ranked least important during the first 72 hours. The top ten perceived needs in Daley's (1984) study were cited as being met by the physician. This is in contrast with Molter's (1979) study where the majority of needs were perceived as being met by nurses. This difference may be due to different time frames used in the two studies. In Molter's (1979) study some family members were interviewed after the patient had been on a general floor for 48 hours or less; therefore, contact with nursing staff might have been greater while contact with the physician would have been less.

Limitations in Daley's (1984) study include the use of a new tool without established reliability and lack of specificity as to the timing of the structured interviews. Daley (1984) also noted that results could be skewed due to
small sample size and method of data collection; therefore, all results should be considered inconclusive until results are supported in future studies.

Leske (1986) conducted a descriptive study based on family needs of critically ill patients in the ICU. The purpose of her study was to identify the needs of families while the patient was in the ICU and to compare identified needs with the results of Molter’s (1979) study. Data for this study were gathered over a four month time frame in three Midwest metropolitan hospitals. Fifty-five adult family members of 20 critically ill patients were interviewed within the first 72 hours of the patient’s admission to the ICU. The 45 CCFNI was read to the entire family group with a rating based on group consensus using a 4 point scale. The findings in Leske’s (1986) study concur with Molter’s (1979) results in that both groups felt the need for hope was very important. Needs such as being told the patient’s condition, knowing why things were done, and assurances that the best care was given to the patient, also substantiate the findings in Molter’s (1979) study.

Although Leske (1986) initially stated the purpose of the study was to determine perceived needs and compare results with those needs identified by Molter’s (1979) sample, it should be noted that this study was not a total replication of Molter’s (1979) investigation. For example, Molter (1979) did not describe patient sample size or
diagnosis, whereas Leske's (1986) patient population consisted of patients whose injuries were incurred from a violent event. Time frame utilized for data collection and interviewing styles varied greatly between the two studies.

Family needs of trauma patient's. VanDongen (1987) conducted a descriptive study of the needs of 30 family members of trauma patients. The purpose of her study was to examine the needs of family members of trauma patients and to determine if there was a difference in the rank order of needs between families of patients experiencing major (n=12) versus minor (n=18) trauma. Family members were interviewed 24 to 72 hours after the patient was admitted to the critical care area utilizing Molter's (1979) 45 CCFNI. The following needs were identified consistently as the most important by both major/minor trauma family members:

1) to have questions answered honestly
2) to be assured the best care possible is being given to the patient
3) to feel there is hope
4) to be called at home about changes in the patient's condition
5) to feel that the hospital staff care about the patient (VanDongen, 1987, p. 42)

In this study VanDongen did discover some statistically significant differences in the rating of needs by families of minor trauma patients versus major trauma patients using
t-tests. Of the nine needs with significant differences, VanDongen (1987) found seven of the needs to be perceived as more important by family members of patients who sustained a major injury. It was more important for family members of major trauma patients to:

1. know the prognosis of the patient
2. know exactly what is being done for the patient
3. have explanations given that are understandable
4. know specific facts concerning patient’s progress
5. know why things were done for the patient
6. visit at any time
7. talk to the doctor every day (p. 39)

The two needs that were rated higher for the family members of minor trauma patients were:

1. to talk about the possibility of the patient’s death
2. to have someone be concerned with the relative’s health (p. 39 & 40)

It is not surprising that these needs are rated higher by family members of minor trauma patients. The family members of major trauma patients are on such an emotional rollercoaster that it is too difficult for them to discuss the possibility of the patient’s death. Emotionally and cognitively they are not ready to address this possibility. The need to have someone concerned about their health is
also not a priority for family members of major trauma patients. Basic needs such as food, sleep and general health are oftened ignored when a person is experiencing a crisis in his/her life.

VanDongen (1987) found the ranking of major trauma family members' needs concurred closely with the results of Molter (1979), Rodgers (1983), and Leske (1986). The following needs were ranked consistently in the first five priority needs in these four studies:

1) to feel there is hope  
2) to have questions answered honestly  
3) to be assured that the best care possible is being given to the patient  
4) to be called at home about changes in the patient's condition.

Limitations in the VanDongen (1987) study included small sample size for family members of both major and minor trauma patients and the majority of participants were female. These factors limited VanDongen's ability to generalize about the study.

Leske (1991) continued to investigate the needs of family members of critically ill patients in order to obtain empirical data. These data were compiled from the results of numerous independent studies in an effort to determine the primary needs reported by family members within the first 72 hours of admission to the critical care area.
Leske's (1991) data base was obtained from a series of studies that occurred between 1980 to 1989. These studies were conducted over this period by 27 nurse investigators in 15 different states using the 45 CCFNI. Included studies met the following criteria:

1) the entire 45 needs CCFNI was used
2) only raw data were analyzed
3) data collection occurred within the first 72 hours after the patient was admitted to a CCU
4) all participating family members could understand, speak and read English
5) raw data were contributed to Leske by researchers.

