FAMILY PERCEPTIONS OF VISITATION DURING HOSPITALIZATION FOR CRITICAL ILLNESS

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ABSTRACT

RESEARCH SUBJECT: Family Perceptions of Visitation During Hospitalization for Critical Illness

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Family functioning is altered dramatically when a loved one is hospitalized. Patients and families feel a greatly increased sense of stress and anxiety, which can be related in part to separation from loved ones. While research has explored outcomes of various patterns of family visitation during hospitalization, results have not been consistent across studies. Specifically, the perceived satisfaction of families has not been clarified when open visitation patterns are practiced during hospitalization for critical illness. Furthermore, little research has been conducted on family participation in patient care. The purposes of this study were to explore the perceived needs of family members during the hospitalization of a loved one and to determine the perceptions of families related to visitation policies and participation in patient care during hospitalization for a critical illness. This quasi-experimental study was a partial replication of a study by Roland, Russell, Richards, and Sullivan (2001). The convenience sample of 200 family members completed a written survey. Findings will add to what nurses know about family perceptions related to visitation and guide the development of visitation policies that address the needs, anxiety, and satisfaction of families.
Chapter 1

Introduction

Admission to a hospital for critical illness can be a stressful event for families. Family members are often in crisis, dealing with fluctuating emotions associated with the threat of a serious illness and trying to make sense of a foreign and potentially frightening environment (Farrell, Joseph, & Schwartz-Barcott, 2005). Families of critically ill patients experience adaptive challenges that differ across family systems. Initially, many families feel vulnerable and powerless and experience anxiety, anger, sadness, confusion, shock, and intense fear. During the initial phase of any crisis, the family system seeks to regain its homeostatic balance and previous levels of functioning. The literature identifies important needs of family members during this time, which include obtaining information, honesty, caring, access to the patient, and support (Leon & Knapp, 2008).

The stress of having a critically ill loved one can be compounded when visitation restrictions are placed on family members. Family members may respond to visitation restrictions with denial, hostility, and anger. As stress and anxiety increase among family members, a decrease in satisfaction with care is typical. As a remedy, open visitation policies can enhance patient and family satisfaction. A recent survey of patients, families, and health care team members revealed a desire for a more open visitation policy (Roland, Russell, Richards, & Sullivan, 2001).
Background and Significance

Family visitation policies in intensive care units have been debated over the last 25 years and are still controversial. Visitation patterns range from allowing visits on a limited scheduled basis to keeping the intensive care units open at all times for visitors (Olsen, Dysvik, & Hansen, 2009). Historically, the nature of the critical care environment has influenced regulations related to visitation in these units. In 1962, the United States Public Health Service published recommendations related to visiting in the critical care setting. The guidelines suggested visits limited to 5 minutes per hour. In 1965, a revision of the guidelines suggested that modifications of the restrictions be based on the patient’s condition and the staff’s ability to entertain visitors in the setting. Since the publication of these guidelines, changes toward a less restrictive visiting policy in critical care units have been slow. There remains a lack of wide-spread acceptance regarding the best pattern of family visitation during critical illness (Farrell et al., 2005).

Since the introduction of the recommendation of short visiting times from the United States Public Health Service, many health care providers have formed an opinion that family visitation during critical illness has a negative influence on patients, thus perpetuating restrictive visitation policies. In particular, nurses have considered open visitation to be harmful to critically ill patients. They have reported the beliefs that visitation increased intracranial pressure, blood pressure, heart rate, and the frequency of atrial and ventricular beats. However, current data have shown that visitations lasting longer than fifteen minutes did not affect the frequency of the premature beats. The blood
pressure, intracranial pressure, and heart rate have been shown to decrease below baseline during longer family visits (Roland et al., 2001).

Research has suggested additional benefits to patients and families when families are present in a patient’s hospital room. For example, families and patients report increased satisfaction with care. Patients see the value in having visitors and are very satisfied with a visiting guideline that is flexible enough to meet the patients’ needs and the needs of the visitors (Gonzalez, Carroll, Elliott, Fitzgerald, & Vallent, 2004). In qualitative studies, patients have reported that the presence and support of family members were highly valued, reduced their anxiety, and lowered the level of stress in the family members. Providing ongoing information to families has been reported as an important priority throughout the medical treatment process. Research has shown an increase in family satisfaction and a reduced sense of powerlessness when the family was included as part of the patient care team (Leon & Knapp, 2008).

Satisfaction of patients and families is an important goal of acute care facilities and critical care units. Resources and emphasis are placed on meeting family’s and patients’ needs and delivering individualized care when hospitalized, so that patients will recommend hospitals and re-visit them in the future when needed. Satisfaction of stakeholders with a hospital experience is a key measurable and benchmarked outcome. With the increased emphasis on customer satisfaction, hospitals are searching for better ways to increase satisfaction and decrease costs. Changing to a more flexible or open visitation policy not only may improve customer relations and satisfaction, but may also decrease the length of the patient’s hospital stay (Roland et al., 2001). Therefore, health
care providers cannot ignore reports of patients and families who are dissatisfied with visitation patterns during critical illness. More research is needed to guide policy-making and decision-making related to family-centered care during hospitalization.

Family presence during critical illness may work better for some patient-family situations than others. Experts encourage nurses to evaluate patients and families when making decisions about family presence. Family members need to be assessed to determine their capabilities and desires regarding participation in care during critical illness, so that nursing interventions can be adapted accordingly. Some individuals are overwhelmed by the monitors and the equipment at the critical care bedside and are afraid of engaging in direct care. They could provide indirect care such as providing and interpreting information about the patient or bringing items from home. Some family members may want to participate in bathing their loved one. A careful evaluation of each individual and family can guide a tailored plan for the participation of family members in patient care (Leon & Knapp, 2008).

While families and patients may desire time together in the critical care unit, health care providers report increased workload when families are in the patients’ rooms. Research has shown that initially, a change in visitation policy can be stressful to nurses (Roland et al., 2001). Adding care of the family to already high patient caseloads challenges critical care nurses who already feel overworked. Therefore, an ongoing tension exists about whether or not families should be present, when, for how long, and what should families do at the bedside of loved ones.
A major study of family members’ needs during hospitalization of critically ill loved ones was conducted by Molter (1979). She developed an instrument through an extensive review of the literature and a survey of 23 graduate nursing students, who listed the needs of family members of critically ill patients according to what they had observed or experienced during their practice. The instrument included a list of 45 needs. In 1986, Leske modified the 45 needs by rearranging their sequence randomly and adding an open-ended item to identify any need that was not listed previously. This instrument was named Critical Care Family Need Inventory (CCFNI) (Lee & Lau, 2003).

This instrument and other modifications of the CCFNI have been used to explore family needs during critical illness. The top five needs identified by Molter (1979) were (a) to have hope, (b) feel the hospital staff cares for the patient, (c) be near the patient, (d) be informed of any change in the patient status, and (e) know the staff (Livesay, Gilliam, Mokracek, Sebastian, & Hickey, 2005). The instrument needs more testing and may be useful in exploring the effect of open visitation on family perceptions and nurses’ perceptions. Several researchers have used the CCFNI, or a modified version, to determine the highest ranking needs of family members while their loved ones are hospitalized. There is less research investigating nurses’ perceptions of the needs of family members in comparison with family members’ perceptions of their needs. It is important to continue to investigate perceptions of family members regarding needs and family presence at the bedside (Hinkle, Fitzpatrick, & Oskrochi, 2009).

Despite all the research conducted and articles written over the past 25 years explaining the benefits of flexible, open, or individual visitation in critical care units,
there is still much debate about this topic. Many critical care units world-wide still restrict family presence. Yet, other units allow tailored flexible visitation despite posted limitations on visiting. Still, other units open the doors to any visitors at any time, day or night. More research is needed on family perceptions of anxiety and satisfaction with differing patterns of family presence. New knowledge can guide nurses and nurse administrators on choosing the best approach for family-centered care during critical illness (Sims & Miracle, 2006).

**Problem Statement**

While research indicates that families and patients want to be together during critical illness, the optimal pattern of family visitation or family presence at the bedside has not been clarified. Families desire to be at the bedside of loved ones, but health care professionals view family presence as both risky and beneficial. Consensus is growing regarding the benefits of open visitation, but more research is needed.

**Purpose of the Study**

The purposes of this study were to document the perceived needs of family members during the hospitalization of a loved one and to determine perceptions of anxiety and satisfaction of families related to visitation policies that included participation in patient care during hospitalization for a critical illness. This study is a partial replication of a study of Roland et al. (2001).

**Research Questions**

Two research questions guided this study:
1. What are the most common needs families have while visiting patients in the intensive care unit?

2. What is the effect of an open visitation policy on family anxiety and satisfaction with care?

**Conceptual Framework**

A conceptual framework of family-centered care guided the study. The conceptual framework rested on the concepts of family, patient, family presence, and hospitalization for critical illness. No theory has been developed specifically related to family presence during critical illness. The conceptual framework was based on the general precepts of family systems theory. Wright and Leahey (1990) developed a family systems nursing framework as a way to understand the values of the nurse-family relationship in patient care. According to systems theory, the family is a set (or system) of relationships that are connected, and the overall family system has a responsibility for taking care its individual members. This system has a structure or boundaries that must be protected to ensure optimal functioning. To maintain a homeostatic balance, the family’s outer boundaries must be fluid enough to allow other positive and helpful resources into the system. If the boundaries are permeated too much, the family system’s integrity may be negatively affected (Leon & Knapp, 2008).

Family systems theory offers some basic tenets that can guide the decision-making of nurses regarding family presence during hospitalization. The three major tenets within the framework include: (a) families also bring their own expertise, knowledge, and skills; (b) a reciprocal relationship must exist between the nurse and the
family; and (c) there is no hierarchy in the nurse-family relationship (Leon & Knapp, 2008).

The value of applying concepts from family systems theory to critical care nursing can best be appreciated if the critical care nurse adheres to a holistic approach to nursing care and integrates crisis theory into care delivery. If nurses are to follow a holistic nursing approach, then understanding the family’s perceptions about the patient’s hospitalization and observing the interactions between the patient and the family are important. Crisis theory asserts that individuals are on a lifelong and continuous search to maintain a stable emotional equilibrium that is often in constant conflict with internal and external pressures. When the equilibrium balance is disrupted, such as in the case of hospitalization, the individual resorts to previously successful coping skills, ego mechanisms, and support systems. Patients that are hospitalized in a critical care unit may be deprived of the support that comes from their family (Leon & Knapp, 2008).

Definitions

Family Needs.

Conceptual: The basic requirements a family experiences during hospitalization of a loved one for a critical illness.

