# NURSES' ATTITUDES TOWARD OPEN VISITATION IN CRITICAL CARE UNITS

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To the Associate Vice-President for Research
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I am submitting herewith a thesis written by

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I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nursing.

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This project is dedicated to my

husband

Shane

Thank you for your patience and understanding

while I completed this project!!!

I love you!!

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NURSES' ATTITUDES TOWARD OPEN VISITATION
IN CRITICAL CARE UNITS

ABSTRACT

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This study was an investigation of critical care nurses and their attitudes towards open visitation in relation to selected variables: age, educational level, shift worked, years of critical care experience, type of rooms in the unit, gender, unit worked on, past experience visiting an ill family member, patient/nurse ratio, and current practice of open visitation. The data were collected by self-report questionnaires from a sample of critical care nurses. The mean attitude of the sample was moderately positive towards open visitation. Four conclusions were made: (a) current practice of open visitation appears to be strongly related to positive attitudes toward open visitation, (b) nurses with 6 to 15 years of experience are more likely to have positive attitudes toward open visitation, (c) nurses are more positive toward open visitation in units that have private and mixture patient rooms, and (d) 3:1 patient/nurse ratios foster positive attitudes towards open visitation.

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# CHAPTER 1

## INTRODUCTION

One of the controversial topics in critical care today is family visitation policies. The literature reports a wide variation in current visitation policies across the country. Kirchhoff (1982) conducted a study and found unclear justification for strict visiting policies. Kirchhoff (1982) made the following statement:

> if the patients' needs were the primary rationale for development of visiting policies and if these visiting policies were written for an MI patient population or even for coronary or critically ill patients, the patterns of visiting would not be so diverse. (p. 575)

A survey of 197 critical care units was conducted by Stockdale and Hughes (1988). It showed that most units have visitation policies setting limits on the number of visits, length of time of visits, number of visitors, and minimum age of visitors. They found very little consensus on what these limits should be. However, more patient and family satisfaction was found in units where liberal visitation policies existed, than in those areas where restricted policies were enforced.

Halm and Titler (1990) pointed out that much of the controversy has been on "whose needs are being met by restricting visiting in the intensive care unit?" (p. 25). Is it the nurses' needs or the patients' needs? The literature presents sufficient evidence that visitation is beneficial for the patient/family relationship. Therefore, why have strict visitation policies remained in effect in most critical care units?

## Statement of the Problem

This study was an investigation of critical care nurses and their attitudes towards open visitation in relation to selected variables: (a) age, (b) educational level, (c) shift worked, (d) years of critical care experience, (e) types of rooms in the unit where critical care nurses work, (f) gender, (g) types of units where the nurses work, (h) past experience visiting an ill family member in critical care units, (i) patient/nurse ratio on the unit where the nurses work, and (j) visitation policy (open versus closed) on the unit where the nurses worked.

## Justification of the Problem

Benefits of family visiting and its effect on patient outcome have been documented over the past 20 years. Researchers have documented increases in heart rate, blood

pressure, and premature contractions when family visitation is limited to 10-minute intervals (Brown, 1976). Also, Fuller and Foster (1982) found that some interactions with limited visitation in surgical intensive care unit (SICU) patients, may be stress-provoking while others may be stress-reducing.

Because the patient is a part of a family unit, it makes sense to include the family in the care and recovery of the patient. The family needs, as well as the patient needs, must be considered in order to help these families return to a pre-crisis level of functioning. Molter (1979), Lynn-McHale and Bellinger (1988), and Leske (1986) have conducted studies relating to the needs of critically ill patients. The family members ranked their needs in relation to visitation. The most important need was to be able to visit whenever they wanted. Halm and Titler (1990) found that patients and family members desired nurses to be flexible in regard to visiting hours.

Because research has shown how visitation affects patients, the question arises again, why are the policies not designed to meet the patient's needs? The value of family visitation is described in the literature as essential to the emotional well-being of the patients (Halm

& Titler, 1990). Why are some critical care nurses strict about family visitation and others are more lenient?

A nurse's attitude (either positive or negative) toward open visitation comes from his or her beliefs that open visitation leads to certain desirable or undesirable outcomes. It is important to determine variables that are related to nurses' attitudes towards open visitation.

## Theoretical Framework

The theory of reasoned action by Ajzen and Fishbein (1980) was used to guide this study. The goal of the theory is to predict and understand an individual's behavior. Ajzen and Fishbein (1980) stated that "the theory is based on the assumption that human beings are usually quite rational and make systematic use of the information available to them" (p. 5). They maintain that individuals consider the implications of their actions before they decide to engage or not engage in a given behavior.

According to the theory, a person's intention is a function of two basic determinants: attitudes and subjective norms. They go on to say that "attitudes are a function of beliefs" (Ajzen & Fishbein, 1980, p. 6). Therefore, if nurses believe allowing open visitation (a behavior) will lead to positive outcomes, then their

attitudes will be positive. If nurses believe allowing open visitation will lead to negative outcomes, then their attitudes will be negative.

Ajzen and Fishbein's (1980) theory also suggests that "external variables may influence the beliefs a person holds or the relative importance he or she attaches to attitudinal and normative considerations" (p. 9). Therefore, it is important to examine external variables that may influence nurses' attitudes toward visitation policies.

## Assumptions

1. Visitation policies in critical care units vary throughout the geographical area where the study was conducted.

2. People use the information available to them in a reasonable manner to arrive at their decisions (Ajzen & Fishbein, 1980).

3. In general, visitation by family members has a positive influence on patients.

## Research Questions

The research study sought to answer the following questions:

1. What are nurses' attitudes towards open visitation in the intensive care units, as measured by the Newkirk Visitation Questionnaire?

2. Is there a difference in nurses' attitudes toward open visitation in critical care according to: (a) age, (b) educational level, (c) shift worked, (d) years of critical care experience, (e) types of rooms in the unit where critical care nurses work, (f) gender, (g) types of unit where the nurses work, (h) past experience visiting an ill family member in critical care units, (i) patient/nurse ratio on the unit where the nurses work, (j) visitation policy (open versus closed) on the unit where the nurses worked?

3. Which of the following variables are most predictive of nurses attitudes towards open visitation: (a) age, (b) educational level, (c) shift worked, (d) years of critical care experience, (e) types of rooms in the unit where critical care nurses work, (f) gender, (g) types of units where the nurses work, (h) past experience visiting an ill family member in critical care units, (i) patient/nurse ratio on the unit where the nurses work, and (j) visitation policy (open versus closed) on the unit where the nurses worked?

## Definition of Terms

For the purpose of this study, the following terms were defined:

1. Open visitation--refers to a policy governing critical care nursing units that allow visitation privileges for 20 hours during the day or night.

2. Nurses' attitudes toward open visitation--refers to positive or negative feelings or thoughts toward open visitation policies. Nurses' attitudes were measured by Newkirk's Visitation Questionnaire (Appendix A). The scores range from 25-125. The higher the number, the more positive a nurse's attitude toward open visitation.

3. Critical care nurses--refers to registered nurses who take care of critically ill patients in a critical care setting.

4. Age--refers to age ranges of 10 year increments and was obtained through the demographic questionnaire.

5. Educational level--was obtained from the demographic questionnaire and refers to the nurse's basic nursing education: (a) associate degree, (b) diploma, (c) bachelor's degree, (d) master's degree, and (e) doctorate degree.

6. Shift worked--refers to the days of the week and the hours of the day the nurse gives direct nursing care to

critically ill patients. This was obtained from the demographic questionnaire.

7. Years of critical care experience--refers to the number of years the nurse has been working in a critical care setting. This was obtained from the demographic questionnaire.

