Measuring satisfaction levels with nursing care of the families of ED patients

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FINAL APPROVAL OF SCHOLARLY PROJECT
Master of Science in Nursing

Measuring Satisfaction Levels with Nursing Care of the Families of Emergency Department Patients

Submitted by

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In partial fulfillment of the requirements for the degree of
Master of Science in Nursing

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2005
Dedication

This scholarly project is dedicated to my sister Julie Ann Hoerig and my best friend S. John Pappas. First, my sister, without her early encouragement I may have never started the journey into nursing as a career. Thank you for your guidance.

To John, thank you for inspiring me to continue on my journey of advanced nursing education and for believing in me and always making me see the light at the end of the tunnel. I could not have concluded this journey without you. I love you “friend”.
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Chapter I
Introduction

A sudden illness, injury or emergency hospitalization of a family member can be described as a crisis situation, potentially leading to family disequilibrium. Quality nursing care received during this emergent period may help the patients and families adapt to the changes within the family unit and increase satisfaction with the encounter. This chapter will introduce the focus of the research on the satisfaction with nursing care of the families of emergency department patients. This chapter discusses the statement of the problem and the nursing theoretical framework used in this research. The statement of the purpose and research questions, followed by conceptual and operational definitions, are reviewed. The chapter concludes with a discussion of the significance of the research to nursing, and assumptions and limitations of the research.

Statement of the Problem

It is estimated that between the years of 1992-2002, the number of emergency room visits increased from 89.8 million to 110.2 million. The average length of stay in the emergency department was between two hours and six hours. The mean age of the persons visiting the emergency department was 35.6 years. Persons older than 75 years of age were reported as having the largest number of visits annually. It is also reported that the number of hospital emergency departments in the United States have declined by 15% between the years 1992 and 2002 (CDC, 2004). With the decline, emergency rooms in some areas have become crowded and wait times for treatment have increased.

Changes in the health care delivery system have greatly affected patient care in the emergency department. Increasing numbers of emergency department visits, delays at discharge, longer emergency department stays, and overcrowding may lead to decreased quality of care and patient dissatisfaction (ENA, 2004). The awareness of the national shortage of nurses may be creating perceptions that emergency departments may have difficulty providing quality care. This can create the potential for breakdown in customer relationships and patient satisfaction. (ENA, 2004)
As reported, millions of people seek care via the emergency department each year. The emergency department encounter may be the only experience a patient or family member may have with the healthcare system. Care received during this time may influence how one may perceive the entire healthcare system. Patients and their families are influenced by the actual care and conditions that they experience during their emergency department visit. Dissatisfaction with the emergency department visit may lead to lack of compliance with necessary treatment regimens and the decision to not use the facility in the future which could lead to lost revenue for the institution.

According to the Emergency Nurses Association, (ENA) National Benchmark Guide (2002) 1,380 emergency department managers reported that 88% of their patients rated their satisfaction with the emergency department as good to excellent. Ninety-six percent of patients rated the quality of their emergency department care as good or excellent. Ongoing monitoring is needed to determine if quality and satisfaction are improving remaining stable or declining (ENA, 2004). The focus of much of the nursing and medical research has been on measuring the satisfaction of the patients in the emergency department. Limited research has been done on assessing the needs and satisfaction of the families of the emergency department patients. It has been suggested that the family is viewed as an extension of the patient, rather than the patient as an extension of the family unit. (Friedman, 1997) Therefore, it can be suggested that patient and family needs may be quite similar, and often are equally as important.

Friedman (1997), stated that in a family unit any dysfunction -illness, injury, separation- that affects one or more members may, and frequently will in some way, affect other members as well as the unit as a whole. Furthermore, Friedman (1997) maintained that the family is a closely-knit, interdependent network whose members mutually influence each other. It can then be inferred that families of those being treated in the emergency department will be affected by the treatment process almost as much as the patient, and that those effects should be assessed. Nursing care directed at satisfying the families needs will ultimately then be addressing the needs
of the patient. Nursing care in the emergency room should focus on both the patient and the family. The emergency room experience may be the only exposure one has to the entire healthcare system. Providing holistic nursing care may help the family members adapt to the crisis situation they are experiencing.

Identification of the Nursing Theoretical/Conceptual Framework

Roy’s Adaptation Model

Roy’s adaptation model (RAM), was used as a guide in this research project to focus on the adaptation of the changing family unit of the emergency department patient, and ways that nursing care may effect this process. The (RAM) views people as adaptative systems in constant interaction with a changing environment. Within the model people cope with the changing environment by adaptive or coping mechanisms. The (RAM) helps the nurse organize and apply a vast body of knowledge of nursing science, related sciences, and arts to promote adaptation of the individuals and groups. In theory, the (RAM) was used as a conceptual aid used by the nurses as they cared for the changing family environment in the emergency department.

Statement of the Purpose

The purpose of this research was to determine the satisfaction levels with nursing care among the family members of emergency department patients.

Research Questions

The research questions are:

1. Are the families of the emergency department patients satisfied with nursing care?
2. Does time of day make a difference in the satisfaction levels of the families of the emergency department patients with nursing care?
Definition of Terms

A conceptual definition provides a variable or concept with theoretical meaning and is either derived from a theorist’s definition of the concept or is developed thorough concept analysis. (Burns & Grove, 2001) Operational definitions are derived from a set of procedures or progressive acts that a researcher performs either to manipulate an independent variable or to measure the existence, or degree of existence, of the dependent variable. (Burns & Grove, 2001)

Nursing care

Conceptual definition

Nursing care can be conceptually defined according to the RAM as a systematic approach used by nurses to problem-solve, collect data, identify a person’s needs, select and implement care and then evaluate the outcomes of the care being given (Andrews & Roy, 1986).

Operational definition

Nursing care can be operationally defined as the actions/interventions by the emergency department Registered Nurse that are measured using the Consumer Emergency Care Satisfaction Scale (CECSS).

Family

Conceptual definition

The family is a self-identified group of two or more individuals whose association is characterized by special terms, who may or may not be related by blood lines or law, but who function in such a way that they consider themselves to be family. (Whall, 1986) The family includes anyone whom the patient deems significant. (Leahey, Harper-Jaques, Stout, Levac, 1995)

Operational definition

The operational definition of the family was the person who accompanied the patient to the emergency department, and who was present with the patient during the treatment process.
Satisfaction

Conceptual definition

Satisfaction can be conceptually defined as an attitude, or emotional response determined by the (dis)confirmation of family expectations John, (1992). Depending on the confirmation, or disconfirmation, of expectations by family perceptions of the treatment and nursing care received in the emergency room, the family member will be either satisfied or dissatisfied.

Operational definition

Satisfaction level can be operationally defined by the scores on the Consumer Emergency Care Satisfaction Scale (CECSS) tool.

Emergency department patient

Conceptual definition

The conceptual definition of an emergency department patient is an adult patient 18 years of age, or older, who can read and write the English language, and has signed consent to be treated in the emergency department.

Operational definition

The operational definition of the emergency department patient is persons who arrive to the emergency department via auto or ambulance, and have signed consent to be treated in the emergency department. Once they are in a treatment room they are considered a patient.

Significance

Increases in numbers of persons seeking care via the emergency department each year are adding to the challenges the emergency department registered nurses will be face. The emergency department environment is one that often produces anxiety and chaos. Emergency department nurses, however, must continue to meet the needs of patients and their families in times of uncertainty, high stress, and often crisis situations. Nursing care directed toward delivering effective communication skills, and incorporating case management strategies with the patients and their families will most likely lead to satisfaction with nursing care. Further
leading to satisfaction with the institution the care was received.

The importance of customer satisfaction is that it potentially leads to repeated consumer use of services, and return visits in the future. The increased number of visits would result in increased revenue for the institution. If it were necessary to increase staffing because of the increased number of patient visits, it would be fiscally feasible to do so.