Operational: Mean scores on each item on the Critical Care Family Need Inventory (CCFNI) (Molter, 1979) were used to identify needs of family members while their loved ones are hospitalized.
**Open Visitation.**

Conceptual: There are no restrictions on the visiting hours during hospitalization for a critical illness (Roland et al., 2001).

Operational: In the study, the site enacted open visitation by allowing families to come anytime during the day or night and stay as long as they wished at the patients’ bedside. Signs were posted about the visitation policy, and all health care staff were educated on the policy (Roland et al., 2001).

**Closed Visitation.**

Conceptual: Restrictive policies allowed a fixed number of visitors to be at the patients’ bedside at specific times (Roland et al., 2001).

Operational: In the study, the site enacted closed visitation by allowing two family members to come to patients’ bedside for ten minutes every hour, between 10 a.m. and 8 p.m. Signs were posted about the visitation policy, and all health care staff were educated on the policy.

**Family Satisfaction:**

Conceptual: The degree to which family members are happy or content with the conditions surrounding their visitation and how well their needs are being met when a loved one is in a critical care unit.

Operational: Mean score on a single item that asked family members to rank their satisfaction with the visitation policy using a Likert-type scale. The scale was from 1 to 5 (1 = very dissatisfied and 5 = very satisfied) (Roland et al., 2001).
Family Anxiety.

Conceptual: The extent to which family members are feeling worried or nervous, generally or at a particular moment in time, with the conditions surrounding their visitations when a loved one is in a critical care unit.

Operational: Mean scores from the State and Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970) served as an indicator of two types of anxiety. It differentiated between temporary or emotional state anxiety versus long-standing anxiety. It also measured the severity of the overall anxiety level.

Limitations

Several limitations of this study were noted. The convenience sample may have introduced bias into the study. For example, those who participated may be those who were most opinionated, positively or negatively, about family presence. A second limitation was that the researcher was visible on the unit while collecting data, which could inadvertently have biased the selection of the sample or the opinions of the participants. A third limitation may have been the extent to which all nurses followed the visitation policies in effect for the two contrasting groups.

Assumptions

This quasi-experimental replication study was grounded by the following assumptions:

1. Participants will respond honestly to the items on the instrumentation.
2. Family members who participate will have an emotional connection and strong interest in the well-being of the patient who is hospitalized.
3. The researcher will conduct all data collection sessions in a similar manner across all participants.

Summary

When patients are hospitalized for acute or critical illness, patient-family connections are often intensified. Families report wanting to be present with loved ones who experience marked illness. Having a family member admitted to an intensive care unit is stressful for the whole family. The stress of having a loved one in an intensive care unit can be compounded when visitation restrictions are placed on family members regarding when they are allowed to be with their loved one. However, research has not yet clarified the optimal pattern of family visitation during hospitalization of a loved one. The purposes of this study were to explore the perceived needs of family members during the hospitalization of a loved one and to determine the perceived anxiety and satisfaction of families related to visitation policies included participation in patient care during hospitalization for a critical illness. This quasi-experimental study was a partial replication of a study of Roland et al. (2001). The conceptual framework rested on the concepts of family, patient, family presence, and hospitalization for critical illness. Family members were sampled during two conditions of visitation: closed and open visitation. Participants completed measures of anxiety and satisfaction with visitation policies and responded to items that reflected their perceived needs during the hospitalization of a loved one. Findings can add to what nurses know about family perceptions related to visitation and can guide nurses in formulating family-centered
approaches to visitation that address the needs, anxiety and satisfaction of families during hospitalization of a loved one for a critical illness.
Family functioning is altered dramatically when patients are hospitalized for a critical illness. Patients and families may feel increased stress and anxiety, which can be related in part to separation from loved ones. While research indicates that families and patients want to be together during critical illness, health care providers see both risks and benefits to family presence. The optimal pattern of family visitation, or family presence at the bedside, has not yet been clarified. Furthermore, direct comparisons of various visitation patterns have rarely been researched, and a limited number of studies have explored family perspectives regarding participation in patient care during critical illness. Family members’ perceptions of needs, anxiety, and satisfaction related to family presence and hospitalization of loved ones require further research and exploration.

Organization of Literature

The organization of literature is divided into 5 sections:

1. Conceptual framework
2. Family satisfaction with visiting policies
3. Nursing satisfaction with visiting policies
4. Patient satisfaction with visiting policies
5. Determining the needs of the family members.
A conceptual framework of family-centered care guided the study. The conceptual framework rested on the concepts of family, patient, family presence, and hospitalization during hospitalization for critical illness. When patients are hospitalized for acute or critical illness, patient-family connections are often intensified. Families report wanting to be present with loved ones who experience marked illness. Leon and Knapp (2008) noted that families respond to and perceive the hospitalization of a critically ill family members as a crisis and exhibit crisis-like behavior that include initial confusion, shock, and intense fear. The literature identifies important needs of family members during this time which include obtaining information, honesty, caring, access to the patient, and support.

Inclusion of the family can actually improve the outcome of the patient; therefore, involving the family should be a part of the patient focus. When families are present in a patient’s hospital room, the families and patients report satisfaction. However, health care providers report increased workload. High patient caseloads and multiple responsibilities make it challenging for critical care nurses who already feel overworked to learn about and apply concepts from family systems theory (Leon & Knapp, 2008). Therefore, an ongoing tension exists about whether or not families should be present, when, how long, and what should families do at the bedside of loved ones?

No grand or middle range theory has yet addressed this clinical dilemma. Family systems theory does offer some basic tenets that can guide the decision-making of nurses regarding family presence during hospitalization. Wright and Leahey (1990) developed a
family systems nursing framework as a way to understand the value of the nurse-family relationship in patient care. The framework has three major points that exist within the framework:

1. families bring their own expertise, knowledge, and skills
2. a reciprocal relationship must exist between the nurse and the family
3. There is no hierarchy in the nurse-family relationship (Leon & Knapp, 2008).

The value of using the concepts from the family systems theory in critical care nursing is more appreciated if the nurse also applies the holistic approach to nursing care and integrates crisis theory. Holistic nursing involves caring for the total patient and the family. This focus requires the nurse to recognize the important interactional relationship between the patient, the patient’s culture, and the family system. Crisis theory states that individuals are on a lifelong and continuous search to maintain a stable emotional equilibrium that is often in constant conflict with internal and external pressures. As expected in crisis theory, a family’s reactions to the medical crisis change over the course of the hospitalization. It is important throughout the medical crisis to assess and meet the needs of families of patients in the intensive care unit. Nurses can assess and recognize the importance of family strengths and needs while providing stress management for the patient and the family system (Leon & Knapp, 2008).

Family Satisfaction

Hospitalization interferes with family functioning. Families can feel a lack of control and pronounced helplessness due to the inability interact with and help care for their family member in the intensive care. These feelings can manifest into hostility,
anxiety and anger. Identifying family needs can lead to interventions that decrease anxiety and stress and result in greater satisfaction for the family and the patient. The focus of a study by Roland et al. (2001) was the family dissatisfaction with visitation policies in an intensive care unit. Studies have shown that the three main categories of needs of the family are information, emotional/psychological support and physical comfort. The purpose of the performance improvement initiative in the study of Roland et al. was to clarify and meet patients’ and families’ need for visitation and measure outcomes for the resulting change in visitation. There was no theoretical framework cited for the study.

The setting for this study was a 15-bed combined MICU and CCU in a 350-bed Veterans Administration Hospital. The population included the patients in the intensive care, family members, and nurses and multidisciplinary staff that included respiratory therapists, monitor technicians, chaplains and volunteers who had frequent interactions with the patient in the intensive care. There were two different samples included in this study of Roland et al. (2001). In the first sample, patients (n = 22), family members, nurses (n = 23) and multidisciplinary (n = 28) were included in the study. The number of family members was not given. In the second sample, 12 patients and 12 family members were included. No rationale for sample size was offered. The inclusion criteria for the sample was the patients had to be alert and oriented, had been in the intensive care over 24 hours, and have family members visiting.

The instruments were questionnaires, interviews and a Likert-scale. Patients, families and multidisciplinary professionals were given questionnaires, the items for
which were identified from a literature review on visitation in intensive care units. A Likert-scale was used to rank satisfaction with current visitation policy on a scale of 1-5 (1 was for very dissatisfied and 5 was for very satisfied). Other items on all questionnaires were preference for visiting hours, length of visits, allowed visitors, and number of visitors (Roland et al., 2001). Patients were asked how visitors affected their health and any allowable tasks they preferred the visitors complete. Family members were asked how to improve the comfort in the waiting areas. Nurses and multidisciplinary members were asked if visits should be restricted during busy times and level of comfort when asking a visitor to leave.

A 30-day pilot study was implemented based on new visitation recommendations. The original visitation was 10 minutes every 2 hours between the hours of 10:00 a.m. and 8:00 p.m. The revised visitation option was allowing visitors between 10:00 a.m. - 1:00 p.m. then between 5:00 p.m. – 8:00 p.m. with the option of altering visitation times to maintain privacy during special procedures or emergencies. After the 30-day pilot, the Likert-scale was repeated for 12 different patients and questionnaires for 12 family members (Roland et al., 2001).

The results showed that there was greater satisfaction in the second patient sample (p < .05) and the families (p < .001) when comparing the original restrictive visitation policy to the revised open visitation policy. The nurses’ satisfaction was unchanged (p = .976) from the original to the new visitation arrangement. A panel of experts consisted of a doctoral prepared faculty member and two intensive care nurses that
established the content validity of the data collection tools (Roland et al., 2001). The reliability data were not included.

The data collected from the patients revealed they were somewhat satisfied with the current visitation policy with a mean response of 3.15 (Roland et al., 2001). In addition, 65% of patients desired more open visitation; 90% stated that visitors were important to them; 85% wanted family members to perform personal care for them; 75% denied feelings of fatigued after visiting; and 60% stated that there should not be a restriction on who is allowed to visit but agreed that two visitors at a time were reasonable. The family members had the greatest dissatisfaction with the restricted visitor policy with a mean satisfaction score of 2.81 on a five-point scale with higher scores indicating higher satisfaction. In addition, 95% of the families wanted to be able to perform personal care, 80% wanted a more open visitation policy, and 35% felt that no visitor restrictions were needed at all. The 28 ancillary staff reported that 46% supported the original policy, although 82% expressed the belief that visitors were beneficial to the patients. The nursing data showed somewhat to moderate satisfaction with the original policy. It revealed that 14 out of 23 nurses wanted a more open policy; 18 out of 23 preferred the family give personal care to the patient. When the type of visitor preferred was explored with patients, 8 wanted immediate families only, one wanted family and close friends, and five wanted the patient to have the final say regarding visitors allowed. The second group of patients desired the unit stay open between the hours of 1:00 p.m. – 5:00 p.m. Seven of the staff also wanted the unit to stay open, but five staff members wanted a stricter closed policy.
Changing to a more liberalized visitation policy improved family and patient perceptions of the quality of care (Roland et al., 2001). The authors suggested that with an open visitation policy, families could become more involved in patient care. Education and communication between family and staff may have increased. Changes made in the visitation policy may have helped meet the family’s needs and had a positive effect on the patient, which in turn may have decreased anxiety, anger and hostility. More flexible visitation could improve customer relations and may have decreased the patient’s length of stay. Researchers in this study reported that the visiting policy was being continually evaluated and refined to enhance consumer satisfaction, patient outcomes, and quality of nursing care.