8. Type of room in the unit--refers to the physical setup of the critical care unit's patient beds. Private room means one bed in a room, with a door. Semi-private room means two beds in one room separated by a curtain. Pods means three or more beds in one large room, also separated by curtains. Mixture means some of the rooms are private and some are pods. This was obtained from the demographic questionnaire.

9. Gender--refers to a male or female nurse and was obtained from the demographic questionnaire.

10. Unit worked on--refers to the type of patients the nurses work with and was obtained from the demographic questionnaire.

(a) Coronary care unit/interventional cardiology (CCU/ICCU)--takes care of cardiology patients with medical problems, i.e., myocardial infarction, unstable angina, congestive heart failure.

(b) Cardiothoracic surgery or transplant unit (CTICU)--takes care of open heart surgery patients and heart transplant patients.

(c) Neurosurgical unit (NICU)--takes care of neurosurgery patients and head injured patients.

(d) Medical unit (MICU)--takes care of any type of patient except surgery patients.

(e) Trauma unit (TICU)--takes care of motor vehicle accident, disaster, or accident patients who have received traumatic injuries.

(f) Liver transplant unit (Liver ICU)--cares for liver transplant surgery patients, rejection of transplanted organ, and overflow patients.

(g) Vascular unit (VASC ICU)--takes care of patients with peripheral vascular disorders and patients who have had surgical repairs, i.e., Triple A repair, femoropopliteal bypass surgery.

(h) Bone marrow transplant unit (BMTU)--takes care of cancer patients and immuno-suppressed patients.

11. Past experience visiting an ill family member--the nurse who answers yes to this question on the demographic questionnaire has had a past experience visiting a family member in a critical care unit.

12. Patient/nurse ratio--was obtained from the demographic questionnaire and refers to the number of patients that one nurse takes care of.

13. Current practice of open visitation--was obtained from the demographic questionnaire and refers to whether or not the nurse's unit is practicing open visitation as defined by this study.

## Limitations

The limitations of the study were:

1. The small convenience sample limits the generalizability of the findings.

2. No control was made for the subjects' experience with various types of visitation policies.

3. The questionnaire had not been used previously. Therefore, only content validity has been established.

## Summary

Visitation in the intensive care environment continues to be an issue for critical care nurses. Most units have visitation policies setting limits on the number of visits, length of time of visits, number of visitors, and minimum age of visitors. There is little consensus on what the limits should be.

Ajzen and Fishbein's (1980) theory asserts that external variables may influence a person's attitude toward a behavior. A nurse's attitude (either positive or negative) toward open visitation comes from his or her beliefs that open visitation leads to certain desirable or undesirable outcomes. It is important to determine variables that are related to nurses' attitudes toward open visitation. These variables may help influence nurses in moving forward and changing their policies.

Nursing journals have been publishing research studies about open visitation. The value of family visitation is described in the literature as essential to the emotional well-being of the patients (Halm & Titler, 1990). Despite the many documented benefits of visitation by family members, critical care nurses appear to have made only minimal efforts to change policies.

# CHAPTER II

# REVIEW OF THE LITERATURE

Critical care units in hospitals across the country vary widely in their policies and practices of open visitation. This chapter presents the review of information found related to those policies and practices and the research that has been conducted on this topic. The following topics will be discussed: visitation practices/policies; physiologic responses of critical care patients to visitation; perceptions of patients, families, and care providers to critical care visitation; and critical care unit responses to research on visitation.

## Visitation Practices/Policies

The journal, Critical Care Nurse, published a survey on "What is your unit's policy for families visiting patients? Do you feel it is appropriate?" (Villaire, 1993). The responses varied greatly from strict visitation to more liberal visitation. It is clear that visitation policy changes are in their infancy and that nurses are still very reluctant to change their policies despite research that has indicated the need for change.

Research studies began to focus on visitation policies in 1982 when Kirchhoff conducted a national survey of hospital visiting policies for myocardial infarction (MI) patients. The purpose of the study was to determine the various visiting policies imposed on critically ill MI patients. She received an 86% (202 of 235) response rate from the institutions surveyed. The larger hospitals denoted scheduled times for visitation, while the smaller hospitals indicated hourly visits. Both groups seemed to have "every 2 hours" as standard visiting times. She found that the duration of visit, number of visitors, and type of visitors varied significantly and tended to be related to both unit variables and institutional variables. Nurses rated the importance of restricting visiting times as significant at the $p = .05$ level, which suggested that nurses both value and regularly impose the restrictions. Master's prepared nurses rated this restriction lower than baccalaureate nurses, while diploma nurses and associate degree nurses rated the importance of restrictions the highest.

Stockdale and Hughes (1988) conducted a study similar to Kirchhoff's with the purpose of examining the current visiting policies, the nurses' satisfaction with those policies, the ascribed patients' satisfaction with those

policies, the ascribed families' satisfaction with those policies, and the ideal visitation policy. The results showed that most critical care units currently have a visitation policy that sets limits on the number of visits, the length of time per visit, the number of visitors, and the minimum age of visitors. Yet these authors found little consensus on what these limits should be. Respondents of units with more liberal visitation policies tended to believe that patients and their families were more satisfied with the policy than respondents in units with conservative visiting policies. Stockdale and Hughes' (1988) summary stated, "justification for strict visitor restrictions is unclear, if there is any" (p. 48).

Since the time of Kirchhoff's (1982) study, visitation practices in ICUs have not changed. Hopping, Sickbert, and Ruth (1992) conducted a descriptive survey to identify factors related to the setting and control of visiting policies in coronary care units. A total of 52 hospitals was included in this study. A questionnaire containing eight questions was mailed to the head nurse in each of the 52 hospitals. The response rate was 61%. A similar finding to Kirchhoff's study was that the educational level of the nurses was inversely associated with the importance of restricting visitors. Non-teaching hospitals were more likely to restrict visiting, while teaching hospitals were

more likely to allow visits of more than 15 minutes and to allow more frequent visits. The belief that limitation of visiting induces patient rest/reduces stress accounted for 45% of the rationales given for restricting visits by both teaching and non-teaching hospitals. Hopping et al. (1992) pointed out that "nurses must free themselves from the shackles of tradition and authority so that they can enter into the lives of those with whom they are entrusted to assist them in attaining the quality of life they choose" (p. 15).

Chronic friction between nurses, patients, and family members regarding visitation practices led the coronary care unit staff, in one institution, to survey patients, families, and nurses to find acceptable alternatives (Brannon, Brady, & Gailey, 1990). Their results showed no consistency among the three groups with respect to time, frequency, and length of visitation. The majority of the staff wanted to maintain the status quo, while 86% of the patients and family members preferred to negotiate the terms of visitation with caregivers. The staff decided to try contracting with family members for a 1-month period, however, they did not evaluate until the end of 3 months. Their evaluations led to acceptance of negotiating terms of visitation with patients and families, since 100% of

patients and families, and 95% of nurses liked the contracting policy.

Moseley and Jones (1991) discussed the "how to's" about contracting for visiting with families. They discussed the contract itself, the identification of one contact person, increasing family involvement, structuring patient care, focusing on family needs, and changing the environment so that it is consistent with contracting for visitation hours.