Nurses often act as mediators and interpreters of events between the families, patients, and members of the healthcare team. Their interactions and professional behaviors at the bedside may have a significant effect on how satisfied the family and patient are with the emergency department experience. Today’s health care consumers want to be involved in their own care. They want to understand what is wrong with them, to understand their diagnosis, and to have a part of the decision making regarding their treatment. Nurses providing care that recognizes this desire in patients and families and addresses it, will ultimately lead to a sense of satisfaction with the care given in the emergency department. This level of consumer satisfaction with the emergency department visit will result in repeat visits, further resulting in increased revenue.

The focus of this study project was to measure the satisfaction levels of the families of the emergency department patients. Roy’s adaptation Model (RAM) was used as the theoretical framework, and is a key factor in assessing the needs of the adapting family unit in relationship to a family member’s treatment in the emergency department. This study examined the relationship between nursing care measured by the CECSS tool, and the satisfaction of the families of the emergency department patients. The results were used to evaluate the effectiveness of the current nursing care and practices at the hospital in which the study was conducted. Areas needing continued improvement, in relation to delivering quality healthcare and maintaining consumer satisfaction, were also evaluated.

Assumptions

Assumptions are statements that are taken for granted, or are considered true, even though they have not been scientifically tested. (Burns & Grove, 2001) According to the RAM, it is
assumed that each person copes differently with changes in health status, and it is the nurse’s responsibility to help persons adapt to these changes.

This research is based on the assumption that families are more than extensions of patients. Further, it is assumed that the family member being evaluated is considered to be part of the family according to the patient. It is assumed that the roles of the family member may change in light of the family member’s treatment in the emergency department, and that different levels of adaptation, and coping mechanisms take place in the presence of hospitalization of the family member. It is assumed that the family members will be honest in their responses to the evaluation questionnaire.

**Limitations**

Limitations are restrictions in a study that may decrease the generalizability of the findings. The limitations to this study are that a small convenience sample was used in one setting, and that the research was conducted over a short period of time.

**Summary**

This chapter introduced the need for research on the satisfaction levels of the families of emergency department patients with nursing care. The purpose of the study, research questions, and hypotheses were clearly stated. The significance of the study to nursing was identified. Assumptions and limitations to the study were discussed.
Chapter II

Literature

This chapter begins with a discussion of the nursing theoretical framework of Roy’s adaptation model (RAM) followed by the specific concepts in the model that were used as a guide for evaluating the satisfaction levels of the families of the emergency department patients with nursing care. Following this discussion, a review of current literature is presented, including descriptive research on patient and family satisfaction, and perceived needs of families in the emergency department and critical care areas.

Theoretical Framework

The theoretical framework used in this research was the Roy Adaptation Model. The foundational goal to the Roy Adaptation Model (RAM) is the enhancement of life processes through adaptation. Roy’s adaptation model views people as adaptive systems in constant interaction with changing environments. Within this model people are said to cope with the changing environment by means of adaptive or coping mechanisms. According to Roy, adaptation is the process and outcome whereby thinking and feeling persons, as individuals or in groups, use conscious awareness and choice to create human and environmental integration. (Roy & Andrews, 1999) There are four major concepts in the RAM: humans as adaptive systems, the environment, health, and goals of nursing. Humans as adaptive systems, the environment, and the goals of nursing are discussed.

Roy described humans in terms of holistic adaptive systems. Holism is the aspect of unified meaningfulness of human behavior in which the human system is greater than the sum of individual parts. (Roy & Andrews, 1999) Characteristics of any system include inputs, outputs, controls, and feedback. According to Roy, a stimulus has been defined as the point of interaction of the human system and the environment, or the mechanism that provokes a response. Stimuli can come externally from the environment or may originate in the internal environment. Certain stimuli pool together and make up a specific internal input, the adaptation level. (Roy
Adaptation level represents the condition of the life processes. Three levels of adaptation can be described: integrated, compensatory, and compromised life processes. The adaptation level affects the human systems ability to respond positively in a situation. The human behavior (output) is a function of the input stimuli, and the individual or group adaptation level. This changing level is significant as humans and environment are constantly changing. Life processes can change from integrated to compensatory, which then stimulates the person to attempt to reestablish adaptation.

In the RAM the major processes for coping are carried out by a human through their regulator and cognator subsystems. Regulator coping mechanisms respond automatically through neural, chemical, and endocrine activity, while cognator coping mechanisms respond through cognitive-emotive channels. The cognator and regulator subsystems act to maintain integrated life processes for the person or the groups. The life process whether integrated, compensated or compromised are manifested in behavior. Behavior as the output of human systems takes the form of adaptive responses and ineffective responses. These responses act as feedback or further input the system, allowing people to decide whether to increase, or decrease efforts to cope with the stimuli.

The second concept in the RAM is the environment. The environment is understood as the world within and around the person. The changing environment stimulates the person to make adaptive responses. For human beings life is never the same, it is constantly presenting new challenges. A person has the ability to make new responses to these changing conditions. The environment includes all conditions, circumstances, and influences surrounding and affecting the development and behavior of the person. These influencing factors are categorized as stimuli. Stimuli are classified into three groups, focal, contextual, and residual.

*Stimuli*

The focal stimulus is the stimulus most immediately confronting the human system. It is the focal stimulus that demands the highest awareness from the human system. It is the focal stimulus that necessitates a response or action from the person so he or she can cope with it. In
this research study the focal stimulus can be identified as the patient arriving to the emergency department for treatment. This arrival of the patient becomes the focal stimulus of the family.

The contextual stimuli can be defined as all of the other stimuli of the human system’s internal and external worlds that can influence how the human system can deal with the focal stimulus, these stimuli can have either a positive or negative influence on the situation. Examples of possible contextual stimuli that the family member in the emergency department may be experiencing in this current study are, the attitudes and communication skills of the nurse(s) caring for their family member, the degree, or complexity -life-threatening or minor-, of the patient’s visit, also any anxieties or fear of the unknown. All could be considered contextual stimuli. Any past experiences the family has had with the emergency department may also be contextual stimuli. These could be either positive or negative contextual stimuli, depending on the circumstances surrounding the experience.

The residual stimuli are environmental factors within or without human systems, the effects of which are unclear in the current situation. There also may not be an awareness of the influence of these factors. In nursing practice, the nurse considers general knowledge related to the event or situation that has possible but unknown influences as residual stimuli. For this current study, the residual stimuli are the unknown stimuli the family is experiencing.

The individual’s responses to stimuli can be adaptive or ineffective. Adaptive responses are those that promote the integrity of the human system. The integrity or wholeness of the system is behaviorally demonstrated when the system is able to meet the goals in terms of survival, growth, reproduction, mastery, and transformations of systems and environments. (Roy & Andrews, 1999) Ineffective responses do not support goals of humans as adaptive systems and can immediately or gradually threaten the systems survival, growth, reproduction, mastery or transformations. (Roy & Andrews, 1999) Potential adaptive responses could be the family accepting the patient’s need for emergency treatment. Ineffective coping may be the family’s inability to accept that the patient needs care, or denial that anything is wrong with their loved one.
As the stimuli are acting as input to the system, the responses are processed through two coping subsystems, the cognator, and the regulator. As previously discussed, the cognator subsystem relates to cognitive-emotive channels, and the regulator subsystem using neural, chemical and endocrine channels. Behavioral responses can then be evoked by these mechanisms via four adaptive modes: physiological-physical, self-concept-group identity, role function, and interdependence. (Roy & Andrews, 1999) Nursing practice is directed toward promoting adaptation in each of the four response modes, and will be explained in each mode.

**Physiological-physical mode**

The physiological-physical mode represents the human system’s physical responses and interactions with the environment. For the individual, the underlying need of this mode is physiologic integrity, associated with the basic needs of oxygenation, nutrition, elimination, activity, rest, and protection. Also needed are more complex processes such as acid-base, fluid-electrolyte balance, neurological and endocrine function. For the family member, activity and rest may be the most affected as the emergency department experience may take many hours. The nurse can assess their need to take a break from the situation, and assure the family that someone will remain with the patient as needed, in the event of their absence.