Data were collected from 905 family members involving 668 critically ill patients. This sample size provided a diverse cross-section of patients by covering broad geographic locations and multi-hospital settings. This enabled Leske to generalize about initial family needs within the first 72 hours after admission to a critical care unit. Upon completion of the analysis from the accumulated data, Leske was able to identify in order the following 15 primary needs of family members:

1) to have questions answered honestly
2) to be assured the best care possible is being given to the patient
3) to know the prognosis
4) to feel there is hope
5) to know specific facts about the patient’s progress
6) to be called at home about changes in the patient’s condition
7) to know how that patient is being treated medically
8) to feel hospital personnel care about the patient
9) to receive information about the patient daily
10) to have understandable explanations
11) to know exactly what is being done for the patient
12) to know why things were done for the patient
13) to see the patient frequently
14) to talk to the doctor every day
15) to be told about transfer plans (p. 224)

Leske’s (1991) findings are significant not only in assessing and identifying family needs during the first 72 hours of a critical illness, but also provide a scientific base for providing holistic care to both the patient and their family members. According to Leske (1991), research-based interventions must now be incorporated into the science of critical care nursing.

Leske’s (1991) study, because of its magnitude, now enables researchers to generalize about needs of family members of critically ill patient. This study has provided the data base which supports the conclusion that family members of critically ill patients have needs that should be addressed during the patient’s hospitalization.

In conclusion, a general review of the literature
indicated that family members of critically ill patients do have needs. Most studies suggested that patients' needs were met. Futuristic goals to meet both patient and family needs according to the literature should include care plans with interventions including the total family network.

**Conceptual Framework**

**The Neuman Systems Model**

The Neuman Systems Model is a wholistic approach to clients that can include families, groups, individuals, and the community. According to Neuman (1989), a client system is a person composed of physiological, psychological, sociocultural, developmental, and spiritual variables. When these variables are in harmony with each other the client is said to be free of environmental stressors. In this study the family member will be defined as a client system.

There are three major factors that can influence the person's reaction to stressor(s) (Neuman, 1989). These are the intrapersonal, interpersonal and extrapersonal factors. Neuman (1989) defines intrapersonal factors as those forces occurring within the client system. Intrapersonal factors are the basic characteristics of the client system's internal environment concerned with the physical, psychosociocultural, developmental and spiritual elements. Interpersonal factors are defined as those forces occurring between one or more individuals. These forces occur in the client system's external environment. It is this
interaction between the trauma patient, the nurse and family member which can produce positive or negative stressors for the client system. Extrapersonal factors are those forces occurring outside the client system such as the event of the unexpected trauma.

In the Neuman Systems model (1989), a person is viewed as an open system who is continuously interacting within the environment. Generally, persons in a state of wellness are viewed as having their needs met and considered to be in a state of equilibrium. During this period of equilibrium the person is able to maintain reserved amounts of energy which can be utilized to ward off potential stressors. This state of balance is developed from previous encounters with stressors and is known as "normal lines of defense" (Neuman, 1989, p. 68). When a person encounters a potential stressor, the immediate response according to Neuman (1989), is the activation of the person's flexible lines of defense. The flexible lines of defense are utilized to prevent a reaction which could disrupt this state of equilibrium. Not all stimuli will produce a reaction for the person. If a reaction does occur, the response by the person may be to ignore the potential stressor or to take some immediate action to circumvent or avoid the stimulus. If, however, the stressor penetrates the person's flexible and normal defense lines causing a state of imbalance then the person must utilize additional internal resources, known as
lines of resistance. If the state of disequilibrium continues after the lines of resistance have been activated then outside resources must intervene in order for the person to survive.

The environment is defined as "all internal and external factors or influences surrounding the identified client or client system" (Neuman, 1989, p. 69). Within the environment are forces defined as stressor(s) which provide a stimulus with the potential for causing disequilibrium within the person. Neuman (1989) believes that the environment can greatly affect a person's health or wellness.

Neuman (1989) defines nursing as a unique profession concerned with all variables affecting a client's response to stressors. Nursing actions are directed at the total needs of the client related to his/her own wellness/illness continuum and provide a basis for stabilizing the client system using stress reducing interventions.

Neuman (1989) uses the nursing process to examine the intrapersonal, interpersonal, and extrapersonal factors of the family members to evaluate and intervene in their perceived needs. This is accomplished by using the following three categories: 1) nursing diagnosis, 2) nursing goals, and 3) nursing outcomes.

Once the nursing diagnosis has been stated, nursing goals can be formulated using "intervention strategies to
retain, attain and/or maintain client system stability" (Neuman, 1989, p. 73). Nursing outcomes are then directed at methods of prevention. Neuman (1989) defines her intervention prevention modalities as: primary, secondary and tertiary prevention.

Primary prevention is concerned with reducing the impact of the stressor before the client system responds, thereby retaining stability. Secondary prevention involves mobilizing the client system's internal and external resources in an effort to prevent further deterioration of defense lines. Tertiary prevention are those interventions needed to "maintain reconstitution when client resources are mobilized to prevent additional reactions to stressors or regression from the current wellness level" (Neuman, 1989, p. 73).

Neuman's system model views the client system as a whole in which several internal and external factors within the environment can affect the client's ability to maintain harmony. These stressors, such as a traumatic event and hospitalization, have already disrupted the family member's equilibrium and pose a potential threat to the client's lines of defense. Utilizing Neuman's basic concepts the trauma nurse can assess the trauma patient's family member's perceived needs using the nursing process. Once the needs have been determined the trauma nurse can then formulate interventions to reduce stressors and reestablish client
equilibrium using the nursing process. Neuman's model allows nursing to intervene at all levels through primary, secondary, and tertiary prevention.