Dracup and Bryan-Brown (1992) responded to the continued restrictive visitation in intensive care units (ICU) by discussing four common myths among critical care nurses and physicians that are inhibiting the liberalization of ICU visiting policies. The first myth is that families do not need to be involved in the acute phase of an illness. They negate this fact by reminding readers of the decreasing length of stay and of patients being sent home early and asserting that patients are not necessarily fully recovered. Nurses must include families in the disease process and treatment plan from the beginning because families are functioning as caregivers when the patient returns home. The second myth described by Dracup and Bryan-Brown is that nurses do not know what families need in the acute care setting. These authors affirmed that studies have been done about what families need most,

and that what they need is information, explanations, and notification of changes. The third myth described is that family visits are upsetting to patients. Researchers have documented that the vast majority of interruptions are caused by nurses and physicians, not family members. Lastly, there is a myth that ICU nurses have a lot of time to assess family functioning and provide education and emotional support. Dracup and Bryan-Brown elucidated the difficulty experienced by nurses in providing all the care required by critically ill patients and giving the time to families that they need. They proposed that nurses/ physicians accept these as myths and change their practices.

Marsden (1992) explored the issue of open visitation in the ICUs as an obligation and not an option. She discussed the fact that the code for nurses states that the primary commitment of the nurse is to the "health, welfare, and safety of the patient" (p. 115). She continued by explaining that if the presence of the family is beneficial to patients by promoting their health and welfare, then the nurse is obliged to facilitate that presence. She implied that interaction with families humanizes the critical care environment and diminishes the sterility of it. Therefore, nurses have a moral obligation to the patient's family and a duty to increase family access to the ICU.

Dracup (1993) discussed issues in helping patients and families cope. She discussed interventions that may help allay family members' anxieties. One of those interventions was open visitation or contracting for visitation. Historical perspectives were discussed and the progress that has been made in pediatric units, but not in adult critical care units. Some other strategies mentioned were to identify a consistent contact person, set a telephone schedule, use primary nursing, provide written information, and clarify perceptions on patient progress.

## Physiologic Responses of Critical Care Patients to Visitation

Nurses continue to assert that family visitation is stress-provoking to critically ill patients. Nurses have contended that visits interfere with patients' rest, despite studies that refute these assertions.

One of the early studies done was that of Brown (1976). She conducted a study to determine whether or not family visits were a stress-producing activity for patients in coronary care. The sample consisted of 50 patients in a small community hospital. All patients in the study had a suspected or confirmed acute myocardial infarction. The researcher tried to document three family visits of 10-minute intervals, but her data decreased with each visit.

No rationale was given for the decrease in data documented. She found a significant mean increase in blood pressure during and after family visits. Brown (1976) concluded that a family visiting period of 10 minutes every hour creates a stressful effect on the blood pressure and heart rates of cardiac patients and they are not conducive to good patient management.

In 1982, Fuller and Foster replicated a portion of Brown's study with a sample of SICU patients, to compare the effects of family/friend visits versus nurse-patient interactions on heart rate, blood pressure, and vocal stress of SICU patients. The sample consisted of 28 subjects. The results showed that family/friend visits were no more stress-provoking than were routine nurse/patient interactions, and that 15-minute visits were no more provoking than 5- to 10-minute periods. Their main point was that some interactions were stress-provoking and others stress-reducing.

Simpson and Shaver (1990) conducted a study on cardiovascular responses to family visits in coronary care unit (CCU) patients. The study sample consisted of 24 CCU patients. Simpson and Shaver found there was no significant difference in patients' stress levels when they were visited by their family as compared to an interview by the researchers. In fact, they found that the systolic

blood pressure (SBP) and diastolic blood pressure (DBP) were lower during the family visit than during the interview visits by 7 to 8 mmHg, and the heart rate was greater by 4 beats/minute.

Finally, in 1993, Kleman et al. conducted a study to examine physiologic changes in myocardial infarction patients in the cardiac intensive care unit (CICU) from previsit, to visit, to postvisit of a family member and the associations among patient preference for visits, patient view of the supportiveness of the visit, and physiologic changes during and after the visit. The sample size was 48. Overall, they found that the mean cardiovascular responses to the visit were not different from previsit, to visit, to postvisit. However, some patients were more physiologically reactive to the visits than others. Patients who preferred increased visits responded with increased cardiovascular responses from start to finish of the visit. However, the overall preference score was low, indicating that the patients wanted visitors but were not especially enthusiastic about them. Scores on the visit supportiveness scale were high, indicating patients viewed their visits quite positively. Their conclusions were that visiting in the CICU was not harmful; however, some patients may be at risk for physiologic changes and that it

might be helpful to ask patients about their visit preferences and to take these preferences into account.

## Perceptions of Patients, Families, and Care Providers to Critical Care Visitation

There are volumes of articles written on patient, family, and care providers' perceptions of visitation. This section will discuss the literature as it evolved through the years of 1978 to 1993.

Gardner and Stewart (1978) discussed the importance of staff and family interactions. They stated that these interactions may lead to decreased anxiety, increased reassurance, better cooperation, improved rapport, mutual understanding and empathy, and improved patient care. They continued by saying that the degree of staff-family involvement depends on a number of factors and one of those factors is staff attitude toward visitation. If the attitude is poor about visitation, the opportunity for staff and family interactions may decrease. They discussed ways to intervene with families in reducing their stress.

Breu and Dracup (1978) discussed eight needs of spouses who are going through the stages of anticipatory grief. The first of those needs was to be with the dying person. Responses from interviews with family members of critically ill coronary care unit patients prompted them to create a plan of care to meet these family members' needs.

The plan involved arranging flexible visiting hours agreed upon by staff and spouse, give explanations whenever the spouse is asked to leave the room, and to place a chair at the bedside for use during visits. They stated that these interventions meet the emotional needs of the patients and families and that nurses feel like they are contributing to meeting the family members needs.

Molter (1979) conducted a study on the needs of relatives of critically ill patients. She talked about the patient as being a member of a family unit and that it was essential to assess the patient's needs within a framework of total patient care. She interviewed 40 relatives of critically ill patients and asked them to respond to a 45-item "need" statement instrument, rating the importance of them on a scale of 1 to 4, with 4 being very important. The relatives rated the need to have hope as most important in the crisis period of the patients' admissions. Among all the needs, the need to visit any time was ranked as most important by half of the respondents. Molter pointed out that by recognizing needs of relatives and evaluating how they are being met, that only then will total patient care be accomplished.

Another study on needs of family members was done in 1984 by Daley. Daley's study was similar to Molter's,

except it identified needs of family members within the first 72 hours after the patient's admission. The most important needs identified in her study were the need for information and the need to relieve anxiety. The need to be with the patient was also ranked high, but not as high as the above two.

Stillwell (1984) utilized the eight need statements specific to visiting the hospitalized patient from Molter's instrument. She studied 30 family members. Again, the visiting needs of greatest importance were to see the patient frequently and to be able to visit the patient whenever the family member desired. The findings from this study suggest that visiting hours be "open" and flexible.

Leske (1986) replicated Molter's study with a few changes in the instrument ranking of need statements and adding an open-ended item to identify any new needs. The majority of the needs were rated similarly to Molter's findings, with a few differences. One of those differences related to visiting and having visiting hours changed for special conditions. She concluded by stating that the family members' responses to the patient's illness can affect the patient's recovery and that early detection and assistance with the families' needs are important nursing responsibilities.

In a study by Boykoff (1986), patients and families were asked to report their visitation needs. Among the statements made by patients and families, that of nurses explaining the patient's condition to visitors was given the highest mean score. Knowing the visitation schedule was more important to family members than patients and nurses, and regulating how many visitors could visit was more important to patients and family members than the times they could visit. Generally, patients preferred to keep visitation periods to the 10-minute intervals hourly, while family members were divided in their responses.

Lynn-McHale and Bellinger (1988) conducted a study to gather information about the level of need satisfaction as perceived by family members, and the extent to which critical care nurses are able to accurately identify those areas of high and low family member satisfaction. The sample consisted of 92 critical care nurses and 52 family members. Family members were more satisfied than dissatisfied for 43 of the 46 needs. Critical care nurses were moderately accurate at identifying the extent to which family members perceive their needs as being met.