In a similar but more focused study, Lee and Lau (2003) explored the immediate needs of adult family member of adult intensive care patients in Hong Kong. The authors suggested that stress could hinder family members’ coping and thus affect the support that was given to the patients. By identifying and meeting the immediate needs of the family members, the effect of stress of critical illness might be lessened.

The purpose of the study was to identify the needs of adult family members in an intensive care unit in Hong Kong. The following objectives were: to measure the degree of importance of needs, identify the first three priority needs, to measure the extent of the needs being met, to identify who meets the needs, to analyze the relationship between the family members’ needs and the patients’ diagnoses, and to analyze the relationship between the family members’ needs and their demographic characteristics (Lee & Lau, 2003). No theoretical framework was cited for the study.
The study was done at an 18-bed adult intensive care unit in a public hospital in Hong Kong. The family was allowed to visit a total of 2 hours a day at two different time periods. The population included family members of intensive care patients. The convenience sample was 40 family members. Inclusion criteria consisted of being Chinese and over the age of 18; related to the patient by blood, marriage, or adoption; the ability to read and write Chinese and speak Cantonese; visited the patient at least once, and be available between 24 and 72 hours after the patient’s admission. The demographic characteristics of the sample study consisted of 14 males and 26 females from the age of 18 to 87 years old. Other demographic characteristics included their education level, relationship with the patient, religious background and if they ever had the experience of visiting an intensive care unit (Lee & Lau, 2003).

A Chinese version of the Critical Care Family Need Inventory (CCFNI) (Wong, 1995) that was originally developed by Leske (1991) was used because of its validity and reliability in identifying the needs of family members. Validity was supported by a panel of professionals working in the intensive care unit. The instrument was divided into two modules. The first module included statement of 45 needs that were divided into five categories. The categories were reassurance, comfort, information, closeness and support. Each item was ranked by a four-point Likert-scale (1) not important, (2) slightly important, (3) important, and (4) very important. The subjects were asked to state if those needs had been met and, if so, by whom. Subjects were asked to rank the three most important needs among the items rated “very important”, and to identify any unlisted needs. Test-retest reliability was done with a correlation coefficient of 0.87. This value
suggested that the instrument was stable and the same result would be obtained on a repeated administration (Lee & Lau, 2003).

The second module asked about the demographic characteristics and the reason for the patients’ admission. Descriptive statistics were used to illustrate subjects’ demographic characteristics, their perceived importance and the priority of immediate needs. Independent t-tests were performed to test whether the mean scores of the need statements were different between the categories in demographic groups. Analysis of variance (ANOVA) was used to test the difference in mean scores of need statements between three or more categories within the demographic groups. The level of significance was set at 0.05 (Lee & Lau, 2003).

The mean scores of importance ranged from 3.9 to 1.6 on a 4 Likert-scale format point scale of (1) not important, (2) slightly important, (3) important, and (4) very important. The findings showed the need item “to know the expected outcome” was selected by 20 out of the 40 subjects as the most important need with a mean score of importance of 3.9 on 4 point scale. The mean score for “having the visiting hours changed for specific conditions” was 3.3 and the need item “to visit at any time” had a mean score of importance of 2.9. The reassurance category was ranked the most important out of the five categories with a mean score of 3.7. There were not any new needs identified from the study. The subjects considered their needs met 58.4% of the time. The five need categories did not show any significant differences in mean scores across different demographic groups, but 16 need items did show a significant difference between some of the various demographic groups (p < 0.05). The need item “to talk
about feelings about what has happened” had the most significant difference in mean scores between the people with and without the experience of visiting an intensive care unit ($p = 0.001$). Female subjects rated the need to see the patient frequently and the need to visit at any time more important than males ($p = 0.004$), but that could be attributed to the fact that females had more time to visit since they were less likely be working in this population. Subjects with experience of visiting the ICU ranked ‘to talk about feelings’ ($p = 0.001$) and ‘to know the expected outcome’ ($p = 0.04$) as more important than those without such experience. Family members of medical patients perceived ‘to talk to the doctor every day’ ($p = 0.011$) and ‘to have someone help with financial problem’ ($p = 0.049$) was more important than family members of surgical patients (Lee & Lau, 2003).

The limitations to the study consisted of a small sample size recruited from only one hospital. Studies that have larger sample sizes and use subjects from different intensive care settings were recommended. The authors suggested that future investigation could help explore differences between the nurses’ and the families. The authors further stated that one way to help meet the needs of the family members may be to have flexible or extended visiting hours. If they are unable to visit, consider daily progress notes over the telephone. The authors noted that studies are required to identify family members’ needs so that holistic care can be provided for them (Lee & Lau, 2003).

In another research study that examined family needs during critical illness, Chiu, Chien, and Lam (2004) looked at the effectiveness of a needs-based education program for families with a critically ill relative in an intensive care unit. The authors acknowledge that being admitted to an intensive care unit could create numerous
physiological and psychological problems for the patient and their family. The purpose of the study was to evaluate the effectiveness of a structured education program for families of patients that were critically ill, based on the result of an assessment of needs (Chiu et al., 2004).

The study took place in the intensive care unit of a regional general hospital in Hong Kong. The population consisted of family members, including parents, spouses and siblings. The convenient sample consisted of 66 family members. During the first month of data collection, 36 family members were entered into the control group. In the second month of data collection, 30 family members were enrolled in an experimental group. No inclusion or exclusion factors were noted (Chiu et al., 2004).

During the first two days that a loved one was in an ICU in the Hong Kong hospital, both groups were given a pre-test of the Chinese version of the State (C-TAI) and Trait (C-SAI) Anxiety Inventory (Shek, 1993). The post test instrumentation consisted of the 45-item Chinese version of the Critical Care Family Needs Inventory (C-CCFNI) (Lee, Chien, & Mackenzie, 2000) and the C-SAI. Based on the result of the needs assessment, the experimental group received the health education on an individual basis arranged over two consecutive days. The control group was given the C-CCFNI to assess the needs statements. There were a total of 10 Needs Statements that scored a 4 or 5 on a 5-point scale. Out of the five highest important needs rated, the number one need was to know the specific facts concerning the patients’ progress; second highest was to know the expected outcome; third highest was to talk about negative feelings; fourth was
to know what was being done for the patient and why; and the fifth was have the advice as to what do to at the bedside (Chiu et al., 2004)

The families in the control group were given the routine practice of orientation and explanation that included an introduction of the ICU environment, daily routines, visiting hours and a brief explanation of the patient’s condition and treatment plan by the ICU nurse. The experimental group was given two structured one-hour sessions that were formulated by the needs assessment results from the control group using the C-CCFNI (Chiu et al., 2004).

The unpaired, two-tailed t-test did not show a difference in the mean between the two groups’ pre-test scores. An analysis of co-variance (ANCOVA) test was used to compare the post-test anxiety and the need satisfaction scores between the groups, using the subjects’ pretest scores as the co-variants. The families in the experimental group had a significant reduction in their level of anxiety (p = 0.001) and a significant increase in the satisfaction of family needs (p = 0.0001), compared with the control group (Chiu et al., 2004).

The findings for this study indicated that a structured needs-based intervention for families of newly admitted critically ill patients to an ICU could be effective in reducing their anxiety and satisfying their immediate needs. The authors recommended that such an educational approach should be considered to achieve a higher quality of care. Further study was recommended to test and explore which-specific models of needs-based family intervention were most effective in satisfying the immediate and long-term needs of families in critical care (Chiu et al., 2004).
In another similar research project, a multicenter study was conducted by Azoulay, Pochard, Chevret, Lemaire, Mokhtari, Le Gall, et al. (2001) on meeting the needs of families. The purpose of the study was to measure the ability of the critical care nursing staff to meet family needs and to identify parameters that could be worked on to improve family satisfaction.

The study was conducted in French intensive care units (ICU) that were members of the French Society of Critical Care Medicine. A total of 43 French intensive care units participated in the study. The ICUs were medical, surgical, and pediatric. The sample size included 637 patients and 895 family members. Family members were defined as anyone who visited the patient in the ICU. Demographic data were collected on each patient, and a standardized questionnaire was given to each family member for demographic data collection. The questionnaires were given to the family members between the third and fifth day of admission (Azoulay et al., 2001). A conceptual framework was not identified in this study.

A modified version of Molter’s (1979) Critical Care Family Needs Inventory (CCFNI) was used for measuring family needs and satisfaction. The effect of potential predictors on the satisfaction score was analyzed using a Poisson regression model. The Poisson regression model was described as the logarithm of the satisfaction score modeled as a linear function of each variable. Results of the Poisson regression model were used to compute the expected percentage change in the satisfaction score with each unit of decrease in the dependent variable (Azoulay et al., 2001).
The Poisson regression model analyses of the predictors of satisfaction were divided between univariate and multivariate. Variables with p values of 0.10 or lower were introduced jointly in a multivariate regression model. The seven predictors of satisfaction were family members of French descent (p = 0.0008), patient-to-nurse ratio less than or equal to three (p = .0144), information provided by junior physicians (p = 0.0001), family felt they received contradictory information (p = 0.0024), family did not know the specific role of each caregiver (p = 0.0012), family was helped by their usual doctor (p = 0.0012), and desired/allowed time ratio (p = 0.0019). None of the other study data were significantly correlated with family satisfaction. No differences in family satisfaction were found between pediatric and adult ICUs. Six out of the seven parameters associated satisfaction were related to caregiver and ICU practices. Only one was related to family member characteristics (Azoulay et al., 2001).

The results showed the feasibility of improving family satisfaction through nursing interventions. Family members preferred a structured caregiver team in which the specific role of each caregiver was known to them. Families desired that all information be given to them in a personalized manner by a single doctor to decrease inconsistencies and contradictions that could come from several caregivers. In addition, families believed that quality of care encompassed more than just treating the patient for an acute illness (Azoulay et al., 2001).