**Self-concept**

The self-concept mode relates to the basic need for physical and spiritual integrity, or a need to know the self with a sense of unity, central to person’s behavior and consists of persons beliefs or feelings about him/her self at any given time. The nurse can assess how the family members view their own personal strengths and limitations, and then determine if those qualities will have some kind of impact on how they will be able to care for the patient after leaving the hospital, if needed.

**Role function**

A role consists of a set of expectations of how a person in a particular position will behave in relation to a person who holds another position. Adaptation in this mode is directed toward meeting individual needs for knowing who they are in relation to others, so they can act
accordingly. (Roy & Andrews, 1999) This adaptive response is important to the family who may be undergoing role changes. The nurse can help the family member cope with the change in role by helping to gain support from other members of the family, or community.

*Interdependence*

Interdependence applies to adaptive behavior for both individuals and groups. Interdependence can be defined as the close relationships of people that involve the willingness and ability to love, respect, and value given by others. (Andrews & Roy, 1986) The nurse assesses the relationship the family member and the patient have. If the bond between the patient and family is broken by injury or illness the nurse can help the family adjust to the situation by offering support. The nurse may also better understand the emotional impact on the family as anxiety, and fear may increase with separation from each other.

For this current study satisfaction of nursing care by the families will be measured after the nursing care has been received. The Consumer Emergency Care Satisfaction Scale (CECSS) is the tool that will be used to measure the level of satisfaction of the family. This tool will be discussed later in Chapter 3. It can be illustrated, in “Using Roy’s Adaptation model in care of the ED patient and family, and its effect on satisfaction level”, (Figure 1, p. 15,) that encompassing the RAM as a guide in the ED practice setting may have an affect on the level of satisfaction families have with the nursing care received. As nurses in the emergency department care for their patients and their families, they use the elements of the nursing process to make decisions. Using the RAM as a guide may facilitate nurses to increase the level of satisfaction of the families in the ED with nursing care.

Figure 1 (p. 15) shows the input to the human system through various stimuli. The focal or the immediate stimulus the family undergoes is the patient being treated in the emergency department. The contextual stimuli the family is filtering may be one of the most important stimuli the nurse can use to have an effect on the adaptation of the family member’s experience with the nursing care received in the emergency department. As stated previously, some contextual stimuli the family will be undergoing may be the attitudes of the nurses, fear of the
unknown and anxiety. The nurse, via observation and communication, can assess these factors and determine ways to help alleviate the fears and anxieties of the families.

As the family members are filtering the stimuli they are using their regulator and cognator coping mechanisms, as previously discussed. Family member responses are then developed in four integrated modes. The nurse assesses the responses and help the family adjust to the changing family unit. As Figure 1 depicts, the family will be continually confronted with new stimuli, and then will use their coping mechanisms to manifest some behavior, the behavior will be adaptive or ineffective. The response is carried out, and continues as feedback into the system. The cycle is continuous.

The emergency department nurse’s role is assessment of this continuous cycle. For this study, emphasis is placed on assessment of the contextual stimuli and the adaptation level of the family. This continuous assessment may then have a role in the perception of the satisfaction of care received. Any lack of awareness by the nurse of the family’s anxiety, fear, or ineffective communication by the nurse, may persuade the family that the nurse was uncaring, leading to the belief that their family member had unsatisfactory nursing care. On the other hand showing care and concern over any fears, and communicating to the family any changes in condition, could change the family’s perception about satisfactory nursing care.

The third concept according to the RAM is the goal of nursing. It can be defined as the promotion of adaptive responses in relation to the four adaptive modes, physiological-physical, self-concept-group identity, role-function, and interdependence. As discussed, the nurse will demonstrate promotion of the adaptive responses of the families of the emergency department patients by continued assessment of the contextual stimuli, and their adaptation level to the stimuli.
Figure 1: Using Roy's Adaptation Model in care of the ED patient and family, and its effect on satisfaction levels.
Review of Research

The review of literature is divided into separate categories based on the current findings relevant to this study. Despite the need for research on family’s needs and satisfaction in the emergency department, such studies were limited in both nursing and medical research. For the purpose of this study the literature review is organized as follows: defining what consumer satisfaction is, followed by trends in consumer satisfaction over the last twenty years, which will include a recent review of literature. Following will be research on nurse’s perceptions of families needs, concluding with examination of what has been found to be the actual needs of the families in the emergency department and critical care areas.

Consumer Satisfaction

Hostutler, Taft, and Snyder, (1999) described satisfaction as occurring when services are rendered in terms of customer expectations, needs, and perceptions. Messner & Lewis, (1996) state patient satisfaction is the degree of congruency between a patient’s expectations of ideal care, and their perception of actual care received. Thompson & Yarnold, (1996), identify a central and recurring principle of determinants of patient satisfaction. This principle is coined “the disconfirmation paradigm”. According to this paradigm, customer satisfaction is determined by the magnitude and direction of the gap between expectations and perceptions of performance. Satisfaction is thus achieved when the consumer experiences confirmation, and greatest satisfaction is achieved when the consumer experiences positive disconfirmation. Dissatisfaction can then be defined as the end result of the consumer’s negative disconfirmation.

Trends in past twenty years

In the late 1980’s, a new perspective to the delivery of quality care in emergency nursing research was suggested. It was proposed that providing quality patient care from a nursing standpoint “only” was no longer adequate, but rather, providing quality care was a perception of the consumer as well. (Morgan, 1986) It was this trend in healthcare that began to shift the focus on what the patient felt, or perceived was more important in care. In the 1990’s, nursing and medical research related to patient satisfaction encountered the movement toward placing
emphasis on interpersonal skills as being essential in the care of patients. It was often found to be more important than technical competence. Nelson & Larson (1993) found that when patients were asked to write about their satisfaction, the focus was on the interpersonal aspects of health-care delivery. Fosbinder, (1994), examined nurse-patient interactions in an acute care area and aimed to identify the elements of interpersonal competence. Themes that emerged from the study were; translating, getting to know you, establishing trust, and going the extra mile. Patients reported confidence and trust when the nurses took charge and appeared to enjoy their work. Fosbinder, (1994), suggested that interpersonal competence improved patient’s quality of care. Many other studies cited interpersonal factors to be a key in patient satisfaction, (Hall, 1996; Yarnold, 1998; Watson, Marshall, Fosbinder, 1999; Boudreaux, Ary, Mandry, McCabe, 2000; Bursch, 1993, & Carrasquillo, 1999)

A recent review of the literature on patient’s satisfaction in the emergency department (Trout, Magnusson, & Hedges, 1999), further acknowledges this trend. This review of literature resulted in many important key themes related to patient’s perceptions, and predictors of satisfaction. Some themes were, a.) provider-patient interpersonal factors, b.) perceived waiting times, and c.) association of satisfaction with patient information giving.

According to Trout et al., (1999), provider-patient interpersonal factors were defined as caring compassionate medical staff, kindness, and showing concern. The perceived waiting time theme was related to patients who had perceived waiting times to treatment to be much longer than they actually were. Patients who were treated faster than they perceived were more satisfied. Lastly the theme of patient information giving was discussed. This theme was related to the staff updating patients on wait times, test results, etc. The themes from this review of the literature that are of special importance to emergency nursing and this study, are the provider-patient interpersonal factors, and information giving. Nursing has the greatest influence on these two concepts.

Nurses in the emergency department spend much more time at the bedside with the patients and their families. They are in constant communication with the physicians, and often
spend time explaining to the patient in simple terms, what is often a very complex issue. The interpersonal theme that has arisen from the literature as being one of the most important determinants in patient satisfaction, is then, most likely to be a common theme present in the satisfaction of the emergency department family, and therefore has relevance to this current study.