Hickey (1988) conducted a study on critical care nurses' attitudes toward families of critically ill patients. Two hundred and twenty-six nurses participated. She sought to answer three questions; however, only the

question pertaining to visitation will be addressed. Critical care nurses' responses showed a wide variation in their interpretation and enforcement of visiting rules. Only 39% of the nurses agreed that official visiting policies were followed in their unit. Out of the 18 units studied, 70 "official" policies were found. There was also little consensus among nurses as to what they felt the visiting policy should be.

Halm and Titler (1990) conducted a study for the purpose of determining the importance and satisfaction of visiting needs of family members of critically ill patients, as perceived by patients, family members, nurses, and physicians. The second purpose of the study was to determine the attitudes of these groups toward less restricted visitation. The sample consisted of 77 patients, 58 family members, 81 nurses, and 8 physicians. Again, only 3.7% of nurses agreed to adhering to official visiting policies, while physicians perceived that family members visit at random or freely. In response to each group's preference toward visitation, 45% of family members desired an unlimited number of visits, 65% of patients preferred two, four, or six visits per day, and 48% of the nurses wanted six to eight visits per day. Fifty-two percent of nurses wanted visits limited to 15-30 minutes, and most patients (62%) wanted visits of 15-30 minutes.

Unlimited visiting was perceived by nurses as not very important to the recovery of critically ill patients. Some reported that more frequent visitation would be detrimental to the patient's health. Another attitude among the nurses was that restricting visits would provide rest for the patient. Nurses and physicians perceived that liberal visitation would interfere with providing required nursing care.

Simpson (1991) carried out a study on patient perceptions of visits in an surgical intensive care unit (SICU) as compared to a cardiac care unit (CCU). She studied 50 patients in each group. Simpson found that patients in both units evaluated the visits as helpful; however, some significant differences did exist between the two patient subgroups. First, the older the patient, the greater the length of visit preferred (particularly in CCU patients). Second, the lower the socioeconomic status, the greater the length of visits preferred in both groups. SICU patients preferred that visits be any time, since they never knew what the time of day was anyway. The more severely ill the patients perceived themselves to be, the greater number of visitors they wanted. CCU patients varied in their responses to length of time, which indicates the need to individualize visit length according to patient preference. This study suggested that there are

several dimensions to patient preference for visits and that they should be carefully considered in changing any current visitation policy.

Simpson conducted another study in 1993 on visit preferences of middle-aged versus older critically ill patients. She found that both groups wanted to limit the number of visitors to two or three persons per visit. However, the older patients preferred to limit visits to once per day and wanted the visit length to be unlimited. Coronary care unit older patients wanted to limit visits to two times a day rather than the once a day preferences of the older surgical unit patients.

Nurses' beliefs and attitudes toward visiting in critical care units were studied by Kirchhoff, Pugh, Calame, and Reynolds (1993). Their objective was to assess nurses' beliefs and attitudes about the effects of visiting on patients, staff, and family. They interviewed nurses in two different states for a total sample size of 70 nurses. Nurses believed that the consequences of visiting was more positive for the patient from a psychological perspective than a physiological perspective but that the effects might differ depending on the patient, the visitor, and the circumstance. Nurses reported that visiting the patient had negative consequences for families, because they became exhausted, and that visiting was disruptive to nursing

care. Nurses' attitudes about the effects of visits on nursing staff were more negative than their attitudes about the effects on patient and family.

As the literature shows, visitation preferences among patients, families, and nurses vary tremendously. Patients vary according to age and perceived severity of illness. Families vary according to needs, with the main need being for information. Nurses vary in enforcement of visiting times according to perceived stability of patient, interactions of patient and family, and the effects on patient vital signs, anxiety, or stress. Nurses also vary in responses according to perceived interference by families in getting work done and interference in patient rest.

## Reactions/Responses to Research on Visitation

Heater (1985) discussed the history of pediatric and maternity nursing and how it has evolved and changed through the years. She discussed the myth that patients in the ICU are restricted in having visitors so they can rest. She talked about a study by Walker where he investigated whether or not these patients were getting rest. Heater reported that Walker found health care workers to be the greatest source of interruptions to rest and not the family. Heater urged nurses to learn from the history of

pediatric and maternity units and to change practices by altering visiting times.

Henneman, McKenzie, and Dewa (1992) conducted a study to determine the effectiveness of interventions in meeting information needs of families of critically ill patients. They found that flexible visiting times and information booklets improved family satisfaction tremendously.

It is only through the efforts of trial and error that changes can be made. The research that has been done is astounding. It is clear that efforts must continue to focus on why ICU visitation has not changed and why policies remain so diverse. Hopefully, examining nurses' attitudes toward open visitation in relation to certain demographic variables will help to discover one more piece to this evolving puzzle.

# CHAPTER III

# PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

A survey design was used in this study. The data were collected by self-report questionnaires from a sample of critical care nurses. The problem of the study was an investigation of critical care nurses' attitudes about open visitation in the intensive care environment in relation to certain demographic variables. The remainder of this chapter presents the setting, population and sample, protection of human subjects, instrument, data collection, and treatment of data.

## Setting

This study was conducted in a non-profit teaching hospital in a large metropolitan area in Texas. This facility has a 1,500-bed capacity, but rarely fills to this capacity. There are eight intensive care units in this facility, each with a different number of beds per unit, ranging from 8 to 15 beds. Each unit has its own staff of professional nurses and its own set of policies regarding visitation. Some units have strict visitation policies and

some have open visitation. The questionnaires were mailed to the critical care nurses' homes to be completed in the settings of their choice.

## Population and Sample

The target population was critical care nurses. The accessible population was critical care nurses at one hospital in Texas. An individual was an eligible subject if they were listed as a critical care nurse working at the hospital. The sampling method was non-probability convenience sampling. A list of names was obtained from the critical care nursing administrator at this hospital. There were 242 nurses working in critical care. A total of 129 nurses returned questionnaires.

## Protection of Human Subjects

Permission to conduct this study was obtained from the Institutional Review Board in the agency in which the study was conducted (Appendix B) and from the graduate school of Texas Woman's University in Denton, Texas (Appendix C). This study was consistent with Category I (minimal, or no risk) according to the Human Subjects Review Committee and was considered exempt (Appendix D). No review was needed as subjects were not identified or put at risk, they were not minors, and the research did not involve sensitive aspects of behavior.

The study participants were informed on the questionnaire that return and completion of the questionnaire was construed as their consent to participate in the research study. The instructions (Appendix E) stated that participants should not put their names or other identifying information on the questionnaires, so that anonymity was maintained.

## Instrument

The instruments used in this study were developed by the researcher. After a careful review of the literature, a demographic questionnaire and an attitude questionnaire were developed. Face validity of the questionnaire was accomplished by sending it to five expert nurses. Two of the experts were directly involved in critical care nursing and the other three had doctorates in nursing and were closely involved in research projects. The experts were given an explanation of the purpose of the study, in writing, and were asked to examine the tool for comprehensiveness and for clarity. They were asked to make comments directly on the tool and return it to the researcher. After receiving the tools and reviewing the comments, changes were made in the tool to reflect the suggestions of the experts. Coefficient alpha was calculated for reliability and factor analysis was examined

for construct validity estimation after the data were collected from subjects. Copies of the questionnaires can be found in Appendixes A and F.

The Newkirk's Visitation Questionnaire was sent to five additional nurse experts to have them score the attitude of each of the 25 responses as reflecting a positive or negative response towards open visitation. Three of the experts were directly involved in critical care nursing, one was a nursing educator, and the last one had a doctorate in nursing. This step helped to aid in scoring the attitude items and establishing content validity for the tool.