The level of satisfaction in this study could not be compared with the level in other studies because no score cut-offs for the CCFNI or other scales evaluating ICU family satisfaction have been validated. The characteristics of the patients and ICUs were
similar to those in other countries. The authors suggested that predictors of satisfaction were amendable to intervention and deserve to be investigated further with the goal of improving the satisfaction of ICU patients’ family members (Azoulay et al., 2001).

**Patient Satisfaction**

A study conducted by Olsen et al. (2009) focused on the patients’ experiences in regard to visiting routines, instead of focusing mostly on the family needs. The aim of this study was to find out from the intensive care patients from whom they desired visits and to see how the patients experienced the presence of their family while they were in the intensive care unit. A theoretical framework was not identified.

The study was conducted at a 12-bed general intensive care unit at a university hospital in Norway. The sample for this study was 11 patients, 4 women and 7 men aged 19-69, who were receiving care in the intensive care unit. The inclusion criteria consisted of ages between 18 and 70, a period of sedation, and treatment on a ventilator for more than 24 hours. The exclusion criteria consisted of patients with chronic illness that were dependent on help from their family on a daily basis and reduced health after the ICU stay that made the interview difficult for the patient. Visiting hours in the ICU were between 11:00 am to 7:00 pm with the exception of shift change and invasive procedures. The ICU nurses could make visiting exceptions on an individual basis (Olsen et al., 2009).

The instrument used to collect data was a semi-structured interview with open-ended questions. Data were collected in the hospital wards 3 - 14 days after the patient was removed from the intensive care unit. The design of the study was descriptive with
qualitative methods. The interviews were tape recorded, and the information was organized by content analysis. The data were organized into themes and categories created from the codes from the meaning units that were generated from the interviews (Olsen et al., 2009).

The four categories that emerged from the content analysis of whom patients preferred to visit were: support of the patient, stress for the patient, stress for the patient and the family, and support of the family. The subjects described the presence of their families as important in the intensive care unit, although the subjects could not remember the entire stay in ICU. When the patients were conscious, they found it relaxing to have family present. The flexible visiting hours made it easier to have visitors. When the patients were unconscious, they wanted to know who visited and the details about the visits. In relation to the stress for the patient, most of the stress was because of difficulty with communication when the patients were intubated. Some patients still wanted their family present without communicating. Some of the patients stated that too many visitors could easily create stress. In connection to the stress for patient and the family, patients knew the family members were feeling stress by seeing them in the ICU. One patient wanted the family members to decide when to visit (Olsen et al., 2009).

The findings from this study showed the importance of families for patients in the ICU, even when unconscious or too weak to decide for themselves, and to limit visits to close family members or at least one supportive person present. Visits have different functions for the patients, but the main finding was that families are important due to providing support for those patients (Olsen et al., 2009). Visits had mutual importance
for both the patients and their family members, even though stress was experienced by both groups. In some situations, stress seemed to be a factor when the patient needed their rest. It seemed important to achieve a balance between patient’s need to feel supported and the risk of being stressed by the visitors.

The duration of the visit was not considered important, but some studies have shown that many patients prefer visits of less than two hours per day. This study had indicated that patients desired some limitation of visitation and preferred visitors to whom they were closest in daily life. The authors pointed out that flexible visiting does not have to lead to longer visits but could lead to visits at times that were more appropriate for the visitors (Olsen et al., 2009).

Some of the patients interviewed did not remember their stay in the ICU. That could have influenced the credibility of the study. The sample size was small, but the findings were consistent with findings from other studies. More research is needed to evaluate the influence of flexible visiting routines on patients in the intensive care unit.

In a similar study, Gonzalez et al. (2004) explored the visiting preferences of patients in the intensive care unit and a complex care medical unit. The authors acknowledged that families have reported wanting to be close to the patient in the hospital, but having close proximity can depend on the patients’ condition and the family dynamics. The purpose for this study was to describe patients’ preferences for family visits in an intensive care unit and a complex medical unit specifically the stressors, benefits, preferences and outcomes of such visiting. No theoretical framework was cited.
The study was done in an intensive care unit and a complex care medical unit at Massachusetts General Hospital in the city of Boston. The population was patients in the intensive care unit and the complex care medical unit (CCMU). The sample included 31 patients from the ICU and 31 patients from the CCMU. The ICU had a contractual visiting policy that allowed an individualized approach to visiting. The CCMU allowed family visits between 1 pm and 8 pm. The patients’ inclusion criteria consisted of being over the age of 18 years old, oriented without any psychiatric illness, able to speak English, not intubated and in a stable hemodynamic condition. The total sample of 62 patients included 36 men and 25 women with a mean age of 61 years old (Gonzalez et al., 2004).

This descriptive study used a questionnaire in an interview format to measure the benefits, stressors, preferences of the patients, and the outcomes of family visiting. Responses were written down by the interviewer. The instrument used was the Patient’s Perception of Visits in Critical Care questionnaire developed by Simpson (1991). The questionnaire asked about the patient’s preferences for visiting, the stressors and benefits of the visitors and the perceived outcome and the degree of satisfaction with the hospital visiting parameters. Each stressor, benefit and outcome of visiting was measured using a 5-point Likert Scale. It stated the scores ranked form 1 (not at all) to 5 (extremely). Content validity was supported by a panel of nurse researchers and intensive care nurses who reviewed the questions (Gonzalez et al., 2004).

The results showed that the intensive care patients compared to the complex care medical unit patients were more “worried about visitors’ traveling” (p = .04). The two
Key benefits reported by ICU patients were “visitor can interpret information” and “visitor helps nurse understand me,” compared to the patients in the complex care medical unit patients (p = .05). Overall, ICU patients were more satisfied with the visiting guidelines than the CCMU patients (p = .04). There was no significance difference found between the two groups concerning the variables related to the length of visit, number of visits per day, number of patients per visit and the minimum age for visitors. Out of the 62 patients, 37% thought unlimited visiting hours was the best guideline, 35% wanted visitors only once a day, 8% wanted visitors in the morning, 50% preferred visitors in the afternoon, 32% thought all visiting should end at 8 pm, and 22% wanted visitors restricted if a patient was having complications (Gonzalez et al., 2004).

The patients in this study felt that visiting was not stressful because the visitors offered comfort and moderate levels of reassurance. They felt that having visitors made them feel loved and cared for by their family. However, patients did want restrictions on visiting if they were not feeling well, if they were unsure of what was scheduled for the day, and when the family or visitor dynamics were not optimal. They also wanted limited visiting in connection with a scheduled procedure or when talking with the doctor (Gonzalez et al., 2004).

The authors noted that generally patients liked to have visitors to break up the day, but visitation policies needed to provide an opportunity for the patients and the nurses to communicate to develop a schedule that best met the needs of the patient, the visitors, and the healthcare providers. The authors concluded that current nursing
literature indicated that family visiting practices in acute care settings still varied widely and that debates about visitation continued in many care settings (Gonzalez et al., 2004).

In a study that assessed some different outcome variables related to visitation policies, Fumagalli, Boncinelli, LoNostro, Valoti, Baldereschi, DiBari, et al. (2006) conducted a two-year pilot study. The researchers compared cardio-circulatory complications and environmental microbial contamination under restrictive visiting polices (RVP) and unrestrictive visiting policies (UVP). Historically, the authors noted, open visitation policies are preferred by most patients, but most intensive care units maintain a restrictive visiting polices due to interference with care, possible increase in patients’ physiological stress, and possible increase risk in septic complications. The purpose of the study was to compare health outcomes associated with an UVP regimen, in which each patient could choose frequency and duration of visits, and a RVP regimen, characterized by visiting times not exceeding 30 minutes twice a day. Environmental microbial contamination, septic and cardiovascular complications, emotional profile, and stress hormones were systematically assessed.

A single-center trial was conducted at an Italian 6-bed cardiac intensive care unit over a 2-year time period. A computer-based procedure generated a random sequence of six 2-month periods for each visiting policy. The sample included approximately 115 patients enrolled during the RVP regimen and 111 during the UVP regimen. The exclusion criteria consisted of severe alterations in consciousness, delirium, cognitive impairment, major psychosis requiring pharmacological treatment, expected intensive care stay less than 24 hours, transferred from another department, readmission after
enrollment in the same study, and an unwillingness or inability to provide informed consent. The RVP could only have one visitor per patient for 30 minutes twice a day at a set time. The visitor had to wash his/her hands for 3 to 5 minutes with antibacterial soap, and put on disposable vests and shoes in a designated area before entering the ICU. In the UVP regimen, the number of visits and the duration was left up to the patient, but with the restriction of one visitor at a time. The visitor was also required to wash their hands and wear disposable garments the same as the regimen in the RVP. Visitors were asked to record the duration of each visit on a form at the bedside (Fumagalli et al., 2006).

Several instruments were used in this study. Severity of acute and chronic health conditions was assessed on admission with the Acute Physiology and Chronic Health Evaluation II (APACHE II) score by Knaus, Draper, Wagner, and Zimmerman (1985). Anxiety and depressive symptoms were evaluated on admission and discharge from the intensive care unit with the Hospital Anxiety and Depression Scale by Zigmond and Snaith (1983) that ranged in score from 0 (no symptoms) to 21 (maximally severe symptoms). The cut off scores for possible to severe disorders were 7 and 14 on the scale. Plasma concentrations of thyroid stimulating hormone, plasma cortisol, and 24 hour vanillylmandelic acid urinary excretion were measured on admission and at discharge from the ICU for biological markers of stress. Bacterial and fungal contamination of air and surfaces were conducted on days 1, 15 and 60 of each two-month period. A value of $p < 0.05$ was considered significant. Baseline categorical variables were compared by the chi square test. Dichotomous outcomes were compared between RVP and UVP in
logistic regression models. Normally distributed continuous variables were compared by the use of the Student t test or the paired t test as appropriate. The Mann-Whitney test was used for comparing non-normally distributed variables. Factors independently associated with bacterial and fungal contamination were identified with multivariable linear regression models. The authors had access to the data and were responsible for its integrity (Fumagalli et al., 2006).

The results showed no difference in length of stay (RVP, 5.8 ± 0.4 days; UVP, 5.6 ± 0.3 days; p = 0.68) RVP patients received 2.0 ± 0.0 visits per day with an overall duration of 1.0 ± 0.0 hours per day; UVP patients received 3.2 ± 0.2 visits per day with a duration of 2.6 ± 0.2 hours per day (p < 0.001 for both comparisons). The air in the ICU corridor was significantly less contaminated with bacteria in the RVP than during the UVP time frame (p = 0.005), but the air contamination in the ICU rooms was similar (p = 0.21). Surfaces in patients’ room were significantly more contaminated with bacteria in UVP (p = 0.010) and with fungi in RVP (p = 0.002) time frame. All major cardiovascular complications were more frequent in the RVP than the UVP periods, the difference being statistically significant for pulmonary edema or shock (p = 0.03). The other illnesses compared were pneumonia, urinary tract infection, generalized sepsis, any infection, arrhythmias, cardiac rupture and any cardiovascular complications (Fumagalli et al., 2006).