Nurses perceptions of families needs

Many studies cited in the literature, were concerned with the nurses perceptions of suddenly bereaved families in the emergency department. (Tye, 1993, Fraser & Atkins, 1990, Milan, 1990, Davies, 1997). Also common in the literature were studies on whether or not families belonged in the resuscitation room. (Barratt & Wallis, 1998, Bassler, 1999, Ellison, 1998). It is important to mention that some families will be met with sudden bereavement in the emergency department. Other family members may have experiences similar in nature to a sudden bereavement. Nurses’ perceptions of the needs of the family are essential in their care of family unit.

Hallgrimsdotter, (2000) researched nurses perceptions and experiences of caring for families of the critically ill/injured patients, also incorporating those suddenly bereaved families. A sample of 54 nurses working in three accident and emergency rooms was used. A series of questions were asked relating to the needs and experiences of caring for the patients and the families. The results of importance to this current research study are that it was demonstrated that 96% of the nurses viewed caring for patient’s families as a nurse’s duty, and felt it was important for patients, that their families were taken care of. Information, reassurance and support were most often stated as most important needs for families. An interesting finding was that a minority of the participants felt they had received adequate education to meet family’s psychosocial needs. This study suggests that nursing involves caring for the family.

Family’s satisfaction/ needs in critical care and ED areas

As mentioned in the beginning of the review of literature, an abundance of research in both the nursing and medical fields have emphasized the satisfaction of the patient in the emergency
department. Limited still, are studies on the satisfaction, and needs of the families in the emergency department. Studies in acute care settings other than the emergency department provide a major contribution to the development of current knowledge of family needs. A study by Picton, (1995) was concerned with the exploration of family centered care in intensive care units. The needs of the families created certain themes. The themes developed from this study were reassurance, proximity, information, convenience, and support. It is suggested that the needs of the families of the critically ill patient often begin in the emergency department, and that the nurses caring for those critical patients, assess those needs early on. To further support these themes, researchers (Redley, Leaser, Peters, & Bethune, 2003), in their search for developing an instrument to measure families needs in the emergency department, found that proximity, communication, meaning support, comfort, and the ability to elicit meaning from experience were all concepts found to be of importance to the families of the critically ill or injured patient.

Caterinicchio (1995) states that effective healthcare systems are driven by patients and families’ needs. Kleinpell and Powers (Kleinpell & Powers, 1992) argue that nurses cannot provide optimal care unless they care for the patient as part of a family unit. Research based evidence of families’ needs for care after critical illness or injury is drawn from many studies that take place in the critical care settings. (Hickey, 1990; Kleinpell & Powers, 1992; Leske, 1992; Wesson, 1997; Jacono, Hicks, Antonioni, O’Brien, & Rasi, 1990; Daley, 1984) Although the focus of this study is directed toward emergency department families, many of the concepts may apply to the emergency department family. Some of the patients may be admitted and transferred to critical care areas, and these concepts, related to caring for the family may then begin with their stay in the emergency department.

Summarizing the review of literature, it can be noted that patient’s satisfaction has been researched in numerous studies, both nursing and medical. Medical research has focused more exclusively on patient’s satisfaction in the emergency department as supported by the recent review of literature by (Trout et al., 1999). Nursing research has also been shown to be limited
on patient’s satisfaction in the emergency department. (Davis, 2003, 1999, 1997; Redley, 2003) This finding can be supported by the limited number of citations in the recent review of literature by (Trout et al., 1999). Studies on the perceived needs in the emergency room settings in relation to sudden bereavement of a family member and whether or not family should be present in the resuscitation room has been cited frequently, in addition to the needs of the families in the critical care areas. However, areas that are lacking in the nursing research are the families perceived needs and satisfaction with emergency department nursing care.

Summary

This chapter contains a review of the nursing theoretical framework of this study. Figure 1 also graphically demonstrates the relationship of the concepts within the nursing conceptual framework used in this study. A review of the concepts of satisfaction of the family and the patient, in acute, critical, and emergency care areas was discussed, along with recent relevant research on this subject.
Chapter III

Method

This chapter describes the specific design and methodology used in this study. The purpose of this study was to determine the satisfaction levels of the families with nursing care among the emergency department patients. A description of the research design, subjects, materials, data collection, and data analysis is included. Controls for threats to internal and external validity, the protection of human rights, and the statistical tests used to answer the specific research questions, is also included.

Design

The study used a non-experimental, descriptive research design. In descriptive studies, the purpose is to gain more information about characteristics within a particular field of study, and to provide a picture of situations as they naturally happen. A descriptive design may be used for the purpose of developing theory, identifying problems with current practice, justifying current practice, making judgments, or determining what others in similar situations are doing. (Burns & Grove, 2001)

Subjects

The setting for this study was a 17-bed Level One-trauma center/emergency department located in an urban area of the midwestern United States. The target population consisted of all family members of patients being treated in the emergency department who had arrived by automobile or ambulance. A non-probability convenience sample was used. In convenience sampling, subjects are included in the study because they “happened to be in the right place at the right time”, and are simply entered into the study until the desired sample size is reached. (Burns & Grove, 2001) Sample selection was based on specific inclusion and exclusion criteria. Inclusion criteria for this study were broad. Potential subjects were any family member of the
person (patient) who was seeking treatment in the emergency department. The subjects had to be able to read, write, and speak English. The subjects, and the persons (patients) they accompanied to the emergency department, were over 18 years of age. For this study subjects who had completed a survey previously within the six week research period were not allowed to complete a second one. Surveys in which all of the questions were not answered were not used for data analysis. Adequate sample size via power analysis was determined to be 135 subjects. The total sample of 135 subjects achieves 81% power to detect differences among means.

The registered nurses assisting in the study were chosen by the co-investigator and participated voluntarily. These registered nurses were given a brief overview of the study goals and inclusion/exclusion criteria. In order to obtain a sample divided throughout the day, three nurses per each eight-hour increment of time in a 24-hour period distributed surveys. This format continued during the six-week data collection period. (Figure 2, p.29) The nine nurses who assisted in the distribution of the surveys gave the survey, enclosed in a sealed and pre-stamped envelope, to the subjects once the patient that they were accompanying had received discharge instructions and immediately before the patient was released from the emergency department.

The registered nurses assisting in the study approached the family members and simply asked them if they would like to complete a satisfaction survey. If they agreed to participate, they were then asked to complete the survey and either place it into the collection box or mail it in at their convenience. The collection box was located at the emergency department information desk, located in the lobby. The box was be labeled “family surveys”. The collection box remained locked during the six-week data collection period, and only the co-investigator had a key to the box.
Materials

The instrument used to measure the satisfaction levels of the families of the emergency department patients with nursing care was the Consumer Emergency Care Satisfaction Scale (CECSS). The purpose of this tool was to measure consumer satisfaction with nursing care in the emergency department. This instrument was chosen for its simplicity, as well as the short completion time usually between five to ten minutes. A simple, time sensitive tool was chosen so the family would be more willing to complete the survey in its entirety. The instrument was originally developed by Davis,(1986). The CECSS tool uses a 5-point likert scale with responses ranging from “completely agree” to “completely disagree”. There are nineteen items in the tool. Two subscales comprise the CECSS tool. Twelve items are placed under the category of caring, and three items under teaching. Four items are negatively worded, and are not scored. The higher the added scores are on the tool, the higher the level of satisfaction with emergency department nursing care is. (Davis & Duffy, 1998) Once it is determined that all of the questions were answered on the survey, scoring of each question was done.

Content validity, construct validity, and reliability via internal consistency have been examined for this research tool. Validity is used to examine whether the scale measures what it intends to measure. Reliability of a scale indicates how consistently and precisely the scale measures the concept (Davis & Bush, 1995). Content validity examines the extent to which the method of measurement includes all the major elements relevant to the construct being measured (Burns & Grove, 2001). Content validity for this tool was established by using a panel of experts. The experts consisted of three specialists in emergency nursing, and two in consumer satisfaction (Davis & Bush, 1995).