The Newkirk Visitation Questionnaire consists of 25 responses. The experts identified the following as positive statements toward open visitation: numbers 1, 2, 3, 5, 6, 7, 10, 11, 12, 13, 14, 16, 17, 21, 22, and 23. They identified numbers 4, 8, 9, 15, 18, 19, 20, 24, and 25 as negative statements toward open visitation. Scoring was then established by assigning positive statement items a number from 1 to 5, with strongly agree receiving 5 points and strongly disagree receiving 1 point, then negative statement items were reverse scored, with strongly agree receiving 1 point and strongly disagree receiving 5 points. Scores on the scale range from a minimum of 25 to a maximum

of 125. The higher the score, the more positive is the individual's attitude toward open visitation.

## Data Collection

Self-report questionnaires were used to collect the data. The first questionnaire gathered demographic data (Appendix F) and the second questionnaire, the Newkirk's Visitation Questionnaire (Appendix A), gathered data on nurses' attitudes toward family visitation in critical care units. The questionnaires included a pre-addressed and stamped envelope for easy return to the researcher. The questionnaires were mailed to the subjects by the researcher, along with a cover letter explaining the study and assuring anonymity. The data collection took 1 month.

## Treatment of Data

The data were analyzed using several types of statistical tests. In assessing the relatedness of nurses' attitudes with individual demographic items, several different tests were used, based on the nature of the particular demographic variable. First, frequencies were calculated for the demographic data and attitudes toward visitation. Second, a one-way analysis of variance on attitudes was examined on the following variables: age, educational level, shift worked, years of critical care experience, types of rooms in the unit where critical care

nurses work, type of units where the nurses work, and patient/nurse ratio on the unit where the nurses work. Third, a *t*-test was performed on attitudes according to the following dichotomous variables: male versus female, visited or have not visited a family member in the ICU, and open visitation versus closed visitation practices. Fourth, a multiple regression of attitude with the entire set of demographic variables was done to determine which variables were most predictive of attitude. Lastly, as discussed previously, a factor analysis and coefficient alpha reliability analysis were used to estimate validity and reliability of the tool.

# CHAPTER IV

# ANALYSIS OF DATA

Demographic variables were studied in regard to nurses' attitudes toward open visitation in critical care units to determine which variables were predictive of attitude. This chapter will review the description of the sample, the findings associated with each research question, and a summary of the findings.

## Description of Sample

Questionnaires were mailed to 242 nurses. A total of 129 subjects returned questionnaires, yielding a 53% return rate.

Table 1 contains the demographic characteristics of the subjects according to frequencies and percentages. The subjects ranged in age from 20 to 59. The most common age range was 30 to 39 years; the second most common age range was 20 to 29 years. The most common educational level for nurses (81 or 62.9%) was a bachelor's degree. Twenty-six (20.2%) nurses held an associate degree, 12 (9.3%) nurses held a diploma, and 9 (7%) held a master's degree. All shifts were represented in the sample, with the most frequent shift being Monday through Friday, 7 a.m. to 7

p.m. (39 or 30.2%). Monday through Friday, 7 p.m. to 7 a.m. was the second most common shift worked (36 or 27.9%). Forty-eight percent of the subjects reported 1 to 5 years of experience, and 29% of the sample reported 6 to 10 years of experience. The most frequent types of rooms in the unit were pods, at 52%, and then private rooms, at 49%. Eighty-seven (67%) of the respondents reported that they had visited an ill family member. The majority of subjects (83.7%) were females.

There was an equal representation of nurses from seven of the eight units surveyed. The number of nurses from the trauma intensive care unit (TICU) reflected a combination of nurses from the TICU and the neurosurgical intensive care unit (NICU) that occurred during data collection. Three subjects did not check a unit listed on the questionnaire, but listed themselves as float nurses who worked in all the units.

Eighty-four percent (109) of the subjects listed 2:1 as the patient/nurse ratio practiced in their unit. Seventy-seven (59.7%) of the subjects responding were not currently practicing open visitation on their units. Nurses working on the coronary care unit/interventional cardiology unit and on the bone marrow transplant unit indicated that open visitation was being used on their units.

Table 1

Demographic Characteristics of Subjects

| Variable | Frequency | Percent |
|---|---|---|
| Age: | | |
| 20 to 29 | 43 | 33.3 |
| 30 to 39 | 55 | 42.6 |
| 40 to 49 | 27 | 20.9 |
| 50 to 59 | 4 | 3.1 |
| Education: | | |
| Associate degree | 26 | 20.2 |
| Diploma | 12 | 9.3 |
| Bachelor's degree | 81 | 62.8 |
| Master's degree | 9 | 7.0 |
| Missing data | 1 | .8 |
| Shift: | | |
| 7am to 3pm | 9 | 7.0 |
| 3pm to 11pm | 4 | 3.1 |
| 7am to 7pm TDA* | 25 | 19.4 |
| 7am to 7pm M-F | 39 | 30.2 |
| 7pm to 7am TDA* | 12 | 9.3 |
| 7pm to 7am M-F | 36 | 27.9 |
| Other | 4 | 3.1 |
| Years of Experience: | | |
| Less than 1 | 13 | 10.1 |
| 1 to 5 | 48 | 37.2 |
| 6 to 10 | 29 | 22.5 |
| 11 to 15 | 21 | 16.3 |
| More than 15 | 18 | 14.0 |
| Rooms: | | |
| Private | 49 | 38.0 |
| Pods | 52 | 40.3 |
| Mixture | 28 | 21.7 |
| Has Visited an Ill Family Member: | | |
| Yes | 87 | 67.4 |
| No | 42 | 32.6 |

(table continues)

| Variable | Frequency | Percent |
|---|---|---|
| Gender: | | |
| Male | 21 | 16.3 |
| Female | 108 | 83.7 |
| Unit Worked on: | | |
| CCU/ICCU | 27 | 20.9 |
| CTICU | 18 | 14.0 |
| MICU | 24 | 18.6 |
| TICU | 21 | 16.3 |
| Liver ICU | 10 | 7.8 |
| VASC ICU | 7 | 5.4 |
| BMTU | 19 | 14.7 |
| Missing | 3 | 2.3 |
| Ratio: | | |
| 2:1 | 109 | 84.5 |
| 3:1 | 19 | 14.7 |
| Other | 1 | .8 |
| Current Practice of Open Visitation: | | |
| Yes | 52 | 40.3 |
| No | 77 | 59.7 |

* = two-day alternative

## Findings

The findings of this study are presented in this section in relation to the specific research questions.

1. What are nurses' attitudes towards open visitation in the intensive care units, as measured by the Newkirk Visitation Questionnaire?

Attitude scores of the sample ranged from 46 to 120, with a mean attitude score of 83.28, a median attitude

score of 84, and a mode attitude score of 90. The possible score range on the Newkirk Visitation Questionnaire was from 25 to 125, each item receives a score of 1 to 5. The higher the score the more positive is the attitude toward open visitation; the lower the score the more negative is the attitude toward open visitation. The negative questions were reverse scored, as stated previously in Chapter III. The mean score for each question on the Newkirk Visitation Questionnaire is listed in Table 2.

2. Is there a difference in nurses' attitudes towards open visitation in critical care according to: (a) age, (b) educational level, (c) shift worked, (d) years of critical care experience, (e) types of rooms in the unit where critical care nurses work, (f) gender, (g) types of units where the nurses work, (h) past experience visiting an ill family member in critical care units, (i) patient/ nurse ratio on the unit where the nurses work, (j) visitation policy (open versus closed) on the units where the nurses worked?