Anxiety scores were similar in both of the baseline groups and were reduced significantly in the UVP group from admission to the time of discharge (p = 0.006). Depression scores did not change for either group between the times of admission to the
time of discharge. The TSH plasma scores were significantly higher at discharge for both
groups (RVP, \( p < 0.001 \); UVP, \( p \leq 0.046 \)) (Fumagalli et al., 2006).

The findings of the study suggested that, even though there was a greater amount
of bacterial contamination of the environment, there were not more septic complications
in the UVR. The authors suggested that the unrestricted visiting hours might be beneficial
in terms of reduced cardiovascular complications possibly related to a lower level of
anxiety. Another possible explanation offered was closer surveillance by the visitors
reduced complications. Some experts have argued that visitors may interfere with the
provision of adequate care. Despite the lower level of contamination in the RVP period,
the cumulative incidence of pneumonia, urinary tract infections, generalized sepsis and
overall septic complications were similar in the two groups (Fumagalli et al., 2006).

The findings challenged the idea that restricting visiting hours may contribute to
infection in ICUs, which is best prevented by hand washing when staff members move
from one patient to another. Liberalizing the visiting hours may be more protective
because it is associated with a reduction of severe cardiovascular complications.
Subsequently, the visiting schedule in the cardiac ICU in which the data collection
occurred had been expanded substantially (Fumagalli et al., 2006).

The limitations of this study consisted of a small sample size, no indicators of
satisfaction levels of the patients and visitors, and no indicators of stress on staff. A
larger study could confirm that a UVP may be associated with a significant reduction in
mortality (Fumagalli et al., 2006).
Nurses’ Satisfaction

Nurses tend to be the primary gatekeepers in the intensive care unit. It is the nurse who ultimately decides who is allowed to visit, how many visitors are allowed, and for how long the visitors may stay. There is little empirical evidence from the perspective of nurses about family visiting in critical care units. A study conducted by Farrell, Joseph, and Swartz-Barcott (2005) looked at the experiences of nurses who were identified as experts at working with visitors in an intensive care setting. The aim was to obtain an empirical description of how nurses incorporated visiting into their daily practice, including the identification and description of strategies and approaches that these nurses found effective in working with visitors.

The study was conducted in a 12-bed intensive care and cardiac care unit in New England. A qualitative research design incorporating in-depth interviews with 8 intensive care nurses was used. The nurses were selected by managers who had been identified as experts working with visitors in the intensive care unit. Participants agreed to participate and signed an informed consent. Each nurse was formally interviewed on two occasions during times when they were not working. In addition to data were collected by limited participant observation, review of selected documents, and informal interviews that occurred during the day when visitors were generally present (Farrell et al., 2005).

The finding from analysis of the data suggested routine and non-routine approaches for challenging, problematic visitor situations or dying patients. The routine approaches identified including dealing with visitors in daily practice, gaining access, general approaches, and asking families to leave the unit. None of the nurses mentioned a
plan for visitors. They stated they dealt with visitors as they came. Each of the nurses had a routine approach and each said that their interactions were based on the visitor’s response. All agreed that each situation was unique and that each needed to be evaluated and managed individually (Farrell et al., 2005).

In the category of gaining access, the unit had four major rules of visiting that consisted of calling before coming, two visitors at a time, 5 to 10 minute time limit per visit, and immediate family only. The call before coming and the two-visitor limit was the most enforced. Three of the nurses did not agree with the two-visitor limit but enforced it anyway. The other five nurses commonly allowed more than two visitors at a time. The 5 to 10 minute time limit was not enforced very frequently. In the category of general approaches, all the nurses stated they routinely greeted the visitors, introduced themselves, reviewed the goals for the day, and answered any questions from the visitors. They tailored their approach depending on the response from the family members and the patient. At times, the nurses noticed an effect of visiting on their patients. They felt that visiting could have a positive or negative effect on a patient. When it came to asking families to leave the unit, all the nurses stated there were times they needed to have their total focus on the patient and could not split their attention between an unstable patient and anxious family members. The nurses’ primary concerns were the stability and safety needs of the patients. The nurses considered the emotional need of the visitors important but felt they could be dealt with after the patient’s basic and safety needs were met. The eight nurses all stated they needed alone time with their patients before they could entertain questions from the family member (Farrell et al., 2005).
The study identified difficulties associated with managing complex tasks, maintaining patient safety, and balancing patient needs with meeting the diverse needs of visitors. The study suggested creating a role of a family caregiver to focus on the family’s needs while the nurse focuses on managing their unstable patient. The findings from this study suggested further exploration and identification of acceptable parameters for “stepping out” for patients, families and nurses in critical care units (Farrell et al., 2005).

In another study of a similar nature, Garrouste-Orgeas, Phillppart, Timsit, Diaw, Willems, Tabah, et al. (2008) examined nurses’ perceptions of the benefits and barriers of having a 24-hour open visitation policy. The authors noted that strict visitation policies still existed despite growing evidence of the benefits of having a more liberal visiting policy. The goals of this study were to examine the perceptions by intensive care workers of the 24-hour visitation policy, to measure family visiting times, and to determine the prevalence of symptoms of anxiety and depression in family member. No theoretical framework was cited for the study.

The study was done at a 10-bed medical-surgical intensive care unit in Paris, France. The population included patients, family members, nurses and doctors. The family member was defined as any relative or friend who visited the patient at least once during the first five days. A family representative was the person closest to the patient and attended the family meetings. The sample size included 209 patients, 30 nurses, 13 doctors, and 149 family members. Only the first five days of the patient’s stay in the ICU were studied because that was felt to be the most critical time period when distress of the family was most likely to be the highest (Garrouste-Orgeas et al., 2008).
The instruments used for this study were Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983) questionnaires for the intensive care staff, and questionnaires for the family. The Hospital Anxiety and Depression Scale consisted of fourteen items that were completed by each family representative. Half of the scale evaluated anxiety, and the other half of the scale evaluated depression. The questionnaire given to the family representative asked about the ease of the commute to and from the hospital, need to stay in the waiting room, and the perception of the relationship with the intensive care team. Subjective feelings of anxiety were assessed by the question, “Do you feel that the 24 hour visitation policy affected you level of anxiety related to the hospitalization of your relative?” Each doctor and nurse that was in charge of the patient was to complete a questionnaire on the same day. The questionnaires inquired about their own characteristics and their perception of the 24-hour visitation policy. The variables for the perceptions included: difficulty in organizing care, easy to work at the bedside, delay in examining the patient, unease while examining the patient, family stress, family integration in the intensive care team, family trust in the intensive care team, and change in behaviors of intensive care workers due to presence of family. The nurses and the doctors turned in 115 questionnaires on 209 patients, so the comparisons were made with the 115 questionnaires. The doctors and the nurses scored each variable on a scale of 1-4. The score of 1 meant “never,” 2 meant “occasionally,” 3 meant “often” and 4 meant “always.” Differences in the perceptions by the nurses and the doctors were evaluated by using nonparametric tests for paired data (Garrouste-Orgeas et al., 2008). Validity and reliability information was not provided.
The findings from the questionnaires from the doctors and the nurses were similar in comparison for the following variables: unease when examining the patient; delay when examining the patient; family stress; family integration; and family trust. The nurses were more likely to perceive disorganization of care than the doctors \((p = .008)\). Doctors reported greater family trust than nurses \((p = .0023)\), more family stress \((p = .047)\), and greater unease when examining the patient \((p = .02)\) (Garrouste-Orgeas et al., 2008).

Change in behaviors of intensive care workers due to the presence of the family was not significant \((p = .16)\). The perceptions of the family members regarding the 24-hour visiting policy included: “facilitating” \((89.2\%)\), allowing them to get to know the intensive care team better \((87.9\%)\), providing enough time to interact with the nurses \((89.2\%)\), enough time to interact with doctors \((77.1\%)\), and allowing them to experience less anxiety \((61.7\%)\). Most of the family members felt that the 24-hour policy lessened their anxiety \((74.5\%)\), yet some family members perceived no effect on anxiety \((23.4\%)\). The Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983) indicated symptoms of anxiety in 49% of family members and symptoms of depression in 29.5% of family members (Garrouste-Orgeas et al., 2008).

The main finding was that the unrestricted intensive care visitation policy was associated with low presence of the family, high family satisfaction, moderate symptoms of anxiety and depression in family members, and no perception of substantial interference with the delivery of care by the intensive care workers. The nurses were concerned that, if they had an unrestricted visitation policy, the families would be in the
room all the time. The findings showed that the families usually visited one to two hours per day. Families reported a high level of satisfaction with the open 24-hour policy, while some of the intensive care staff felt like it interfered moderately with the delivery of care. The authors recommended that, if intensive care units are not ready to adopt a 24-hour policy, they could try a gradual approach in increasing visitation and evaluate the effects (Garrouste-Orgeas et al., 2008).

These studies imply that nurses are responsible for meeting the needs of families of patients in the intensive care. However, there is not much known on how nurses view this role or about the effects it has on them. Hardicre (2003) conducted a phenomenological study to look at the experiences of nurses providing care for the family members of patients in the intensive care unit. The purpose of the study was to discover the lived experience of nurses when caring for the relatives of patients.

The setting for the study took place in three intensive care units in north-western England. The sample size was nine nurses who volunteered to participate. The inclusion factors stated the nurses had to have a minimum of three months working in the intensive care unit (Hardicre, 2003).

The author used phenomenological methods for the study. The phenomenological method was based on personal meanings derived from individuals’ perceptions, attitudes, beliefs, views and feelings on the subject in question. The nurses were tape recorded in unstructured interviews, but prompts were used to ensure the conversation stayed within the subject’s area of interest. The analysis of the data was done by Van Manen’s (1994) process of thematic analysis, which included recovering the theme or themes that were
embodied and dramatized in the evolving meanings and imagery of the work (Hardicre, 2003).

From the data analysis, five themes emerged: the world of the ICU nurse, not being able to make it better, breaking bad news, not getting on with relatives, and poor preparation and training. The themes were shared with five of the nurses in the study for the purpose of validation (Hardicre, 2003).