Crisis Theory

According to Caplan's (1961) crisis theory, a crisis occurs when a person faces an obstacle (stressor) to important life goals, which for a time appears insurmountable through normal problem solving methods. When a stressful event such as trauma occurs, "certain balancing factors can effect a return to equilibrium; these are perception of the event, available situational supports, and coping mechanisms" (Aguilera & Messick, 1986, p. 68). If the balancing factors (state of equilibrium) remain intact then crisis is avoided; however, if one or more of the balancing factors is missing the problem remains unresolved, thus increasing disequilibrium and precipitating crisis (Aguilera & Messick, 1986).

According to crisis theory, a stressful event, such as trauma, can be disruptive to each family member. The need for intervention during this time is essential in restoring each individual family member's equilibrium. Nurses can facilitate restoration of the family member's equilibrium by appropriately assessing his/her perceived needs, providing situational support, and mobilizing individual coping mechanisms. These basic concepts can be easily applied to Neuman's system model using the nursing process
and her three modalities of primary, secondary and tertiary prevention. Both Neuman's theory (1989) and Crisis theory (1961) use interventions to meet family member's needs.

For most families, life as it is known stops when a family member incurs a traumatic injury. The traumatic event occurs suddenly and strikes without warning, predisposing the family system to a potential state of crisis. According to Braulin, Rook, and Sills (1982) families of traumatized patients are often "ill-prepared to deal with the anxiety and tension created by the stressful event" (p. 39). Initially, the family members may become immobilized by the multiple stressors which have disrupted their normal lines of defense and a sense of helplessness ensues. Therefore, the way in which the family members react to these multiple stressors may drastically affect the outcome for both the injured patients and their families (Gardner & Stewart, 1978).

The critical care nurse can facilitate the return of the family unit by "reestablishing equilibrium disrupted by the crisis" (Parad & Caplan, 1960, p. 5). Assessment of both family and patient needs, along with appropriate intervention will assist the family in emerging from the crisis at a functional pre-crisis level.

Summary

In summary, for the past two decades several researchers have examined the needs of family members of
critically ill patients. Small sample size and lack of random sampling have been identified by several researchers as limits in generalizing findings to the general population. Inconsistency in interviewing techniques has also been a consistent problem identified within the designs. In 1991, however, Leske analyzed the results of several independent studies and found support for the conclusion that family members of critically ill patients have universal needs that can be readily identified as very important.

Further research is needed to examine the specific needs of family members of trauma patients in an effort to determine if their needs do in fact concur with the needs of family members of other critically ill patient's. This study, although small, will add to the body of literature currently available regarding family needs of critically ill patients.

Research Questions

The specific research questions investigated in this are:

1. What are the needs of family members of trauma patients no sooner than 24 hours nor greater than 120 hours after the patient’s admission to the Trauma Care Unit?

2. What differences are there in the ranking of needs by family members of patients experiencing major versus minor trauma?
Definition of Terms

The following definitions from the literature review and the conceptual framework will be used in this study.

Family member is defined as one of two or more individuals who form a unit, whose interaction and interdependent parts create a whole and who consider themselves family (Neuman, 1989). Family members in this study will include both adult (age 18 years and older) blood relatives and significant others.

Needs are defined as those situation specific requirements of the family members that are necessary for them to maintain, attain, or retain stability and/or well-being at a functional level. In this study the needs are those identified on the CCFNI questionnaire.

Trauma patient is defined as any individual who receives a sudden or unexpected injury requiring medical intervention. For the purpose of this study the trauma patient must be admitted to the TCU for a minimum of 24 hours.

Minor trauma is defined as any patient with an Injury Severity Score (ISS) of less than 15 (Baker, O'Neiil, Haddon, & Long, 1974).

Major trauma is defined as any patient with an ISS of 15 to 75 (Baker et al., 1974).
CHAPTER 3
METHODOLOGY

Design

The research design for this study was a descriptive two group comparison using a survey methodology. A questionnaire was given to family members of trauma patients. This questionnaire contained Molter's (1979) 45 item Critical Care Family Needs Inventory (CCFNI). Written permission was obtained from Molter for the use of her tool in this study (see Appendix A). Attached to the questionnaire, was a general information sheet (Appendix B) which participating family members were also asked to complete.

This study allowed the subjects to remain anonymous since no names were placed on the questionnaires. This anonymity helped diminish any fear of repercussions to their family member. Additionally, problems such as interviewer bias did not interfere with this data-gathering process.

The major threat to internal validity involved the emotional impact each family member was experiencing at the time the questionnaire was given. Some family members were so emotionally distraught that they chose not to complete the questionnaire. Those family members that completed the
questionnaire, were able to do so despite the emotional distress they were experiencing. This emotional distress may have inadvertently influenced the responses due to the impact on their subjective assessment of the patient’s injuries.

**Sample**

This study was conducted at a 442 bed hospital in southwest Michigan. This facility is a designated Level 1 trauma center. Approval to conduct this study was obtained from the Human Subjects Review Committee at Grand Valley State University and the Nursing Research Committee at this hospital.