Independent *t*-tests were calculated on the dichotomous variables gender, past experience visiting a critically ill family member, and current practice of open visitation. There were no significant differences in attitudes toward

Table 2

Mean Response to Attitude Questions on the

Newkirk Visitation Questionnaire

| Question | Mean Score |
|---|---|
| Open visitation is only beneficial for medical ICU patients. | 4.23* |
| Open visitation allows family members to continue to work and visit after work. | 4.10 |
| Open visitation should only be for patients who are terminally ill. | 3.93* |
| Dealing with the families of critically ill patients is rewarding and allows the nurse to give holistic patient care. | 3.89 |
| Following an open visitation policy is harmful to patient outcomes. | 3.85* |
| Open visitation contributes to better communication between patient, family, and the health care team. | 3.81 |
| In an open visitation setting extra efforts are needed to maintain patient privacy, but it can be done. | 3.80 |
| Open visitation for family members is beneficial. | 3.76 |
| Open visitation promotes the emotional support patients need. | 3.74 |
| It is essential for nurses to enforce strict visiting times. | 3.72* |
| Open visitation in the critical care unit interferes with my nursing care because I have to slow down and answer questions. | 3.61* |
| Visitors help calm the patient's fears, uplift their spirits, and help them maintain a positive attitude. | 3.60 |
| Open visitation has positive effects on patients physiological functioning. | 3.49 |
| Open visitation allows nurses to practice their commitment to the "health, welfare, and safety of the patient". | 3.43 |

(table continues)

| Question | Mean Score |
|---|---|
| Open visitation facilitates the care of patients, as families are available to assist with care. | 3.20 |
| Allowing open visitation of critically ill patients will speed the patient's recovery. | 3.12 |
| Open visiting is time consuming and interferes with nursing and physician rounds. | 3.08* |
| It does not matter what my peers think about open visitation, I will still allow open visitation. | 2.80 |
| Open visitation should be on a case by case basis. | 2.78* |
| Family members should be allowed to visit at any time. | 2.78 |
| Visiting a critically ill patient should be allowed anytime. | 2.74 |
| Open visitation contributes to increased congestion and confusion on the unit. | 2.67* |
| Open visitation could be frustrating for family members who might feel obligated to be there at all times. | 2.56* |
| Children of all ages should be allowed to visit critically ill patients at any time, if given adequate explanation of what they will see and how to act. | 2.35 |
| If my loved one were in an ICU I would expect open visitation because I am a nurse, regardless of rules. | 2.21 |

* indicates a reverse scored item

open visitation based on gender or past experience visiting an ill family member. There was, however, a significant difference in the nurses' attitudes toward open visitation for subjects who worked on units practicing open visitation. Nurses' attitudes were significantly ($t$ = 5.98, $df$ = 127, $p$ = < .001) more positive towards open visitation if they worked on those units that were currently practicing open visitation.

One-way analysis of variance (ANOVA) was performed to examine nurses' attitudes towards open visitation in regard to age, educational level, shift worked, years of critical care experience, type of rooms in the unit worked, type of unit where the nurses work, and patient/nurse ratio. There was no significant difference in nurses' attitudes towards open visitation according to age, educational level, shift worked, or type of unit where the nurses worked. A significant difference was found in nurses' attitudes according to years of critical care experience, types of rooms in the unit worked, and patient/nurse ratio. Therefore, a post-hoc Tukey was performed to determine exactly which groups were significantly different on these variables.

Based on years of critical care experience, one way ANOVA indicated a significant difference ($F$ = 4.46, $df$ = 4, $p$ = .002) in nurses' attitudes towards open visitation.

When further analyzed by post-hoc Tukey, two groups emerged as those making the significant difference. Nurses with 6 to 10 years of experience and nurses with 11 to 15 years of experience were significantly more positive in their attitudes (91.97 and 89.33) toward open visitation than the other groups. Table 3 lists the ANOVA analysis for open visitation attitude and years of critical care experience.

Table 3

Open Visitation Attitude and Years of Critical Care Experience

| Source | df | Sum of squares | Mean squares | F-ratio | p-value |
|---|---|---|---|---|---|
| Between groups | 4 | 5024.4728 | 1256.1182 | 4.4630 | .0021 |
| Within groups | 124 | 34899.9148 | 281.4509 | | |
| Total | 128 | 39924.3876 | | | |

One-way ANOVA performed on type of room in the units worked indicated a significant difference in the nurses' attitudes toward open visitation in regard to the types of rooms in the units where the nurses worked ($F = 21.27$, $df = 2$, $p = .001$). Again, a post-hoc Tukey was done to determine the source of the significant difference. Nurses' attitudes were more positive in units with private rooms (92.80) and in units with a mixture (85.71) of

private and pods (4 to 1 room) than the attitudes of nurses working in units with only pods (73.02). Table 4 lists open visitation attitude and the type of room in the units where the nurses worked.

Lastly, one-way ANOVA indicated a significant difference ($F$ = 5.28, $df$ = 2, $p$ = .006) in nurses' attitudes towards open visitation according to patient/nurse ratio on the units where the nurses worked. Post-hoc Tukey was again examined to determine that the significant difference in attitudes was found in the group of nurses who practiced the 3:1 patient/nurse ratio. The mean attitude in this group was 93.74 as compared to the 2:1 patient/nurse ratio (81.24). Table 5 lists open visitation attitude and patient/nurse ratio.

Table 4

Open Visitation Attitude and Types of Rooms in the Unit Worked

| Source | df | sum of squares | mean squares | F-ratio | p-value |
|---|---|---|---|---|---|
| Between groups | 2 | 10077.7334 | 5038.8667 | 21.2720 | .0000 |
| Within groups | 126 | 29846.6542 | 236.8782 | | |
| Total | 128 | 39924.3876 | | | |

Table 5

Open Visitation Attitude and the Patient/Nurse Ratio on the Unit Worked

| Source | df | Sum of squares | Mean squares | F-ratio | p-value |
|---|---|---|---|---|---|
| Between groups | 2 | 3090.3915 | 1545.1957 | 5.2857 | .0062 |
| Within groups | 126 | 36833.9961 | 292.3333 | | |
| Total | 128 | 39924.3876 | | | |

3. Which of the following variables are most predictive of nurses' attitudes towards open visitation: (a) age, (b) educational level, (c) shift worked, (d) years of critical care experience, (e) types of rooms in the unit where the critical care nurses work, (f) gender, (g) types of units where the nurses work, (h) past experience visiting an ill family member in critical care units, (i) patient/nurse ratio on the unit where the nurses work, and (j) visitation policy (open versus closed) on the unit where the nurses worked?

Multiple regression was performed in order to determine which variables were most predictive of nurses' attitudes towards open visitation. Two variables emerged in predicting attitude: current practice of open visitation and shift worked. Together, these two variables

explained 27% of the variance in the attitude scores. No other variables entered the equation. Table 6 lists the beta values, R squared values, and the p value for each variable.

Table 6

Multiple Regression of Attitude with Study Variables

| Variable | Beta Value | R Square | p-value |
|---|---|---|---|
| Open Visitation | -.468997 | .21996 | .0000 |
| Shift Worked | -.229619 | .27045 | .0038 |

## Additional Findings

In order to estimate reliability and validity for the Newkirk's Visitation Questionnaire, two tests were performed: coefficient alpha and factor analysis. The coefficient alpha for the questionnaire was .9321. Factor analysis revealed the instrument measures one concept.

## Summary of Findings

In summary, 129 subjects participated by returning questionnaires. The mean attitude score of the sample was 83.28, yielding a moderately positive attitude towards open visitation.