The findings suggested the nurses enjoyed the ability to get to know more about their patients from the views of the family members, especially for patients that were unconscious. The nurses stressed the importance of relatives in helping to humanize their nursing care. The majority of the nurses discussed how they became close to the relatives, but a minority preferred not to get too close. They felt it added to the stress of critical care nursing (Hardicre, 2003).

The difficulties the nurse described with families in the intensive care units included: the family being there all time, not being able to switch off, taking work home, aggressive/drunken relatives, and extended/remarried families. The close proximity of the visiting family, combined with prolonged visiting hours, potentially made a stressful time for the nurse (Hardicre, 2003).

Another source of stress was feeling powerless and inadequate when the nurses were unable to make things better for the family members (Hardicre, 2003). An example included not being able to give a definitive prognosis. A nurse having to support family members after breaking bad news was also stressful for them. Another problem nurses faced was not being able to get along with some of the family members. Some of the
nurses did not feel they were educationally or psychologically prepared to provide care to problematic family members (Hardicre).

The limitation to this study was the small study sample. The study was able to determine that nurses valued providing support and care for family members, but families could be a source of considerable stress. More research is needed for more emphasis to be given to the psychological aspects of the care-giving role including the family care-giving role in training courses (Hardicre, 2003).

A study by Hinkle, Fitzpatrick and Oskrochi (2009) looked at identifying the perception of needs of family members visiting and nurses working in the intensive care unit. In providing some background for the study, the authors noted that the American College of Critical Care Medicine Task Force (Davidson, Powers, Hedayat, Tieszen, Kon, Shepard, et al., 2007) issued clinical practice guidelines for support of the family in the patient-centered ICU. The two pertinent recommendations made were that open visitation in the adult ICU should be structured to allow flexibility for patients and families and be determined on a case-by-case basis. The patient, family and nurse should determine the visitation schedule, taking into account the best interest of the patient. This study proposed the question, “Were previously identified family members’ and nurses’ perceptions of needs representative of the current needs of individuals visiting ICU patients?” One aim of the study was to describe the current needs of patients with critical illness identified by family members and nurses. A second aim was to compare and identify the differences in the needs identified by family members visiting patients in the ICUs and nurse working in the ICUs.
The study took place in the critical care division of a large northeastern U. S. medical center. The critical care division had different units; each unit had different visitation policies. None of the units had an open visitation policy. The convenience sample was 101 people that consisted of family members, patients, and nurses who were associated with one of the six units. The inclusion factor for the patients consisted of having spent at least 24 hours in one the six units. The family member had to be an adult relative with an established relationship with the patient in one of the six units. No inclusion factors were noted for the nurses (Hinkle et al., 2009).

Demographic data were collected on the patients, family members, and nurses. The needs of the family members, patients, and nurses were measured using the Critical Care Family Needs Inventory (Molter, 1979). The responders rated their perception of the importance of the individual needs on a scale from 1 (not important) to 4 (very important). Hierarchical cluster analysis identified four themes. The themes identified in the order of importance by the nurses and the family members were emotional resources and support; trust and facilitation of needs; treatment information; and feelings (Hinkle et al., 2009).

Paired t-tests indicated that family members and nurses differed significantly on three out of the four themes (p = .000). Family members considered the depth of the emotional cluster (t = 5.036, df = 100, p = .000) and the trust cluster (t = 4.354, df = 100, p = .000) to be more serious than did the nurses. Family members considered the depth of the feeling cluster (t = -4.901, df = 100, p = .000) to be less serious than did the nurses. The authors declared that this was important information for neuroscience nurses and
other healthcare professionals to consider in providing care, setting visiting policies in ICUs, and developing approaches such as family-centered care. The Cronbach’s alpha values for the version of the inventory used for the family members and the nurses were .81 and .89, respectively (Hinkle et al., 2009).

The limitation of this study was that no one was responsible for meeting the needs of the family members or to explore whether their needs were met. That was not part of the study. From the results of the study, a task force was assembled to examine the visiting hour policies. Most the units changed to policies that were more individualized and flexible to meet the patient and family needs. None of the six units adopted an open visitation policy (Hinkle et al., 2009).

In another study on families at the bedside during critical illness, Williams (2005) noted that hospitalization in a high-technology intensive care unit can be stressful for both the patients and their families and can trigger a variety of unwanted psychological effects. Williams’ study aimed to illuminate the specific impact that family members may have on patients’ care and on their recovery during a stay in the intensive care unit; explore the role of the nursing staff in supporting families; and describe the specific needs of the intensive care nurses related to family care.

The study took place at an 11-bed intensive care unit in a large general hospital in the United Kingdom. The sample included 14 nurses who were selected through purposeful sampling. The purposive sampling was intended to maximize the scope and variety of information gained from the study context (Williams, 2005). The inclusion and exclusion factors were not discussed.
Naturalistic inquiry methodology (Erlandson, Harris, Skipper, & Allen, 1993) was chosen for this study, with a case study approach, providing structure for data collection and facilitating in-depth reporting of the research. Data collection was through unstructured observation, in-depth interviewing and video recording with reflective video analysis. The methods employed for data analysis were based on the principles of constant comparative analysis (Strauss & Corbin, 1998). Open coding examined the data for patterns and themes (Williams, 2005).

The three key themes related to the families of critically ill patients were getting to know the patient through the family, family’s contribution to patient care, and nurses’ role in supporting families. Nurses identified that it was through the contact with the family that they came to know more about the patient they were caring for, especially if the patient was intubated and/or sedated. Nurses recognized that the family provided a vital source of emotional support to patients. Nurses acknowledged that family members may have the advantage of knowing what will be of interest to patients that could be central to the family’s role in supporting the patient. In addition, family may need support in facilitation of verbal communication with an intubated and/or sedated patient; and tacit permission to touch and help with care. Nurses described the emotional frustration from all parties when situations arose in which the patient and the family were unable to make themselves understood. Nurses expressed the importance of making them feel like a part of the caring team and showing them how to get close and make contact with the patient. It must be recognized that a nurses’ capacity to support the patients’ families effectively is linked to their ability to cope with the demands placed upon them (Williams, 2005).
The limitations to the study consisted of a small sample size and a possible bias from the researcher’s experience of having previously worked in the intensive care unit in which the study was conducted. The researchers concluded that the therapeutic contribution that families can make to the well-being and recovery of their relatives in the intensive care unit should be given wider recognition. Nurses should invite family members to contribute to their patients’ assessments with the aim of gaining a picture of the person behind the patient. Families may need to be shown how to interact effectively and safely with patients. Further research is required in the area of expanding understanding of the unique contribution that families make to patient care in the intensive care unit and exploring how nurses can best support them in that role (Williams, 2005).

Summary

In summary, an admission to an intensive care unit is recognized as an extremely stressful experience for both patients and their families (Williams, 2005). A review of the literature indicated that open visitation policies increased patient and family satisfaction. Research showed that nursing staff and other multidisciplinary professionals generally opted for a more restrictive visitation policy. When family members and patients were separated from each other, they experienced increased stress and anxiety. Family members that were not getting their needs identified by hospital personnel had the potential for increased stress and anxiety, as well. Two of the most important needs identified were the ability to receive understandable information (Roland et al., 2001) and the need to know the expected outcome. If family members’ immediate needs could be
met, desirable consequences both for family members and patients could be achieved (Lee & Lau, 2003).

In recent years, visiting routines have become less restrictive in many intensive care units, but the amount of time family members were allowed to spend in the intensive care unit varied (Olsen et al., 2009). Family members wanted to be able to be with their loved one without being restricted. Initially, the hospitalization of a family member resulted in the other family members wishing to spend more time with the patient. After three to four days, the family members began spending less time with the patient (Leon & Knapp, 2008). The study conducted by Garrouste-Orgeas et al. (2008) showed that when a 24-hour policy was implemented, it was not perceived by families as indicating a duty to stay with the patient around the clock. Family members experienced few symptoms of anxiety and depression and reported a high level of satisfaction with unrestricted visitation.

Most intensive care staffs maintained restrictive visiting policies in the belief that liberalizing visiting hours interfered with the provision of care and increased the patient’s physiological stress (Fumagalli et al., 2006). Despite the multitude of daily responsibilities, critical care nurses were the ones who interacted most with families of critical care patients. Involving the family in patient care resulted in benefits to both the patient and the family (Leon & Knapp, 2008). The goal was to find a balance between family members’ need to be present, patients’ need for rest, and nurses’ need to give safe care to intensive care patients (Farrell et al., 2005). The goal may be met through the conduction of more research to clarify the perspectives of family members.
Hospitals continuously seek ways to increase customer satisfaction. The visiting policy is frequently evaluated and refined to enhance customer satisfaction, patient outcomes, and quality of nursing care. When family members become dissatisfied with restrictive visiting policies, changes in visitation can provide an opportunity to better meet patient and family needs. Recent research has indicated that a more open, non-restrictive visitation policy can decrease family anxiety and stress, resulting in greater satisfaction with care. The purposes of this study were to determine the satisfaction of families with restricted visitation policies compared to open visitation policies that included family participation in patient care during hospitalization for a critical illness. This quasi-experimental study was a partial replication of a study by Roland, Russell, Richards, and Sullivan (2001).

Research Questions

Two research questions guided the study:

1. What are the most common needs families have while visiting patients in the intensive care unit?
2. What is the effect of an open visitation policy on family anxiety and satisfaction with care?
Population, Sample, and Setting

The population included family members of patients hospitalized in the Medical Surgical Intensive Care Unit (MSIC) at a hospital in an urban area of one Midwestern state. A convenience sample of 200 family members who met the inclusion criteria completed a questionnaire about family presence at the bedside including participation in patient care during critical illness. There were 100 family members in the control group and 100 in the experimental group. Inclusion criteria included: the patient’s stay in the intensive care unit exceeded 24-hours; able to read English; family members and patient were 18 years of age or older; and the family member was a spouse, adult child, parent, or significant other. Exclusion factors included family members with dementia or mental illness and patients that were terminal weaning or receiving end-of-life care.

Demographic data collected included age, gender, and educational level of the family members, patients’ age, and medical diagnosis.

Protection of Human Subjects

This study was submitted to the Institutional Review Board and Ethics Committee (IRB) of the participating hospital for approval. The nursing and medical directors of the participating facility gave their permission to conduct the study.

There was minimal risk to participants, the only risk being that the principal investigator may have been able to guess who participated in the study by the demographic data collected. However, it was anticipated that, with a sample size of 200 enrolled in the study over a period of 12 months, participants’ identities were likely
protected. Participants were assured that the investigator made no attempt to determine who participated and who did not.