A convenience sample of 41 adult family members of 38 trauma patients participated in the study. Thirty-four (82%) were female and seven (18%) were male. The age of the family members ranged from 21 to 80 years, with a mean age of 42 years. The relationships of the family member to the patient were as follows: 13 (33%) were spouses/significant others, 14 (35%) were parents, six (15%) were children, and five (13%) were siblings, one (2%) aunt, and one (2%) granddaughter. Criteria for inclusion in the study were: adults (18 years or older); blood, marital relatives, or significant other (spouse, parent, or adult child, or live-in significant other) who had visited the patient in the trauma care unit. Those family members that were directly involved in the accident were excluded from this study,
because they may have been too traumatized to participate. This study included those family members of trauma patients who had been hospitalized a minimum of 24 hours, but not longer than 120 hours. All eligible family members of trauma patients were asked if they would like to participate in the study. It was explained to each family member that the care provided for the patient would in no way be affected whether or not the family member chose to participate. Participants were given a questionnaire to complete and return in a sealed envelope to the nurses' station.

**Instruments**

The instrument used in this study was the Critical Care Family Needs Inventory tool developed by Molter (1979). This instrument allowed the investigator to examine the importance of perceived needs of family members of trauma patients.

The need statements were rated on the following scale: (1) not very important, (2) slightly important, (3) important, (4) very important. The needs statements contained in Molter's (1979) CCFNI tool were developed through a literature review and a survey of 23 graduate student nurses. Content validity was established through a review of literature and documentation by several other researchers (Bouman, 1984; Daley, 1984; Lynn-McHale & Bellinger, 1988; Mathis, 1984; Molter, 1979; Rodgers;
VanDongen, 1987). This instrument has been used in its original form and with revisions by several established researchers (Daley, 1984; Leske, 1986, 1991; Mathis, 1984; Norris & Grove, 1986; Rodgers, 1985). Reliability for the Molter (1979) instrument was established using the Cronbach's alpha coefficient. The alpha coefficient of .90 to .94 obtained in a study by Mathis (1984), of .93 in a study by Rodgers (1985), and of .98 in a study by Leske (1986) all support the internal consistency of the tool. A Cronbach’s alpha coefficient of .92 was obtained for this study.

In this study the trauma patient was classified as either a major or minor trauma using the Injury Severity Score (ISS) system developed by Baker, O’Neill, Haddon, and Long (1974). The ISS represents an overall single rating of the patient’s injury ranging from one to 75. This method of scoring can be utilized both on the single or multiple injured patient. Content validity was established for this instrument by several trauma specialists (Baker et al., 1974). Through these studies it has been noted that ISS scores between one and 15 have a mortality rate of near zero. An ISS score between 15 to 75 correlates consistently with an increase of mortality for the patient.

The general information sheet was a short questionnaire which provided demographic and general information regarding age, gender, and family member’s relationship to the patient.
(see Appendix B). It also provided information regarding the number of hours the family member had spent in the TCU and whether they had visited the patient. Questions related to previous experiences visiting a patient in the critical care setting and perception of severity of injury were also addressed. These questions provided the investigator with useful data concerning previous exposure and its potential influence on the family member's perception of the severity of injury.

**Procedure**

Eligible family members were contacted no sooner than 24 hours nor greater than 120 hours after the admission of their family member to the Trauma Care Unit (TCU). Subjects were asked if they were interested in participating in a study about the needs of family members of trauma patients. The CCFNI was given to those family members who wanted to participate. A cover letter accompanied the questionnaire (Appendix C). The cover letter explained the purpose of the study in general terms. It was emphasized to all participating family members that confidentiality would be maintained throughout the study. Each questionnaire was coded. This matching coded number appeared on a separate master data sheet. The identification number was used only as a source to match the patient's ISS score and to keep parts of the questionnaire together. Participants were asked to complete the questionnaire and return it in sealed
envelopes to the TCU nurses' station. These envelopes were then picked up by the researcher. This research design had virtually no risk for the participants. The master data sheet was destroyed at the completion of this study. Approval to conduct this study was obtained from the Human Subject Review Committee at Grand Valley State University and the hospital Nursing Research Committee.
CHAPTER 4
DATA ANALYSIS

In this chapter the results of the study will be reviewed. The first section will discuss the rating of needs of trauma patients’ family members. The second section will discuss those needs ranked significantly different by family members of major and minor trauma patients.