Nurses working on units practicing open visitation had a significantly ($p$ = < .001) more positive attitude toward open visitation in critical care units than those nurses not working on a unit practicing open visitation. Nurses with 6 to 10 years of critical care experience and 11 to 15 years of critical care experience were significantly ($p$ = < .0021) more positive in their attitudes toward open visitation than nurses with less experience than 6 years or with greater than 15 years of experience.

Nurses' attitudes were significantly ($p$ = < .0001) more positive towards open visitation when they worked in settings with private rooms or in units with a mixture of private and pod rooms. Nurses reporting a 3:1 patient/ nurse ratio on their units were more positive than nurses practicing in settings with other ratios ($p$ = < .0001).

The variable that was most predictive of nurses' attitudes towards open visitation was the one that concerned the current practice of open visitation, which explained 21% of the variance. The shift worked by the subjects contributed another 6% to the explained variance. Therefore, these two variables, combined, explained 27% of the variance in attitude toward open visitation.

Finally, coefficient alpha for the Newkirk's Visitation Questionnaire in the current sample was .9321.

Factor analysis revealed that the tool was measuring only one concept--attitudes towards open visitation.

# CHAPTER V

# SUMMARY OF THE STUDY

This chapter presents a summary of the findings, conclusions, and implications for nursing practice. Finally, recommendations for future studies are presented.

## Summary

Despite the many research studies that have been done on visitation practices, very few critical care units have changed their policies. Therefore, the problem of this study was to determine critical care nurses' attitudes towards open visitation and to determine if there was a difference in their attitudes in relation to selected demographic variables.

The theory of reasoned action by Ajzen and Fishbein (1980) was used to guide the study. The goal of the theory is to predict and understand an individual's behavior. The theorists purport that "attitudes are a function of beliefs" (Ajzen & Fishbein, 1980, p. 6). Therefore, if nurses believe allowing open visitation (a behavior) will lead to positive outcomes, then their attitudes will be positive. If nurses believe allowing open visitation will

lead to negative outcomes, then their attitudes will be negative.

The theory also suggests that external variables may influence one's beliefs or the relative importance one places on the attitude of normative consideration. Therefore, it was essential to examine external variables that might be influencing nurses' attitudes towards open visitation.

The following questions were asked to guide the current study:

1. What are nurses' attitudes towards open visitation in the intensive care units, as measured by the Newkirk's Visitation Questionnaire?

2. Is there a difference in nurses' attitudes towards open visitation in critical care according to: (a) age, (b) educational level, (c) shifts worked, (d) years of critical care experience, (e) types of rooms in the unit where critical care nurses work, (f) gender, (g) types of units where the nurses work, (h) past experience visiting an ill family member in critical care units, (i) patient/ nurse ratio on the unit where the nurses work, (j) visitation policy (open versus closed) on unit where the nurses worked?

3. Which of the following variables are most predictive of nurses' attitudes towards open visitation: (a) age, (b) educational level, (c) shift worked, (d) years of critical care experience, (e) types of rooms in the units where critical care nurses work, (f) gender, (g) types of units where the nurses work, (h) past experience visiting an ill family member in critical care units, (i) patient/nurse ratio on the unit where the nurses work, and (j) visitation policy (open versus closed) on the unit where the nurses worked?

Prior to the current study, a questionnaire was developed to collect demographic data and attitudes towards open visitation (Demographic Data and the Newkirk's Visitation Questionnaire). The researcher based the questions on a review of the current literature on open visitation policies and practices. The tools were examined for content validity by a panel of nursing experts prior to their use in the current study. The attitude questions on the Newkirk Visitation Questionnaire were scored by a panel of nursing experts as either a positive or a negative attitude question concerning open visitation.

A total of 242 subjects from one large metropolitan teaching hospital in Texas were mailed questionnaires to their homes. Responses were received from 129 subjects, yielding a 53% return rate. The sample consisted mainly of

females (80%). The majority had bachelor's degrees and ranged in age from 30 to 39 years. The most frequent shift worked was Monday through Friday, 7 a.m. to 7 p.m. Forty-eight percent of subjects had 1 to 5 years of experience. The most common type of room in the units was pods (52%). Sixty-seven percent of subjects had a prior history of visiting an ill family member in critical care. Seven of 8 units were represented in the sample. One unit had merged with another unit during the study.

The mean attitude score of the sample was 83.28, a moderately positive attitude towards open visitation. Independent t-tests performed on variables showed that nurses currently practicing open visitation had a significantly ($p$ = < .001) more positive attitude toward open visitation in critical care units than nurses on units not practicing open visitation.

One-way ANOVA indicated three variables that were significant in relation to nurses' attitudes: years of critical care experience, types of rooms in the unit, and patient/nurse ratio. Nurses with 6 to 10 and 11 to 15 years of critical care experience were significantly ($p$ = <. 0021) more positive in their attitudes towards open visitation than nurses with less experience or more experience. Nurses' attitudes were more positive when they worked where there were private rooms or a mixture of

private and pod rooms ($p$ = <. 0001). Finally, nurses indicating a 3:1 patient/nurse ratio ($p$ = .0062) were more positive than nurses practicing on units with other ratios.

In a test of multiple regression the variables that were most predictive in explaining attitude towards open visitation were current practice of open visitation and shift worked (27% of explained variance). No other variables entered the equation.

Lastly, the reliability of the Newkirk's Visitation Questionnaire was calculated at .93 for the sample. Factor analysis indicated that the instrument measures only one concept--attitude towards open visitation.

## Discussion of Findings

Overall, critical care nurses in the sample have a moderately positive attitude (mean attitude = 83.28) toward open visitation. Hopping et al. (1992) found that teaching hospitals were more likely to allow more frequent visits, but said nothing about the nurses' attitudes toward those visits. Four out of the 10 demographic variables being studied were found to have a significant relationship with the nurses' mean attitudes towards open visitation.

A finding in this study that is similar to that found by Stockdale and Hughes (1988) was that nurses currently practicing open visitation or more liberal visitation have

a more positive attitude toward these types of visitation policies. This lends support to trials of open visitation. If nurses who currently practice open visitation are positive about it and have few problems, why not try it?

Nurses having between 6 and 15 years of critical care experience tended to have a more positive attitude than those with more or less experience--a finding that had not been previously reported. This finding could be explained by surmising that the less experienced nurses are not as confident in their clinical skills and assessments and that the more experienced nurses are resistant to change. The less experienced nurses who are not as confident in their skills may feel pressure to perform when the family is around, thereby giving them a negative attitude toward family visitation; whereas, the older nurses have always believed that visitation times were set up to allow the patient to rest. Therefore, if the older nurses believe that restricted visitation leads to positive patient outcomes (rest), then their attitudes towards open visitation would be more negative, as found in the current study.

Again, as expected, nurses' attitudes towards open visitation in units where there are private patient rooms or a mixture of private and pod patient rooms were more positive than in units with pods only. Halm and Titler

(1990) reported that nurses and physicians felt that liberalized visiting would interfere with patients' privacy, but no study to date had listed the types of rooms in the units where the study was conducted as being a factor that influenced attitudes' toward visitation. This finding can be explained by deducing that in units with private rooms the issue of patient privacy and confidentiality would not be a concern and would not take extra effort on the part of the nurse to maintain patients' privacy. Whereas, in units with pods (4 patients to 1 room) extra efforts are required on the part of the nurse to assure patient confidentiality and privacy. Maintaining patient privacy and confidentiality can be very difficult if one has four different families visiting patients at one time. The curiosity of each of those families in seeing what else is going on in the room might be hard to control. Therefore, if a nurse believes that open visitation in rooms that are not private interferes with a patient's privacy and confidentiality, their attitudes toward open visitation is going to be more negative. Whereas, if a nurse with private patient rooms believes patient privacy and confidentiality are maintained, their attitude will be more positive toward open visitation.