While there were no direct benefits to the participants, the significance of the knowledge that health care professionals could potentially gain from the study was cited in the cover letter and informed consent. The risk-benefit ratio was considered acceptable.

Family members who qualified and who signed the informed consent were enrolled into the study. Participation was voluntary, and the patients could withdraw from the study at any time. Participants put the completed surveys in a sealed envelope provided by the researcher and returned completed surveys to a drop box in the waiting area of the MSIC. Completed surveys were retrieved from the box by the researcher or a representative daily. Completed surveys were kept in a file in the locked office of the principle investigator. Responses were anonymous, as surveys were not coded in any way. Data were seen only by the researcher and data entry personnel. Data were destroyed at the end of the study.

Procedure

After the clearance from the Institutional Review Board and Ethics Committee, the project was presented to the director and the clinical coordinators on the MSIC unit for approval. Then data collection began for the control group under the conditions of a restrictive visitation policy for family members. The researcher screened the list of patients who were in the MSIC for longer than 24-hours and were over 18 years of age. Family members who qualified were approached by the principal investigator in the
patient’s room or in a waiting area and asked if they would like to receive information about the study. The principal investigator trained three additional registered nurses in recruitment and enrollment of patients into the study. These three nurses could obtain informed consent and collect data in the absence of the principal investigator. The three nurses met the IRB qualifications regarding knowledge about protection of human subjects.

If family members were interested in receiving information about the study, the researcher provided informed consent information and a set of instructions. The instruments included the Critical Care Needs Inventory (Molter, 1979), State and Trait Anxiety Inventory (Spielberger et al., 1970), and demographic items that were presented to all respondents in the same order. Participants completed the surveys and deposited them in a drop box located in the waiting area of MSIC. The principal investigator or nurses trained to collect data for the study collected surveys from the box study. Data were collected until 100 family members were enrolled the study.

Then data collection began for the experimental group under the conditions of an open visitation policy for family members. The researcher screened the list of patients who were in the MSIC longer than 24-hours and were over 18 years of age. Family members who qualified were approached by the principal investigator in the patient’s room or in a waiting area and asked if they would like to receive information about the study. If family members were interested in receiving information about the study, the researcher provided informed consent information and set of instructions. The instruments included the Critical Care Needs Inventory (Molter, 1979), State and Trait
Anxiety Inventory (Spielberger et al., 1970), and demographic items were presented to all respondents in the same order. Participants completed the surveys and deposited them in a drop box located in the waiting area of the MSIC. The principal investigator or nurses trained to collect data for the study collected surveys from the box daily. Data were collected until 100 family members were enrolled in the experimental group for the study. Data were entered into an SPSS program for statistical analysis. Following completion of data analysis and dissemination of results, the surveys were destroyed by shredding.

Research Design

This study used a quasi-experimental study design. The purposes of this study were to document the perceived needs of family members during the hospitalization of a loved one and to determine perceptions of anxiety and satisfaction of families related to visitation policies that included participation in patient care during hospitalization for a critical illness. Questionnaires were given to the patients’ family members under the restricted visitation condition until 100 participants were recruited into the control group of the study. After the control sample was recruited, mandatory in-services were provided to educate the nursing staff on the revised visitation policy that was recommended through literature review and provided open visitation for families. There were posters placed in the unit, so doctors and other interdisciplinary staff could be informed of the new visitation policy. This occurred over a two week period to allow all the nurses and other staff to be aware of the revised visitation policy. Two nurses on each shift received additional education on open visitation so they could answer questions and serve as a
resource to staff during practice change. Educational information was repeated during staff meetings and weekly newsletters during the time of data collection for the experimental group.

Instrumentation

Critical Care Family Needs Inventory developed by Molter (1979) included 45 items listed as needs of family members of critically ill patients. The items were generated by graduate students during their practice working under Molter. An open-ended question was added to identify any need item that was not listed previously. Each participant in the control group and the experimental group was given the Critical Care Family Needs Inventory.

Mean scores on a single item that asked family members to rank their satisfaction with visitation policy using a Likert-type scale. The scale was from 1 to 5 (1 = very dissatisfied and 5 = very satisfied) (Roland et al., 2001). Content validity was supported by a panel of professionals working in the intensive care unit at the time the instrument was developed. Test-retest reliability was conducted in a previous study with a correlation coefficient of 0.87. This value suggested that the instrument was stable and the same result would be obtained on repeat administration (Lee & Lau, 2003).

The State and Trait Anxiety Inventory by Spielberger et al. (1970) served as an indicator of two types of anxiety. It differentiated between temporary or emotional state anxiety versus long-standing anxiety. It also measured the severity of the overall anxiety level. The state anxiety test-retest correlation was .054, and the trait anxiety had a test-
retest correlation of a 0.86. The tool has been widely used and is considered reliable and valid in multiple samples.

Demographic items included age, gender, relationship to patient, patient’s reason for admission to the MSIC. Age was reported in actual years. Gender was reported as nominal item, male or female. Relationships to patient were reported as spouse, adult child, parent, or significant other. In addition, families were asked to rate their satisfaction with the visitation policy on a single item that inquired, “Please circle a number on the line below to indicate how satisfied you are with the current visitation policy in this unit.” The item was presented as horizontal 10-point visual, with the anchoring words on each end presented as “Not at all satisfied” and “Completely satisfied.” The numbers 1-10 were placed equidistant along the line. Participants were to circle the number corresponding to their level of satisfaction.

Data Analysis

Descriptive statistics analyzed the data to determine which needs had the highest mean scores and to summarize the demographic characteristics. Mean scores and standard deviations were calculated for each need item. Needs items were rank ordered to identify the most commonly reported needs of family members and thus address the first research question.

Mean satisfaction scores and standard deviations were calculated related to the old policy and the revised policy and compared by an independent t-test in order to partially address the second research question. Independent t-tests were performed to test whether the mean scores of the need statements were different between the control and
experimental groups. In addition, mean scores of needs items were compared by various analysis of variance statistics across demographic groups, such as age groups and categories of relationship to patient. Level of significance was set at 0.05, which meant that there is a probability of 5% or less of having a type I error.

Summary

In this chapter, the methods and procedures were used to examine the common needs of family members of critically ill patients and levels of anxiety and satisfaction of family members with two types of visitation. The research design was a quasi-experimental. Questionnaires were given to the control group and experimental group to measure needs, anxiety, and satisfaction associated with current and revised visitation policies. Data were collected from family members in the patients’ room or waiting area. Data were analyzed with descriptive and inferential statistics. This study was a partial replication of a study by Roland et al. (2001).
References