Sample Characteristics

Completed questionnaires were returned by 41 adult family members of 38 trauma patients. The participants included 17 family members of 16 minor trauma patients and 24 family members of 23 major trauma patients. For a summary of demographics of family members of major and minor trauma patients, see Table 1. All family members who responded to the questionnaire had visited the patient in TCU at least once. Forty-three percent of family members of major trauma patients and 18% of family members of minor trauma patients rated the patient’s perceived injuries as extremely serious.
Table 1

Age and Sex Characteristics of Family Members of Major and Minor Trauma Patients

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>n = 24</td>
<td>n = 17</td>
<td></td>
</tr>
</tbody>
</table>

Subject's Sex:

<table>
<thead>
<tr>
<th></th>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>n = 22 (92%)</td>
<td>n = 12 (71%)</td>
</tr>
<tr>
<td>Male</td>
<td>n = 2 (8%)</td>
<td>n = 5 (29%)</td>
</tr>
</tbody>
</table>

Mean age (years) of subject

<table>
<thead>
<tr>
<th></th>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>44 (range 21 - 62)</td>
<td>38 (range 21 - 67)</td>
</tr>
<tr>
<td>Male</td>
<td>54 (range 52 - 56)</td>
<td>38 (range 31 - 80)</td>
</tr>
</tbody>
</table>

Responses to CCFNI Questionnaire

The first purpose of this study was to determine the perceived needs of family members of trauma patients who have been hospitalized 24 to 120 hours in the TCU. Subjects were asked to rate each of the 45 needs on a scale: 1 = not very important, 2 = slightly important, 3 = important, and 4 = very important.

Subjects were able to easily identify the importance of each need on the questionnaire. This observation was consistent with studies by Molter (1979), Rodgers (1983),
VanDongen (1987) and Leske (1991). All 45 needs were considered very important by at least one subject. Twenty need statements were rated highest with a median score of 4.00, 23 had a median score of 3.00, and two had a median score of 2.00. The highest rated needs addressed issues related to patient information. Needs with median scores of 3.00 related mostly to the personal needs of the family member while needs with a median score of 2.00 were specific to the emotional needs of the family member.

The rating of the need statements as identified by the subjects can be found in Table 2. The rank order of the need statements was determined by a combination of the median and mean value (which is consistent with Molter’s study).

**Differences in Ranking of Needs**

The second purpose of this study was to examine the rating of needs of family members of major and minor trauma patients to determine if needs were ranked differently. In this study, 24 (59%) of the subjects family members were classified as major trauma and 17 (41%) as minor trauma. The Mann-Whitney U test was used to analyze these data. The results of those needs that were significantly different are shown in Table 3. Only three needs were significantly different. The need to feel that the hospital personnel care about the patient approached significance ($u = 148$, $p = .07$).
<table>
<thead>
<tr>
<th>Rank Order</th>
<th>Need Statements</th>
<th>Median Value</th>
<th>Mean Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To have questions answered honestly</td>
<td>4.000</td>
<td>4.000</td>
</tr>
<tr>
<td>2</td>
<td>To know the prognosis</td>
<td>4.000</td>
<td>3.974</td>
</tr>
<tr>
<td>3</td>
<td>To be assured that the best care possible is being given to the patient</td>
<td>4.000</td>
<td>3.949</td>
</tr>
<tr>
<td>4</td>
<td>To know specific facts concerning the patient’s progress.</td>
<td>4.000</td>
<td>3.925</td>
</tr>
<tr>
<td>5</td>
<td>To know how the patient is being treated medically.</td>
<td>4.000</td>
<td>3.900</td>
</tr>
<tr>
<td>6</td>
<td>To know exactly what is being done for the patient</td>
<td>4.000</td>
<td>3.875</td>
</tr>
<tr>
<td>7</td>
<td>To have explanations given that are understandable</td>
<td>4.000</td>
<td>3.850</td>
</tr>
<tr>
<td>8</td>
<td>To be called at home about changes in the patient’s condition</td>
<td>4.000</td>
<td>3.825</td>
</tr>
<tr>
<td>9</td>
<td>To feel that the hospital personnel care about the patient</td>
<td>4.000</td>
<td>3.824</td>
</tr>
<tr>
<td>10</td>
<td>To feel there is hope</td>
<td>4.000</td>
<td>3.816</td>
</tr>
<tr>
<td>11</td>
<td>To receive information about the patient once a day</td>
<td>4.000</td>
<td>3.775</td>
</tr>
<tr>
<td>12</td>
<td>To see the patient frequently</td>
<td>4.000</td>
<td>3.725</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Mean1</td>
<td>Mean2</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>13</td>
<td>To have the waiting room near the patient</td>
<td>4.000</td>
<td>3.650</td>
</tr>
<tr>
<td>14</td>
<td>To talk to the doctor every day</td>
<td>4.000</td>
<td>3.650</td>
</tr>
<tr>
<td>15</td>
<td>To know why things were done for the patient</td>
<td>4.000</td>
<td>3.629</td>
</tr>
<tr>
<td>16</td>
<td>To talk about the possibility of the patient's death</td>
<td>4.000</td>
<td>3.600</td>
</tr>
<tr>
<td>17</td>
<td>To be told about transfer plans while they are being made</td>
<td>4.000</td>
<td>3.600</td>
</tr>
<tr>
<td>18</td>
<td>To have a telephone near the waiting room</td>
<td>4.000</td>
<td>3.462</td>
</tr>
<tr>
<td>19</td>
<td>To have friends nearby for support</td>
<td>4.000</td>
<td>3.375</td>
</tr>
<tr>
<td>20</td>
<td>To visit at any time</td>
<td>4.000</td>
<td>3.350</td>
</tr>
<tr>
<td>21</td>
<td>To be assured it is alright to leave the hospital for awhile</td>
<td>3.000</td>
<td>3.350</td>
</tr>
<tr>
<td>22</td>
<td>To have specific person to call at the hospital when unable to visit</td>
<td>3.000</td>
<td>3.325</td>
</tr>
<tr>
<td>23</td>
<td>To feel accepted by the hospital staff</td>
<td>3.000</td>
<td>3.250</td>
</tr>
<tr>
<td>24</td>
<td>To know which staff members could give what type of information</td>
<td>3.000</td>
<td>3.205</td>
</tr>
<tr>
<td>25</td>
<td>To have someone be concerned with the relative's health</td>
<td>3.000</td>
<td>3.175</td>
</tr>
<tr>
<td>26</td>
<td>To help with the patient's physical care</td>
<td>3.000</td>
<td>3.128</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>27</td>
<td>To have a bathroom near the waiting room</td>
<td>3.000</td>
<td>3.125</td>
</tr>
<tr>
<td>28</td>
<td>To be told about other people that could help with problems</td>
<td>3.000</td>
<td>3.100</td>
</tr>
<tr>
<td>29</td>
<td>To know about the types of staff members taking care of the patient</td>
<td>3.000</td>
<td>3.100</td>
</tr>
<tr>
<td>30</td>
<td>To have comfortable furniture in the waiting room</td>
<td>3.000</td>
<td>3.075</td>
</tr>
<tr>
<td>31</td>
<td>To have directions as to what to at the bedside</td>
<td>3.000</td>
<td>3.075</td>
</tr>
<tr>
<td>32</td>
<td>To have visiting hours start on time</td>
<td>3.000</td>
<td>3.054</td>
</tr>
<tr>
<td>33</td>
<td>To have visiting hours changed for special conditions</td>
<td>3.000</td>
<td>3.051</td>
</tr>
<tr>
<td>34</td>
<td>To have another person with the relative when visiting the critical care unit</td>
<td>3.000</td>
<td>2.950</td>
</tr>
<tr>
<td>35</td>
<td>To be told about someone to help with family problems</td>
<td>3.000</td>
<td>2.875</td>
</tr>
<tr>
<td>36</td>
<td>To have explanations of the environment before going into the critical care unit for the first time</td>
<td>3.000</td>
<td>2.800</td>
</tr>
<tr>
<td>37</td>
<td>To talk to the same nurse every day</td>
<td>3.000</td>
<td>2.775</td>
</tr>
<tr>
<td>38</td>
<td>To have comfortable furniture in the waiting room</td>
<td>3.000</td>
<td>2.750</td>
</tr>
</tbody>
</table>