Construct validity examines the fit between the conceptual definitions and operational definitions of variables (Burns & Grove, 2001). For this tool, construct validity was done using
factor analysis (Davis & Bush, 1995). Testing homogeneity of items in an instrument is a means to determine reliability. Homogeneity testing, examines the extent to which all the items in the instrument consistently measure the construct and is a test of internal consistency. (Burns & Grove, 2001). Internal consistency reliability of the CECSS tool has been supported using Cronbach alpha coefficients. Coefficients less than 1.00 indicate that the instrument will reflect the discriminations in the levels of construct. In the literature, values of 0.85 for the “caring” subscale, and 0.88 for the “teaching” subscale were reported. (Davis & Duffy, 1998) Another significant finding was reported when the tool was used on three different groups of emergency department patients. Cronbach alpha coefficients of 0.89, 0.84, and 0.89 under the “caring” subscale, and coefficients of 0.90, 0.91, and 0.95 for the “teaching” subscales were reported. (Davis & Bush, 2003)

According to Davis & Bush, (1995), in situations where scores on a scale might change from one testing to another, such as in measuring concepts like attitudes, satisfaction, or hope, the use of internal consistency reliability is preferred. Examples of how reliability of this tool has been measured is cited in several studies in the literature. (Davis & Bush, 2003.; 1995; Davis & Duffy, 1998) Use of the CECSS tool in this current study will be the first time the instrument will be used to measure the family’s satisfaction with nursing care in the emergency department. The author of the CECSS tool (Davis, 2004), has given written permission to use this scale in measuring the family’s response to satisfaction with nursing care in the emergency department. (Date of permission, June 16, 2004, Appendix B)

Data Collection

The data collection technique that was be used in this research study was a survey. Subjects were selected to complete the survey by the registered nurses who were assisting in this study. In order to obtain a representative distribution of surveys in a 24-hour period each nurse
was given a specific eight-hour increment of time to distribute the survey by the co-investigator. Three registered nurses, per each eight-hour shift, distributed the surveys. They were assigned to groups based on the time of day they were working. (Figure 2., p.29) A total of nine nurses were used to assist in collecting data. Each nurse was given 15 surveys to distribute during his or her eight-hour shift, over the six week research study period.

The subjects were recruited over a six week period in the winter of 2005. Family members were selected by the emergency department nurses based on the inclusion criteria. Subjects were informed by the primary investigator as stated on the cover letter of the survey, that the survey was anonymous, and that participation was strictly voluntary. The form clearly stated that the person filling out the survey would not be identified. (Appendix C) The survey had an explanation of the rationale for the study, and consent to use the information from the survey for use in explaining the study findings once completed. Surveys that were mailed in to the co-investigator’s mailbox were also placed into the locked collection box and emptied out weekly. The data contained in the sealed envelopes was transferred to a safety box and was securely locked with a key. This locked box will remain in the office of the Center for Nursing Research for seven years.

**Controls of Internal/External Validity**

Internal validity is the extent to which the effects detected in the study are a true reflection of reality, rather than a result of the effects of extraneous variables. Any study can contain threats to internal validity, and these validity threats can lead to a false-positive or false negative conclusion. (Burns & Grove, 2001) There are different types of threats to internal validity. Controls of threats to internal validity will be taken in this study in the instrumentation used to collect data, and the testing practices of the subjects. As previously stated in the materials section of this chapter, the instrument used in this research study, the CECSS survey has been tested in
the literature for construct and content validity. Threats to internal validity via instrumentation were controlled in this study by using the CECSS tool without making modifications or alterations to its current form.

According to Burns & Grove, (2001), sometimes the effects being measured can be due to the number of times the subjects’ responses have been tested. Subjects may remember earlier, inaccurate responses that can be modified, thus altering the outcome of the study. This threat to internal validity was controlled by allowing the subjects to complete the survey one time in the six week period, and not allowing for alterations in their responses, based on their previous experience of answering the survey.

External validity is concerned with the extent to which study findings can be generalized beyond the sample used in the study. According to Burns & Grove (2001), as the percentage of those who decline to participate increases, external validity decreases. Steps to control threats to external validity or the ability to generalize findings of this study were to be taken by reporting those participants who were approached to take part in the study, however, refused to participate. This goal was not achieved as accurate accounts of those refusals were not made.

Protection of Human Rights

Steps to ensure protection of human rights were taken before any research was conducted. Institutional Review Board, (IRB) expedited approval forms, along with conflict of interest forms, were completed by the researcher prior to obtaining permission to complete the study. A written letter from the hospital’s emergency department nursing manager, and emergency department medical director were received before beginning the study as well. (Appendix A) After all forms were returned to the researcher and permission was granted by the IRB, the study began.
Assumptions/Limitations

A limitation to this study was the use of a small convenience sample, over a short, six week period of time. Further, that the research tool used had not been tested for reliability/validity with family members’ satisfaction with nursing care in the emergency department. It is assumed that the responses by the families answering the surveys were truthful.

Data Analysis

Data was first organized by using descriptive statistics. Descriptive statistics describe or characterize data by summarizing them into more understandable terms without losing or distorting much of the information. Descriptive statistics include frequencies, percentages, means, summary tables, charts, and ranges to describe the sample characteristics (Munro, 2001). Demographic data will be arranged using descriptive statistics. The demographic data for this study were the subjects age, race, gender, highest level of education received, time of day care was received in the ED, and the relationship of the subject to the patient. Once demographics were analyzed, the next step was analysis of the data according to the specific study research questions. There were two research questions in this current study.

Research Question One: Are the families of the emergency department patients satisfied with nursing care?

This question was answered using descriptive statistics. The scores used in the CECSS research instrument under the subscales “caring” and “teaching” were first added together. Means were analyzed for both the caring and teaching subscales, along with a total mean of both categories. The mean scores were used to determine if the family was satisfied with the nursing care received while in the emergency department.
Research Question Two: Does time of day make a difference in satisfaction of the families of the emergency department patients with nursing care?

The time of day the family was in the emergency department was an item marked on the demographic portion of the survey. The time of emergency department treatment was broken into three categories of times in a 24-hour period. The times were; a.) 7:00 a.m.-3:00 p.m., b.) 3:00 p.m.-11:00 p.m., and, c.) 11:00 p.m.-7:00 a.m.

To answer whether time of day made a difference, a one way analysis of variance test (ANOVA), was done. ANOVA procedures test for the differences between means. ANOVA examines data from more than two groups, and compares the variance within each group with the variance between groups. The outcome of the analysis is a numerical value for the F statistic, which is used to determine whether the groups are significantly different (Burns & Grove, 2001).

Summary

This chapter included the research design, methodology, subjects, material, data collection and the data analysis that was be used in this research study. Controls for threats to internal and external validity, and the steps to protect human rights were also included. This was a non-experimental descriptive study. A non-probability convenience sample was taken from a 17-bed emergency department in a Level One trauma center in an urban area of the Midwestern United States over a six-week period in the winter of 2005.

Appropriate approvals were obtained before this study began, including expedited Institutional Review Board (IRB) and conflict of interest statements. Letters of permission were received from the Institutional Review Board (IRB), the nursing manager, and medical director of the emergency department used in this study. Once all permission letters were received, data collection was initiated.
Figure 2: Daily Survey Distribution

7:00 a.m.

3 RNs
Group 1

3:00 p.m.

3 RNs
Group 2

11:00 p.m.

3 RNs
Group 3

Total Surveys Distributed Over 6 weeks

7:00 a.m.

Week 1

Week 6
Chapter IV

Results

The purpose of this study was to determine the satisfaction levels with nursing care among family members of emergency department patients. This study determined if the families of emergency department patients were satisfied with nursing care, and, if the time of day care was received made a difference. This chapter includes the demographic findings of the population, followed by the findings of the research questions, closing with a summary of the chapter contents.