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<td>Roland et al., 2001</td>
<td>Family functioning is altered dramatically when a loved one is hospitalized. Patients and families feel a greatly increased sense of stress and anxiety. Frequently, these feelings manifest themselves as anger, denial, and hostility. There is a gap in the research related to the effects of open visitation on the level of anxiety of patients and families.</td>
<td>To describe the satisfaction of patients, families, and staff with various visitation policies</td>
<td>Stress, Coping, Family Visitation, Satisfaction of patients, families, and staff</td>
<td>A convenience sample of: 23 RNs 32 Patients 12 Family members 28 Ancillary Staff</td>
<td>Case Study Design/Quasi-Experimental</td>
<td>Likert-type questionnaires specific to patients, families, RNs, and multidisciplinary groups. Content validity was established by a panel of experts consisting of a doctorally prepared faculty member and two critical care nurses.</td>
<td>All groups, except RNs, showed a significantly greater degree of satisfaction after a less restrictive visitation policy was implemented. Significant p-values were reported as: patients, p = &lt; .005 and families, p = &lt; .001</td>
<td>More liberal visitation may improve customer relations and may also decrease patient length of stay, thus decreasing cost. When attempting any major change, administrative support and staff involvement is essential.</td>
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<td>Garrouste Orgeas, et al., 2008</td>
<td>Critical illness of one individual can cause family crisis. The patient’s and family’s quality of life is influenced by the relationship with the ICU team. There is little research examining the effects of open visitation on ICU workers, visiting family members, and patients.</td>
<td>This study examines the perceptions of ICU workers regarding open visitation, the effects of open visitation on family stress and anxiety, and whether the well-being of the patient is influenced by open visitation.</td>
<td>Stress, Anxiety, Coping, Visitation, Nursing workload</td>
<td>To be included, patients had to be alert and oriented, in the ICU more than 6 hours, and have visiting family members. A convenience sample of: 209 patients 149 family representatives 43 ICU workers</td>
<td>Observational Prospective Single-center cohort</td>
<td>Patients: Simplified Acute Physiology Score (SAPS), Logistic Organ Dysfunction Score (LOD), Nine Equivalents Of Nursing Manpower Score (NEMS) Families: Open-ended questionnaire, Hospital Anxiety And Depression Score (HADS) ICU Workers: Open-ended questionnaire</td>
<td>Nurses perceived more disorganization of care than physicians (p = .008). Compared with nurses, the physicians reported greater family trust (p = .0023) more family stress (p = .047) and greater unease when examining the patient (p = .02).</td>
<td>Open visitation may be beneficial in creating an open dialogue between ICU workers and families, which can create a better working relationship.</td>
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<td>Lee &amp; Lau, 2003</td>
<td>Stress can hinder family members’ coping and thus affect the support that is given to the patients. In order to lessen the effect of stress, family members’ immediate needs must be identified and met.</td>
<td>To identify those needs of the adult family members in an intensive care unit in Hong Kong.</td>
<td>Coping Stress Family visitation Needs of family members</td>
<td>A convenience sample of 40 family members. Inclusion criteria consisted of being Chinese, over 18 years of age, related to the patient, ability to read and write Chinese, speak Cantonese, visit the pt at least once, and be available between 24 and 72 hours after the patient’s admission. Descriptive cross-sectional</td>
<td>Families were given the Chinese version of CCFNI Test – retest for Reliability was done with a correlation coefficient of 0.87. Content validity was supported by a panel of professionals working in the ICU.</td>
<td>The findings showed the need item “to know the expected outcome” was selected by 20 out of the 40 subjects as the most important with a mean score of importance of 3.9 on 5 point scale. The mean score for “having the visiting hours changed for specific conditions” was 3.3 and the need “to visit at any time” had a mean score of importance of 2.9. The reassurance category was ranked the most important out of the five categories with a mean score of 3.7.</td>
<td>Investigation on the nurses’ perceptions of family needs could help explore differences between the nurses’ and the families. One way to help meet the needs of the family members is to have flexible or extended visiting hours. Studies in related areas are required to identify family members’ needs so that holistic care can be provided for them.</td>
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<td>Olsen, Dysvik &amp; Hansen, 2009</td>
<td>Related studies focus on mostly the family needs, very few studies focus on the patients’ experiences with visiting routines. There must find a balance between the family members’ need to be present, patients’ need for rest and nurses’ need to give safe care to ICU patients.</td>
<td>To find out from whom the ICU patients sought visits and to see how the patients experienced the presence of their family while they were in the ICU.</td>
<td>Patients’ experiences Family visitation</td>
<td>11 patients, 4 women and 7 men with a mean aged 19-69, in the intensive care unit.</td>
<td>Descriptive qualitative study</td>
<td>Semi-structured Interviews with Open-ended Questions – The questions used were not noted, just the responses from the patients.</td>
<td>The findings from this study shows the importance for patients in the ICU who are unconscious or too weak to decide for themselves, to limit visits to close family members or at least one supportive person present.</td>
<td>This study indicated that patients desired some limitation of visitation and preferred visitors whom they were closest to in daily life. Flexible visiting does not have to lead to longer visits, but to visit at times that are more appropriate for the visitor. Current nursing literature indicates that family visiting practices in acute care settings still vary widely and that debates continue in many areas of care.</td>
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<td>Gonzalez et al., 2004</td>
<td>Families want to be close to the patient in the hospital, but having close proximity can depend on the patients’ condition and the family dynamics.</td>
<td>To describe patients’ preferences for family visits in an intensive care unit and on a complex medical unit, specifically patients’ perspectives of the stressors, benefits, preferences and outcomes of such visiting.</td>
<td>Family visitation Stress Family dynamics</td>
<td>The sample included 31 patients from the ICU and 31 patients from the CCMU.</td>
<td>Descriptive study</td>
<td>Patients Perception of Visits in Critical Care questionnaire. Likert scale Content validity was supported by a panel of nurse researchers and ICU nurses who reviewed the questions.</td>
<td>Out of the 62 participants, 37% thought unlimited visiting hours was the best guideline, 35% wanted visitors only once a day, 8% wanted visitors in the morning, 50% preferred visitors in the afternoon, 32% thought all visiting should end at 8 pm, and 22% wanted visitors restricted if a patient was having complications.</td>
<td>Patients like to have visitors to break up the day, but visiting policies need to provide an opportunity for the patients and the nurses to communicate to develop a schedule that best meets the needs of the patient, the visitors and the healthcare providers.</td>
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<td>Chiu, Chien, &amp; Lam, 2004</td>
<td>Being admitted to an intensive care unit can cause numerous physiological and psychological problems for the patient and their family. Families may benefit from information when a loved one is hospitalized.</td>
<td>The purpose of the study was to evaluate the effectiveness of a structured education program for families of patients that are critically ill, based on the result of an assessment of family needs.</td>
<td>Family Members, Family Visitation, Education, Family needs, Anxiety</td>
<td>The convenience sample consisted of 66 family members. During the first month of data collection, 36 family members were entered into the control group. In the second month of data collection, 30 family members were enrolled in an experimental group. No inclusion or exclusion factors were noted.</td>
<td>A pre and post test, untreated group design</td>
<td>The Chinese version of the State and Trait Anxiety Inventory (C-SAI) (C-TAI) Chinese version of the Critical Care Family Needs Inventory (C-CCFNI) Descriptive and Inferential Statistics. ANCOVA Unpaired t-test (two-tailed)</td>
<td>The families in the experimental group had a significant reduction in their level of anxiety ($F = 16.5, p = 0.001$) and a significant increase in satisfaction of family needs ($F = 22.9, p = 0.0001$) compared with the controls.</td>
<td>The findings for this study indicate that a structured needs-based intervention for families of newly admitted critically ill patients to an ICU could be effective in reducing their anxiety and satisfying their immediate needs. Further study is recommended to test and explore which specific models of needs-based family intervention will be most effective in satisfying the immediate and long-term needs of families in critical care.</td>
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<td>Hardicre, 2003</td>
<td>There are several studies that cite nurses as being responsible for meeting the needs of families of patients in the intensive care but there is not much know on how the nurses view this role or about the effects of it may have on them.</td>
<td>The purpose of the study was an attempt to discover the ‘lived experience’ of nurses when caring for the relatives of patients.</td>
<td>Critical illness, Family visitation, Nurses experiences’</td>
<td>The sample size was 9 nurses that volunteered to participate. The inclusion factors stated the nurses had to have a minimum of three months working in the intensive care unit that included working in each of the three units.</td>
<td>Phenomenological study</td>
<td>Van Manen’s (1994) thematic analysis</td>
<td>The findings suggest the nurses enjoy the ability to get to know more about their patients from the views of the family members, especially for patients that were unconscious. The nurses stressed the importance of relatives in helping to humanize their nursing care.</td>
<td>The study was able to determine that nurses’ valued providing support and care for family members, but families can be a source of considerable stress.</td>
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<td>Hinkle et al., 2009</td>
<td>There is less research investigating nurses’ perceptions of the needs of family members in comparison with family members’ perception of their needs. It is important to investigate the difference in perceptions of family members and ICU nurses regarding needs.</td>
<td>One aim of the study was to describe the current needs of patients with critical illness identified by family members and nurses. A second aim was to compare and identify the differences in the needs identified by family members visiting patients in the ICUs and nurses working in the ICUs.</td>
<td>Needs of family members Needs of nurses in ICU Family visitation</td>
<td>The convenience sample was 101 people that consisted of family members, patients and nurses that was associated with one of six units. The inclusion factor for the patients consisted of having spent at least 24 hours in one the six units. The family member had to be an adult relative with an established relationship with the patient in one of the six units. No inclusion factors were noted for the nurses.</td>
<td>Correlational Design</td>
<td>Critical Care Family Needs Inventory – The Cronbach’s alpha values for the version of the inventory study for family members and for nurses were 0.81 and 0.89.</td>
<td>Family members and nurses differed significantly on three out of the four themes (p = .000). Family members considered the depth of the emotional cluster (t = 5.036, df = 100, p = .000) and the trust cluster (t = 4.354, df = 100, p = .000) to be more serious than did the nurses.</td>
<td>From the results of the study, a task force was assembled to examine the visiting hour policies. Most the units changed to policies that were more individualized and flexible to meet the patient and family needs. None out of the six units adopted an open visitation policy.</td>
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<td>Azoulay et al., 2001</td>
<td>Meeting the needs of patients’ family members is an essential part of the responsibilities of ICU physicians and nurses. However, a major task is providing the appropriate, clear and compassionate information for improving the comprehension.</td>
<td>The purpose of the study was to measure the ability of the ICU staff to meet family needs and to identify parameters that could be worked on to improve family satisfaction.</td>
<td>Family satisfaction Family needs Family visitation</td>
<td>The sample size included 637 patients and 895 family members. Family members were defined as anyone who visited the patient in the ICU.</td>
<td>Prospective correlation design as a multicenter study</td>
<td>Critical Care Family Needs Inventory Validated by Johnson and colleagues Poisson regression model</td>
<td>The seven predictors of satisfaction were family members being of French descent (p = 0.0008), patient to nurse ratio less than or equal to three (p = .0144), information provided by junior physicians (p = 0.0001), family feels they received contradictory information (p = 0.0024).</td>
<td>The results show the feasibility of improving family satisfaction. Predictors of satisfaction are amendable to intervention and deserve to be investigated further with the goal of improving the satisfaction of ICU patients’ family members.</td>
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<td>Fumagalli et al., 2006</td>
<td>Open visitation policies are preferred by most patients, but most intensive care units maintain a restrictive visiting policies due to interference with care, possible increase in patients’ physiological stress and possible increase risk of septic complications.</td>
<td>The purpose of the study was to compare health outcomes associated with an UVP regimen, in which each patient could choose frequency and duration of visits, and a RVP regimen, characterized by visiting times not exceeding 30 minutes twice a day.</td>
<td>Visitation policies</td>
<td>The sample included approximately 115 patients enrolled during the RVP regimen and 111 during the UVP regimen. The exclusion criteria consisted of severe alterations in consciousness, delirium, cognitive impairment, major psychosis requiring pharmacologic al treatment, expected intensive care stay less than 24 hours, transferred from another department, readmission after enrollment in the same study, and an unwillingness or inability to provide informed consent. The RVP could only have one visitor per patient for 30 minutes twice a day at a set time.</td>
<td>Correlational Design</td>
<td>Acute Physiology and Chronic Health Evaluation II (APACHE II)</td>
<td>Hospital Anxiety and Depression Scale</td>
<td>Chi square test</td>
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<td>Instruments</td>
<td>Results</td>
<td>Implications</td>
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<td>Williams, 2005</td>
<td>Hospitalization in a high-technology intensive care unit can be stressful for both patients and their families and can trigger a variety of unwanted psychological effects.</td>
<td>The study aimed to illuminate the specific impact that family members may have on patients’ care and on their recovery during a stay in the intensive care unit; explore the role of the nursing staff in supporting families; and describe the specific needs of the intensive care nurses related to family care.</td>
<td>Framework/Concepts</td>
<td>Sample included 14 nurses, selected through purposeful sampling.</td>
<td>Naturalistic Inquiry Methodology</td>
<td>Unstructured observation, In-depth interviewing, Video recording with reflective video analysis</td>
<td>The three key themes related to the families of critically ill patients were getting to know the patient through the family, family’s contribution to patient care, and nurses’ role in supporting families. It must be recognized that a nurse’s capacity to support the patient’s families effectively is linked to their ability to cope with the demands placed upon them.</td>
<td>Further research is required in the area of expanding understanding of the unique contribution that families make to patient care in the intensive care unit and exploring how nurses can best support them in that role.</td>
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<td>Farrell et al., 2005</td>
<td>It is the nurse who ultimately decides who is allowed to visit, how many visitors are allowed and for how long the visitors may stay. There is little empirical evidence to guide the nurses about family visiting in critical care units.</td>
<td>The aim was to obtain an empirical description of how nurses incorporated visiting into their daily practice, including the identification and description of strategies and approaches that these nurses found effective in working with visitors.</td>
<td>Framework/Concepts</td>
<td>8 intensive care nurses who were selected by managers who had been identified as experts working with visitors in the intensive care unit.</td>
<td>A qualitative research design</td>
<td>In-depth interviews, (questions were not published), Limited participant observation, Literature Reviews on several articles, but did not identify which selected documents were used specifically for the study.</td>
<td>The study identified difficulties associated with managing complex tasks, maintaining patient safety and balancing patient needs with meeting the diverse needs of visitors. The study suggested creating a role of a family caregiver to focus on the family’s needs while the nurse focuses on managing their unstable patient. The findings from this study suggest further exploration and identification of acceptable parameters for “stepping out” for patients, families and nurses in critical care units.</td>
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