Table 2 continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean Rating</th>
<th>U</th>
<th>2-tailed p</th>
</tr>
</thead>
<tbody>
<tr>
<td>39 To have a place to be alone while in the hospital</td>
<td>3.000</td>
<td>2.750</td>
<td></td>
</tr>
<tr>
<td>40 To have the pastor visit</td>
<td>3.000</td>
<td>2.750</td>
<td></td>
</tr>
<tr>
<td>41 To talk about negative feelings such as guilt or anger</td>
<td>3.000</td>
<td>2.625</td>
<td></td>
</tr>
<tr>
<td>42 To have good food available in the hospital</td>
<td>3.000</td>
<td>2.575</td>
<td></td>
</tr>
<tr>
<td>43 To be told about chaplin services</td>
<td>3.000</td>
<td>2.513</td>
<td></td>
</tr>
<tr>
<td>44 To be alone at any time</td>
<td>2.000</td>
<td>2.500</td>
<td></td>
</tr>
<tr>
<td>45 To be encouraged to cry</td>
<td>2.000</td>
<td>2.316</td>
<td></td>
</tr>
</tbody>
</table>

Table 3
Need Differences Between Major and Minor Subjects

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean Rating</th>
<th>U</th>
<th>2-tailed p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major n = 24</td>
<td>Minor n = 17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Have directions as to what to do at the bedside.</td>
<td>3.3</td>
<td>2.3</td>
<td>115.5 .022</td>
</tr>
<tr>
<td>35. To have explanations that are understandable.</td>
<td>4.0</td>
<td>3.6</td>
<td>120.0 .001</td>
</tr>
<tr>
<td>43. To know specific fact concerning the patient’s progress.</td>
<td>4.0</td>
<td>3.8</td>
<td>156.0 .029</td>
</tr>
</tbody>
</table>
Additional Findings

This study identified the ranking of the most important need statements similar to previous studies by VanDongen (1987) and Leske (1991). A ranking of the top 10 need statements for comparison of these studies is listed in Table 4.
Table 4

Ranking of Top 10 Need Statements for Comparison

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 41</td>
<td>n = 30</td>
<td>n = 905</td>
</tr>
<tr>
<td>To have questions answered honestly.</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>To know the prognosis.</td>
<td>2</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>To be assured that the best care possible is being given to the patient.</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>To know specific facts concerning the patient’s progress.</td>
<td>4</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>To know how the patient is being treated medically.</td>
<td>5</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>To know exactly what is being done for the patient.</td>
<td>6</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>To have explanations given that are understandable.</td>
<td>7</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>To be called at home about changes in the patient’s condition.</td>
<td>8</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>To feel that the hospital personnel care about the patient.</td>
<td>9</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>To feel there is hope.</td>
<td>10</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>To see the patient frequently</td>
<td>-</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>To receive information about the patient daily.</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
</tbody>
</table>

**Note.** The "-" indicates the item did not appear on the top 10 list in this study.
CHAPTER 5
DISCUSSION

The Neuman Systems Model and Crisis Theory provided excellent theoretical frameworks for examining the family member needs of trauma patients. Both models look at stressors and the potential disruption of the person's equilibrium. The traumatic event and hospitalization disrupt the family member's equilibrium and pose a potential threat to the family member's lines of defense. Utilizing Neuman's basic concepts, the trauma nurse can assess the trauma patient's family member's needs identified by Molter's (1979) CCFNI tool. After the needs have been identified the trauma nurse can formulate interventions to reduce stressors and reestablish client equilibrium using the nursing process.