Sample

A non-probability sampling technique was used to obtain participants from a 17-bed Level One trauma center/emergency department, located in an urban area of the Midwestern United States. All participants met the inclusion criteria for this study. One hundred thirty-five surveys were distributed over a six-week period, by nine emergency department nurses. See Figure 2, Daily Survey Distribution (p.29) Sixty-one (45%) of the surveys were returned. Six of the sixty-one surveys were not completed in their entirety. Fifty-five (41%) of the surveys distributed were used for data analysis.

Sample demographics are found in Tables 1-3
Table 1 illustrates that thirteen males (23.6%) and 42 females (76.4%) participated in this study. The ages of the sample revealed that 22 (40%) were 18-39 years of age. Eighteen (33%) were between 40-60 yrs of age. Fifteen (27%) were 61 years of age or older. Thirty-seven (67.3%) were Caucasian, ten (18.2%) were African-American. Three (5.5%) were Asian, two (3.6%) were Hispanic, and three (5.5%) were other racial or ethnic origins.
Table 2. illustrates the relationship of the family member who completed the survey to the patient, and the education level. Twenty (36.4%) were the significant other/spouse, followed by 16 (29%) being the mother, father or grandparent. Daughters and sons represented ten (18.2%), and brothers/sisters four, (7.3%) of the population. The remaining five (9.1%) were comprised of friends and others. The sample populations highest level of education achieved revealed that 20 (36.4%) had attended high school, and 16 (29.1%) had some college. Four (7.3%) had an associate degree, and fifteen (27.3%) had a Bachelor’s or Master’s degree.
Table 3

Time of day care was received in the ED

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00 a.m.-3:00 p.m.</td>
<td>12</td>
<td>21.8</td>
</tr>
<tr>
<td>3:00 p.m.-11:00 p.m.</td>
<td>29</td>
<td>52.7</td>
</tr>
<tr>
<td>11:00 p.m.-7:00 a.m.</td>
<td>14</td>
<td>25.5</td>
</tr>
</tbody>
</table>

Time of day care was received was equal to 12 (21.8%) participants from 7:00 a.m.-3:00 p.m., 29 (52.7%) from 3:00 p.m.-11:00 p.m., and 14 (25.5%) from 11:00 p.m.-7:00 a.m.

Findings

Two research questions were used in this study. The first question asked: Are the families of the emergency department patients satisfied with nursing care? The Consumer Emergency Care Satisfaction Scale (CECSS) was used to collect the data to answer this question. This instrument using a five point likert scale consisted of 19 questions. Twelve of the questions comprised the “caring” subscale, and three of the questions comprised the “teaching” subscale. Four of the questions were used to minimize response set and were not scored. To answer the first research question, the “caring” subscale questions were added together, and a score was calculated. Second, the “teaching” subscale scores were added together and a score was calculated.

The ranges of possible scores for the caring subscale were 12-60, and 3-15 for the teaching subscale. Caring subscale scores in the ranges of 12-32 represent not satisfied with care. Scores between 33-42 represent no opinion or neutral, and scores between 43-60 represent satisfied with care. Teaching subscale scores ranging from 11-15 represent satisfaction with care, scores of 8-
10 represent no opinion, and scores of 3-7 represent not satisfied. (Appendix E)

Table 4
*Caring/Teaching Scores on the CECSS*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Satisfaction Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Caring</td>
</tr>
<tr>
<td>Subscales</td>
<td></td>
<td></td>
<td></td>
<td>55</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33-42= Neutral or no opinion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12-32= Not satisfied with care</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Teaching</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8-10= Neutral or no opinion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3-7 =Not satisfied with care</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55</td>
</tr>
</tbody>
</table>

Each of the 55 surveys “caring” and “teaching” subscale scores were added together. The mean caring score for all the surveys was 52.6, (SD=9.6) and teaching mean 12.2, (SD=2.9). This data would suggest the families of the emergency department patients were satisfied with nursing care received, as evidenced by the mean caring and teaching scores using the CECSS scoring guidelines.

The second research question asked: Does time of day make a difference in the satisfaction of the families of the emergency department patients with nursing care? Time of day care was received was a question on the demographics portion of the survey. Table 5 represents descriptive statistics of the satisfaction scores related to time of day care was received. Mean scores and standard deviations are shown, along with totals.
Table 5
Time of day/satisfaction

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>Caring M, (SD)</th>
<th>Teaching M, (SD)</th>
<th>Total M, (SD)</th>
<th>Satisfaction Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>7a-3p, (N=12)</td>
<td>54.4, (5.6)</td>
<td>12.8, (2)</td>
<td>67.3, (6.8)</td>
<td>Caring scale 43-60=Satisfied with care 33-42=Neutral or no opinion 12-32=Not satisfied with care</td>
</tr>
<tr>
<td>3p-11p, (N=29)</td>
<td>53.4, (8.7)</td>
<td>12.2, (3.4)</td>
<td>65.7, (10.2)</td>
<td>Teaching scale 11-15= Satisfied with care 8-10=Neutral or no opinion 3-7 =Not satisfied with care</td>
</tr>
<tr>
<td>11p-7a, (N=14)</td>
<td>49.5, (13.3)</td>
<td>11.4, (2.9)</td>
<td>60.9, (15.6)</td>
<td></td>
</tr>
</tbody>
</table>

A one-way analysis of variance statistical test was used to determine if time of day made a significant difference in the satisfaction scores. It was determined that time of day care was received did not make a difference in the scores. Caring subscale; [F 2, 52)=1.051, p=.36] Teaching subscale= [F (2, 52) =.728, p=.49] and the total of caring and teaching; [F (2,52) = 1.184, p=.31).

Summary

This chapter outlined the demographic data of the sample population. Research questions were answered using descriptive statistics, and conducting a one-way (ANOVA) statistical test. Analysis of the findings were reported and indicated that the families of the emergency
department patients were satisfied with care received (M=52.6, 12.1, SD=9.6, 2.9). Further
determining the time of day care was received did not make a difference. [F 2, 52]=1.184,
p=.31).
Chapter V
Discussion

This chapter summarizes the findings for this study and compares the findings with studies in the current literature. This chapter also outlines the findings as they apply to Roy’s Adaptation Model (RAM). Finally, this chapter discusses conclusions and limitations of the study, and recommendations for further nursing research.

Findings

The purpose of this study was twofold. First, to determine the satisfaction levels among the families of the emergency department patients and second, to determine if time of day made a difference. The results of this study suggest that families are satisfied with nursing care received (M=52.6, 12.2; SD 9.6,2.9) and that time of day care was received did not make a difference in the scores. [F (2, 52)=1.184, p=.31) Measuring satisfaction with nursing care among the families of emergency department patients was not found in the literature. Many studies in both the nursing and medical research were found to only measure patient satisfaction with nursing care in the emergency department. (Trout et al., 1999, Davis, 2003, 1999, 1997; Reedley, 2003)

It has been suggested in a family unit that any dysfunction -illness, injury, separation- that affects one or more members, may and frequently will in some way affect other members as well as the unit as a whole (Friedman, 1997). It can be inferred that the families of those being treated in the emergency department will be affected similarly by the treatment process as is the patient. Measuring nursing care directed at satisfying family’s needs, will ultimately be addressing both the needs of the patient and family. As mentioned, families and patients needs may be similar, so for this study the CECSS was used to measure the family’s satisfaction with nursing care as opposed to the patients. However, this research tool has not been used on families, so a
comparison of two studies using the CECSS on patient satisfaction in the emergency department setting was made, in an effort to support the current study’s findings.