The findings in this study support the findings in previous studies by Molter (1979), Rodgers (1983), VanDongen (1987), Leske (1986) and Leske (1991). Family members of trauma patients were able to easily identify the importance of each need on the questionnaire. All 45 needs were considered very important by at least one subject.

Need statements addressing issues related to patient information were rated highest. Needs of the personal
nature rated higher than emotional needs. These findings are consistent with studies by Bouman (1984) and Daley (1984). Additionally, these findings are also supported by both the Neuman systems model and crisis theory which determined needs of the personal/psychological nature are oftend ignored during the initial crisis period.

It is interesting that nine of the top 10 needs in this study are consistent with the top 10 needs in the Leske study (1991). This supports the current findings, since Leske used a large, diverse sample for her research. In the VanDongen (1987) study, nine of the top ten needs are noted, but are not as congruent with Leske’s or this study. The difference in the rating of needs in the VanDongen (1987) study may be attributed to a greater number of family member participants of minor trauma patients.

In the VanDongen (1987) and Leske (1991) studies the need to have questions answered honestly was rated as the number one need (see Table 4). This need was also rated number one in this study.

Several needs were rated higher in this study than in the VanDongen (1987) study. These are:

a) to know specific facts concerning the patient’s progress
b) to know how the patient is being treated medically
c) to know exactly what is being done for the patient.

These higher ratings may be related to increasing trends in
public awareness concerning health issues and the need to enhance consumerism in health care.

In this study and the VanDongen study (1987) the two needs rated as least important were: a) to be alone at any time and b) to be encouraged to cry. The low rating of these needs are consistent with previous studies by Molter (1979), Rodgers (1983), Leske (1986) and Leske (1991). In these studies it was determined that a family member's needs of a personal/psychological nature were consistently rated as a low priority. Aguilera and Messick (1986) identified this as typical of people experiencing a situational crisis. They are often immobilized by the stressful event and experience a sense of helplessness. The family member's attention is focused on the needs of the patient, rather than on their own needs.

Differences in Ranking of Needs

The results of this study indicate that family members of major trauma patients do rank some needs differently than family members of minor trauma patients. Of the three needs with statistically significant differences only the needs a) to have explanations that are understandable and b) to know specific facts concerning the patient's progress were also significantly different in the VanDongen (1987) study. The need to have direction as to what to do at the bedside was not statistically significant in the VanDongen (1987) study. This difference may be due to a smaller sample size of 12.
subjects of major trauma patients in the VanDongen (1987) study compared to 24 subjects in this study. The need to feel that the hospital personnel care about the patient approached significance in this study, but was of no significance in the VanDongen (1987) study.

It is interesting that the three needs ranked differently by the family members of major trauma patients are all needs related to the severity of the patient’s condition. This may indicate the importance of keeping family members informed in order for them to have a true understanding of the patient’s condition. The ranking of the need to feel that the hospital personnel care about the patient is also interesting, because the family members of major trauma patients are less likely to be able to meet the needs of the patient. Therefore, it is important for them to feel that the hospital personnel taking care of their loved one are also willing to meet the patient’s needs.

Limitations

Sample

The sample size of the study was small (n = 41). There were 24 subjects related to major trauma patients and 17 subjects related to minor trauma patients. This sample size did not allow an adequate comparison between the two groups. Differences in item rating of needs between the major and minor groups may become evident in a larger sample.

The sample in this study was limited to one
institutions. Participation in this study was voluntary. Those subjects who were asked to be in the study, but chose not to participate may have ranked needs differently than those who participated. Therefore, the sample is not representative of the population of trauma family members. This limits the generalizability of the study results.

Another interesting fact about this sample is that although multiple members of the same family were invited to participate, most families designated one member to complete the survey. Eighty-two percent of the participants were female. This further limited the ability to make generalizations about the male population of family members of trauma patients.

Methodology

This study was a descriptive survey using a questionnaire. The participants were asked to complete the survey and return it to the TCU nurses' station. Some subjects returned the survey unanswered stating they were too emotionally distraught and could not completed it. An interview format would have allowed the researcher to obtain more qualitative data. A formal interview format may have increased the number of participating subjects.

Instrument

The CCFNI questionnaire used in this study was self explanatory and easy for participating subjects to follow. The only problem arising with use of the questionnaire was
not the instrument itself, but in the method of obtaining the data. The emotional impact on the family members of trauma patients may warrant the use of a formal interview format in future studies.

**Future Studies**

Further research using the CCFNI questionnaire in the study of the needs of family members of trauma patients would be valuable for health care professionals. Data obtained from a large sample in several geographic locations would add to the growing body of literature that family members do have certain needs and are able to easily identify these needs. A comparison of male and female family members would also be enlightening.

Research directed towards ongoing needs after the initial crisis period such as one, three or six months after hospitalization may provide greater insight of the need expectations of family members. It would be interesting to do a comparison study that examines initial needs and long term needs for all family members.

Finally, it may be interesting to conduct a study on nurses to determine their awareness of the needs of that family members of trauma patients. Other studies in conjunction with this may look at the nurse’s perception of what the needs are and are they being met? Future research directed at how to best meet family member needs would be beneficial and Molter believes it is essential.
Nursing Implications

Nurses will need to investigate ways to help family members meet the needs that they have identified. This can be done through education of health care providers. Once needs have been assessed and identified, then a plan of care should be implemented to meet the needs of the family member. "Nurses must accept the human involvement that accompanies caring for a patient. They must recognize that family members are also their patients" (Daley, 1984, p. 237).

The needs family members identified as most important included obtaining patient information and receiving assurance that the patient was cared for appropriately. One approach to address these needs could include daily conference reports. This conference should be at a specific time every day and include designated health care providers and one or two family members. This would keep the family members informed about the patient and also allow them to collaborate in the decision making process regarding the patient. This also would facilitate open communication between family members and the patient’s health care providers. Ultimately, this intervention should help reduce stressors and mobilize appropriate defense lines.

Conclusion

Family members of trauma patients do have needs that they can readily identify. In this study, family members of
trauma patient’s rated priority needs similarly to needs of family members of other critical care patients (Leske, 1991). This study also examined the ranking of needs of major and minor subjects. There were only a few statistically significant differences in the ranking of needs for these two groups. These differences more than likely were related to the severity of injury experienced by the major trauma patient and the need for the family to understand its impact on the patient.
APPENDICES
APPENDIX A

Permission letter
Appendix A

Nancy Moller
9526 Millers Ridge
San Antonio, TX 78239
10 July, 1990

Sally Sutkowi, RN
7650 Gull Creek Dr.
Richland, MI 49083

Dear Ms. Sutkowi,

You have my permission to reproduce the copyrighted need statements, Critical Care Family Needs Inventory, for investigational purposes as long as appropriate authorship, copyright, and permission is documented in your work. Please find enclosed a copy of the CCFNI.

I am also enclosing a review of the psychometric properties of the instrument. If you change the wording of the statements then the properties would not be valid for your version of the tool. Feel free to adapt the tool to meet your needs. Good luck with your study. I do hope you will consider using the tool to evaluate interventions and not just describe needs in a specific population unless they haven't been described before. Evaluation of interventions is so crucially needed.

Sincerely,

[Signature]
APPENDIX B

General information sheet
Appendix B

General Information

1. Patient’s Age______  2. Patient’s Sex is: 1. ___Male
   2. ___Female

3. Your Age is:___________

4. Are you: 1. ___ Male  2. ___ Female

5. What is your relationship to the
   patient________________________________?

6. Have you visited your family member since his/her
   admission to the critical care setting?
   1. ___ Yes  2. ___ No

7. How severe do you perceive the injuries sustained by
   your family member are?
   1  2  3  4  5
   Not serious          Extremely serious

8. Have you been told by a health care professional how
   severe the injuries are that your family member
   sustained?
   1. ___ Yes  2. ___ No

   If yes, what did they tell you?

Do not write below this line.

ISS Score:_________________________ ID Survey #_____
Length of stay_____________________

52
APPENDIX C

Cover letter
Appendix C

October 1, 1994

Dear Family Member,

Every four seconds someone is injured in an accident in this country. Most patients are hospitalized as a result of their injuries and family members are left anxiously awaiting for information regarding the patient’s condition. The purpose of this study is to determine what the needs of family members are so that in the future we as health care providers will be able to meet both the patient and his/her family member’s needs.

You have been selected to participate in this study because you are a family member of a trauma patient. Your response will help us to have a better understanding of the needs of family members. It will also help us to meet these needs for future families. Enclosed is a simple questionnaire. It is important that you answer each question. Please place your completed questionnaire in the envelope provided for you. Please return the sealed envelope to the TCU nurses station.

Please understand that your privacy will be maintained. Your name is not attached to the information - only numbers. Do not put your name on the questionnaire. The data will be reported as group data only.

Participation in this study is voluntary and will not affect the care of your loved one. There is no anticipated risk to you as a result of this study. If you have any concerns after you have completed the questionnaire you may talk to the nursing staff or have the nursing staff contact me. Neither Bronson Methodist Hospital, Grand Valley State University, nor the investigator (Sal Sutkowi) will be responsible for paying for any services you may require.

If you return this completed questionnaire, it is understood that you agree to participate in the study. If you have any questions about the study or wish to obtain the results of the study, please contact me at the below address.

Thank you for your time and assistance. It is greatly appreciated.

Sincerely,

Sal Sutkowi, R.N., B.S.N., M.S.N.c
252 E Lovell
Kalamazoo, MI 49004
phone: 341-8912
LIST OF REFERENCES
LIST OF REFERENCES


55