Davis and Duffy (1999), used the CECSS to compare patient satisfaction in an urban and rural emergency department. The combined caring subscale scores for both the rural, (N=39) and urban, (N=64) emergency departments were reported as (M=55, SD=6.49) A combined caring subscale score of 55 falls into the ranges of 43-60 which means that both the rural and urban emergency departments patients were satisfied with nursing care received. This finding by Davis and Duffy, (1999) supports the current study’s findings, which resulted in a mean caring subscale score of 52.6,(SD=9.6) or that satisfaction had occurred. The combined urban and rural teaching subscale scores in the Davis and Duffy, (1999) were slightly lower (M=10.82, SD=2.9) than the current studies.(M=12.2, SD=2.9) The urban teaching scores were slightly higher (M=11.40, SD=3.17) than the rural, (M=9.89, SD=2.46) The urban scores are more closely correlated to the current study’s scores. This may indicate a difference in the teaching strategies in urban and rural areas.

Davis and Duffy (1999) reported that females represented 47.7% (N=46) of the sample, and males represented 52.4% (n=54). When comparing the current study, (N=55) it was found that 13 (23.6%) were males and 42 (76.4%) were females. A difference in the gender distribution of the samples was found. Other demographic data reported by the Davis and Duffy (1999) study could not be compared to the current study, as the characteristics of the variables were different.

Davis and Bush, (2003) used the CECSS tool to measure patient satisfaction in three emergency departments in three countries. The countries involved were the United States, (N=240), Slovenia (N=60), and Australia (N=106). Although the mean scores were not reported it was stated that all of the patients were satisfied with nursing care and that there was not a significant differences in scores between the three emergency departments used. It was
mentioned, however, that the scores in Slovenia and the United States were higher. The
teaching subscale scores in the American and Slovenia samples resulted in greater satisfaction,
\(M=12.1, 12.6; \, SD=2.3, 3.42\), than the Australian sample \((M=10.3, \, SD=3.6)\) The United States
and Slovenia scores support the current study’s scores. \((M=12.2, \, SD=2.9)\) The rationale for this
could be that teaching strategies among nurses in the emergency department may be different
among different cultures.

The United States sample \((N=240)\) had an almost equally divided sample of males \((N=116, \, 48\%)\), and females \((N=124, \, 52\%)\) and was predominately Caucasian \((78\%)\). The current study
although not as large, \((n=55)\) also was predominately female \((n=42, \, 76.4\%)\) males \((N=13, \, 23.6\%)\), and Caucasian \((N=37 \, 67.3, \, \%)\). In the current study time of day care was received was a
demographic variable that was measured. Time of day was not a variable found in the literature
by those studies using the CECSS tool.

The Roy Adaptation Model (RAM) was the theoretical framework used for this study.
According to the RAM, the family is experiencing constant interactions with various stimuli.
Those stimuli were defined as focal, contextual and residual. The family would then cope with
those stimuli and either effectively adapt to the changing family unit or not. This study
emphasized the nurses continued assessment of the contextual stimuli \((Figure \, 1, \, p.29)\). The
findings of this present study support the concept that the nurses were indeed addressing the
families needs or certain contextual stimuli leading them to perceive that the care they received
was satisfactory.

The caring subscale scores ranged from 18-60, and the teaching scores between 3-15. These
ranges place some scores in the unsatisfactory category. Some of the nurses may not have been
aware of the family’s continued introduction of different stimuli and adaptation to the changing
family unit. This may have led some families to believe that the care received was unsatisfactory.
Those family members may have recorded lower satisfaction scores on the CECSS. Nurses who continued to assess the contextual stimuli and promote adaptation of the family unit may have given the perception that the care was satisfactory and those family members may have recorded higher satisfaction scores on the CECSS.

The emergency department nurse’s continuous assessment of the contextual stimuli, using the RAM as a theoretical model, may have had a role in the perception of satisfaction with care that the family received. As previously stated, the results indicated that the families were satisfied with nursing care received (M=52.6, 12.2; SD=9.6, 2.9). It can be suggested that the emergency room nurse’s continuous assessment of the families changing environment and adaptation to that environment led the family to be satisfied with care received in the emergency department.

Conclusions

The purpose of this study was to determine if families of emergency department patients were satisfied with nursing care. In doing so, this study found that the families were satisfied with nursing care (M=52.6, 12.2; SD=9.6, 2.9). It was also found that the time of day care was received did make a difference in the scores. [F (2,52) =1.184, p=.31] The two studies discussed in the findings, although related to patient satisfaction support the current study’s findings that families are satisfied with the nursing care they are receiving via teaching and caring.

Using the RAM as a conceptual guide it appears that the emergency department nurses in the study’s setting are acknowledging the families needs (contextual stimuli), and helping them adapt to their changing family environment. If the results would have been different, than other conclusions may have been drawn as to why the families were not satisfied with care. The results of this study were not able to be compared to other research studies on family satisfaction in the emergency department as they do not exist at the present time.
Limitations

There were several limitations to this study. First, a convenience sample was used over a short time frame of six weeks. A study of longer duration may have resulted in a larger sample size, and thus may have allowed for generalizability to the population sample. A single study site was used to gather data. Using other sites may have given data to further support or contradict the current study’s findings. Excluding families of pediatric and air ambulance patients represents another limitation. And finally, the potential of bias with the distribution of the surveys. It is unknown whether of the nurses distributing the surveys made their decision by selecting those families who seemed to be having a more pleasant experience than others.

Implications

This research was intended to gather data to encourage improvement of family satisfaction with nursing care in an emergency department setting. Data from this study will be used to promote the continued improvement of satisfactory nursing care at the institution in which the study was conducted. The goal of the researcher is to present the collected data to the emergency department nursing staff at the institution in which was conducted, in hopes they will use it to continue to deliver satisfactory nursing care to the families of the emergency department patients.

Based on the findings of this study a future comparison may be made to the emergency departments used in this study’s patient’s satisfaction scores. These scores are monitored quarterly by the emergency department nursing manager. In order to further promote the methods of improving patient satisfaction in the emergency department the comparisons may also be made and presented to hospital administration. This could give recognition to the emergency department staff, further addressing their vital role in this area.

This study adds to the body of knowledge of nursing research aimed at family satisfaction,
further increasing the knowledge of family satisfaction in an emergency department setting. This study adds to the idea of needed continued promotion of nursing education in relation to assessing the needs of the families of patients. Nursing education that encompasses teaching continuous assessment of both the patients and families needs will in hopes lead the experiences of those families in the emergency department setting to be positive ones. The use of the CECSS research tool that was previously only used on patients may now prove to be a tool that can be used with measuring family satisfaction as well. The current study also builds on the idea that nursing care involving continuous assessment of the families needs in the emergency department can in turn be shown to have positive satisfactory outcomes.

**Recommendations for further research**

The present study may be used as a pilot for future studies in the area of family satisfaction with nursing care in an emergency department setting. It is recommended that this current study be replicated with a larger sample population. Further it is recommended to use many study sites, and to use sites in different areas of the country. Comparisons could then be made as to the areas of needed improvement, and areas which standards of consumer satisfaction are being continually met. Finally it is recommended to include all ages of families and patients, and also to include non-English speaking persons in future research in this area.

**Summary**

This final chapter included the findings of the study and conclusions Implications for continued nursing research and education in the area of family satisfaction in the emergency department setting, and future recommendations for nursing research were also discussed.
REFERENCES


Fraser, S., Atkins, J. (1990) Survivor’s recollections of helpful and unhelpful nurse activities surrounding the sudden death of a loved one. *Journal of Emergency nursing* 16(1) 13-16.


To Whom It May Concern,

I, Kris Brickman, MD, Medical Director of Emergency Services at the Medical College of Ohio, authorize Ms. Angela Kolodziane, BSN, RN, to conduct research on “Family satisfaction in the emergency department,” at the Medical College of Ohio, during a six week period between December 2004 and March 2005.

Sincerely yours,

Kris Brickman, MD
Medical Director of Emergency Services
Medical College of Ohio
Appendix B

Mail Message

Hi Angela,

Thank you for your interest in the CECSS. While the CECSS was developed primarily for the patient to indicate satisfaction, the items are generic enough that they could be used with families. I am attaching a copy of the CECSS and the permission form. I do not charge to use the CECSS, but do request that you send me either a copy of each completed instrument or a copy of your computer database with all individual responses along with demographics of the sample. I use these data to continue my examination of the reliability and validity of the CECSS.

I am attaching a copy of the CECSS (in two files - the front sheet and the other items). You can make into one double sided copy along with the permission form for completion. As I will not be in my office this summer, I would ask that you send the permission forms to me at home. That address is:

1719 South Drive
Madisonville, KY 42431-2226

I will return the scoring instructions with the signed permission form. I will be out of town next week, but should be able to sign and return the permission form to you the week of June 14th.

Again thanks for your interest in the CECSS and I look forward to hearing from you.

Sincerely,

Barbara A. Davis, PhD, RN
DAVIS

CONSUMER EMERGENCY CARE SATISFACTION SCALE (CECSS)

Barbara A. Davis, PhD, RN

Request Form

I request permission to copy the Davis Consumer Emergency Care Satisfaction Scale by Davis for use in my research entitled:

To examine the relationship of focused nursing interventions (nursing care) on the satisfaction of the family of an emergency department patient.

In exchange for this permission, I agree to submit to Dr. Davis a copy of each data collection tool (i.e. subject demographic sheet and CECSS) for each subject tested or a copy of the coding sheets. These data will be used to establish a normative data base for clinical populations. No other use will be made of submitted data. Credit will be given to me in reports of normative statistics that made use of data I submitted for pooled analyses.

(Signature)

(Date)

Position and full address of principal investigator:

Joanne Ehrman, PhD, RN
Associate Professor & Department Chair
Medical College of Ohio, School of Nursing
3015 Arlington Ave., Toledo, Ohio 43614 - 5803

Permission is hereby granted to copy the CECSS for use in the research listed above.

Barbara A. Davis, PhD, RN

6-16-04
Appendix C

Project Title: Measuring satisfaction levels with nursing care of the families of the emergency department patients

Principal Investigator: Diana French, Ph.D., RN., FNP-C, GNP-C (419) 383-5824
Co-Investigators: Angela M. Kolodzaike, BSN, RN (419) 283-4884
Joanne Ehrmin, Ph.D., RN

PURPOSE: You are being asked to participate in a research study about family satisfaction in the emergency department with nursing care. The purpose of this study is to determine how satisfied the families of the emergency department patients were with nursing care received.

PROCEDURES AND DURATION: The survey contains 19 questions related to satisfaction with nursing care, and 6 related to general facts about the person completing the survey. This survey is short and should not take more than 15 minutes to complete.

PARTICIPATION: Your participation in this study is voluntary. Completion of the survey will be interpreted as your implied consent to participate in the study.

CONFIDENTIALITY: In order to protect confidentiality, the following steps will be taken: (a) your name will not appear on the survey, (b) only Ms. Kolodzaike and her advisory committee from the Medical College of Ohio will have access to the information, (c) all surveys will be kept in a secure area during the study, (d) all surveys will be destroyed after the study is completed, and (e) it will be impossible to know who participated in the study and who chose not to participate.

RISKS/DISCOMFORTS: There are no harmful risks to anyone taking part in this survey.

BENEFITS AND/OR COMPENSATION: There will be no guarantee of any type of benefit as a result of your participation in this study. It is believed that information obtained from this study will lead to an increased understanding of the ways in which satisfaction of the family is viewed in the emergency department.

QUESTIONS/CONCERNS: If you have any questions or concerns about this study, please direct them to the principal investigator, Diana French, Ph.D, RN at the Medical College of Ohio School of Nursing (419) 383-5824 or co-investigator, Angela M. Kolodzaike BSN, RN (419) 283-4884

APPROVED BY MCO IRB

MCO IRB #104871

Cover Letter Version Date: 01/10/2005

FROM TO
Appendix D

DAVIS

CONSUMER EMERGENCY CARE SATISFACTION SCALE®

Directions: For each statement indicate how much you agree or disagree with the statement based on this visit to the emergency department by putting an X in the appropriate space. Think of the nurse who spent the most time with you.

EXAMPLE: Completely agree-Completely Disagree
A.) The nurse thought I understood more than I really did.

X: : : :

The answer to question A indicates that you are quite certain that the nurse thought you understood more than you really did.
Completely Agree-Completely disagree

1.) The nurse performed his/her duties with skill. 

2.) The nurse seemed to know something about my illness/problem. 

3.) The nurse knew what treatment I needed. 

4.) The nurse gave me instructions about caring for myself at home.

5.) The nurse should have been more attentive then he/she was. 

6.) The nurse told me what problems to watch for. 

7.) The nurse told me what to expect at home. 

8.) The nurse explained all procedures before they were done. 

9.) The nurse seemed too busy at the nurses station to spend time talking with me. 

10.) The nurse explained things in terms I could understand. 

11.) The nurse was understanding when listening to my problem. 

12.) The nurse seemed genuinely concerned about my pain, fear, and anxiety. 

13.) The nurse was as gentle as he/she could be when performing painful procedures. 

14.) The nurse treated me as a number instead of as a person. 

15.) The nurse seemed to understand how I felt. 

16.) The nurse gave me a chance to ask questions. 

17.) The nurse was not very friendly. 

18.) The nurse appeared to take time to meet my needs. 

19.) The nurse made sure that all my questions were answered.

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Principal investigator: Diana G. French, PhD, RN
MCO IRB Approval Number: 

Approved by MCO IRB
Appendix E

Consumer Emergency Care Satisfaction Scale

Scoring Instructions

Caring Scale – Add items 1, 2, 3, 8, 10, 11, 12, 13, 15, 16, 18, 19
Possible range - 12 – 60
Not satisfied – 12 – 32
No opinion (neutral) – 33 - 42
Satisfied – 43 - 60

Teaching Scale – Add items 4, 6, 7
Possible range – 3 – 15
Not satisfied – 3 – 7
No opinion (neutral) – 8 – 10
Satisfied – 11 – 15

Items 5, 9, 14, 17 (negatively worded items) are used to minimize response set and should not be scored.
Appendix F

Principal Investigator: Diana G. French, PhD, RN

Family member completing the survey
Please circle only one response after each question

1.) Time of day your family member received the majority of care while in the emergency department: 7a.m.-3p.m., 3p.m.-11p.m., 11p.m.-7a.m.

2.) What is your relationship to the patient who received care in the emergency department?
   Significant other, Spouse, Mother, Father, Son, Daughter, Brother, Sister, Aunt, Uncle, Cousin, Grandmother, Grandfather, Friend, Other

3.) What is your age?
   18-28, 29-39, 40-50, 51-60, 61-70, 70 or older

4.) Gender: Male, Female

5.) Race: African-American, Asian, Caucasian, Hispanic, Other

6.) Highest level of education you have received:
   Elementary school, High School, Some college, Associate degree, Bachelor’s degree, Masters, PhD, Post-doctorate

APPROVED BY MCO IRB

MCO IRB #104871
ABSTRACT

The purpose of this study was to determine if the families of emergency department patients were satisfied with care, and to determine if time of day care was received made a difference. Roy’s Adaptation Model was used as the theoretical framework for this study. The emergency department nurses continuous assessment of the families stimuli, coping mechanisms and their adaptation to the changing family unit in a time of crisis may have led the families to perceive that satisfaction with nursing care had occurred.

This study used a non-experimental descriptive research design. The results indicated that the families of the emergency department patients were satisfied with care (M=52.6, 12.2; SD=9.6, 2.9) and that time of day care was received did not make a difference in the scores. [F 2,52)=1.184, p=.31] Results from this study may be used to promote the continued improvement of satisfactory nursing care and encourage areas of needed improvement in the emergency department setting at the institution the study was conducted.