Another factor that might make a difference in the nurses' attitudes towards open visitation and type of room

is noise level. Families who visit patients in private rooms can talk to patients without interfering with another patient's rest. Nurses might feel that the noise encountered in an open visitation environment where there are not private rooms might interfere with patients' rest and, therefore, their attitudes might be more negative. Again, in the literature reviewed, no study to date has reported noise as a factor in influencing nurses' attitudes towards open visitation practices.

Patient/nurse ratio of 3:1 was significant, as those nurses practicing 3:1 ratios had more positive attitudes towards open visitation than those with other ratios. It might be explained that these nurses have more work to do with three patients and enjoy the family being there to lend a hand when things get busy. This factor has not been reported in the previous literature.

Those variables that were most predictive of nurses' attitudes were current practice of open visitation and shift worked. Current practice of open visitation and shift worked explained 27% of the variance in attitudes toward open visitation; no other variables entered the equation at the .05 significance level. Although the shift worked was predictive of nurses' attitudes in the multiple regression equation, when one-way ANOVA was performed, no

significant difference could be found in their attitude scores according to shift worked.

To ensure that the results of this study were not based on the use of an unreliable tool, a coefficient alpha was calculated for reliability, and factor analysis was examined for construct validity estimation. The coefficient alpha was .93 which indicates a high reliability for internal consistency of the instrument. According to Nunnally (1978), one must test at least 5 to 10 people per question in order to determine reliability. There were 25 questions indicating a need for 125 people to test the questionnaire. A total of 129 subjects participated in the study. Therefore, the sample size was adequate to estimate reliability.

Content validity was determined by a panel of experts who agreed that the tool was measuring what it was supposed to measure. Factor analysis indicated that only one concept was being studied or measured. According to Polit and Hungler (1987), the validity of a tool is never proven per se, but is estimated by many different studies over time. The more evidence gathered that the tool is testing what it is supposed to, the more confidence one can have in the validity of the instrument.

## Conclusions and Implications

The present study affirmed that the current practice of open visitation leads nurses toward more positive attitudes towards open visitation in critical care units. This conclusion cannot be drawn about males, doctorally prepared nurses, or nurses in the 50 to 59 year age range, due to the limited representation of these groups in the study sample. Future research is needed to draw conclusions about these groups.

A second conclusion is that nurses with 6 to 15 years of experience are likely to have positive attitudes towards open visitation. There is nothing that can be done about years of experience; it evolves with time.

A third conclusion is that nurses are more positive towards open visitation in units that have private or mixture patient rooms. Extra efforts are not required on the part of the nurse to maintain privacy, confidentiality, or noise control.

Finally, it was concluded that a 3:1 patient/nurse ratio fostered more positive attitudes towards open visitation. It was unclear as to whether or not the attitudes were positive because the nurses had more work to do and needed the help from the families.

Three implications can be drawn from the present study. First, sharing of experiences by staff in units

where open visitation is practiced with staff where open visitation is not practiced may help to change the practice. It is only through the efforts of education from peers and institutional colleagues that practices may be changed. Nurses with positive attitudes must educate those have negative attitudes toward open visitation policies.

A second implication would be for administrators to consult nurses in designing units that enhance privacy and confidentiality, while maintaining noise control. Enhancing these types of units may move more nurses to change their practices about open visitation policies.

Lastly, there is probably no need to change patient/nurse ratios, but more research may be needed to verify the current study results and the researcher's proposition that nurses practicing a 3:1 patient/nurse ratio were more positive toward open visitation because they have more work to do and enjoy the help of the family in accomplishing that work.

Nurse administrators and managers should encourage a trial of open visitation in critical care units, keeping in mind the types of rooms in the unit. Managers should allocate resources to change the design of units in order to foster an open visitation setting. Studies have clearly shown what families need, what patients need, and what nurses need, but no study has determined the external

variables that are inhibiting changes toward accommodating those needs.

## Recommendation for Further Study

Based on the conclusions drawn, the following recommendations are made:

1. Replication of the current study with a larger sample size, and using a probability sampling method, such as a state-wide study, in order to generalize results to a variety of settings.

2. Studies examining the environmental effects (i.e., noise, traffic, privacy, nurses' ability to get work done) of open visitation in critical care units on nurses, patients, and families.

3. Studies examining the effects of open visitation on patient outcomes (i.e., length of stay, effectiveness of rest, and patient knowledge of teachings).

4. Studies examining qualitative data on rationale for and against open visitation gathered from nurses, physicians, patients, and families.

REFERENCES

Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall.

Boykoff, S. L. (1986). Visitation needs reported by patients with cardiac disease and their families. Heart & Lung, 15, 573-578.

Brannon, P., Brady, A., & Gailey, A. (1990). Visitation in the CCU: From "rules" to contracts. Critical Care Management Edition, 21, 64m-64p.

Breu, C., & Dracup, K. (1978). Helping spouses of critically ill patients. American Journal of Nursing, 78, 50-53.

Brown, A. (1976). Effect of family visits on the blood pressure and heart rate of patients in the coronary care unit. Heart & Lung, 5, 291-296.

Daley, L. (1984). The perceived immediate needs of families with relatives in the intensive care setting. Heart & Lung, 13, 231-237.

Dracup, K. (1993, August). Challenges in critical care nursing: Helping patients and families cope. Critical Care Nurse Supplement, pp. 4-13.

Dracup, K., & Bryan-Brown, C. W. (1992). An open door policy in ICU. American Journal of Critical Care, 1, 16-18.

Fuller, B. F., & Foster, G. M. (1982). The effects of family/friend visits vs. staff interaction on stress arousal of surgical intensive care patients. Heart & Lung, 11, 457-463.

Gardner, D., & Stewart, N. (1978). Staff involvement with families of patients in critical-care units. Heart & Lung, 7, 105-110.

Halm, M. A., & Titler, M. G. (1990). Appropriateness of critical care visitation: Perceptions of patients, families, nurses, and physicians. Journal of Nursing Quality Assurance, 5, 25-37.

Heater, B. S. (1985). Nursing responsibilities in changing visiting restrictions in the intensive care unit. Heart & Lung, 14, 181-186.

Henneman, E. A., McKenzie, J. B., & Dewa, C. S. (1992). An evaluation of interventions for meeting the information needs of families of critically ill patients. American Journal of Critical Care, 1, 85-93.

Hickey, M. (1988). Critical care nurses' role with families: A descriptive study. Heart & Lung, 17, 670-676.

Hopping, B. L., Sickbert, S. F., & Ruth, J. (1992). A study of factors associated with CCU visiting policies. Critical Care Nurse, 12, 8-15.

Kirchhoff, K. T. (1982). Visiting policies for patients with myocardial infarction: A national survey. Heart & Lung, 11, 571-576.

Kirchhoff, K. T., Pugh, E., Calame, R. M., & Reynolds, N. (1993). Nurses' beliefs and attitudes toward visiting in adult critical care settings. American Journal of Critical Care, 2, 238-245.

Kleman, M., Bickert, A., Karpinski, A., Wantz, D., Jacobsen, B., Lowery, B., & Menapace, F. (1993). Physiologic responses of coronary care patients to visiting. The Journal of Cardiovascular Nursing, 7, 52-62.

Leske, J. S. (1986). Needs of relatives of critically ill patients: A follow up. Heart & Lung, 15, 189-193.

Lynn-McHale, D. J., & Bellinger, A. (1988). Need satisfaction levels of family members of critical care patients and accuracy of nurses' perceptions. Heart & Lung, 17, 447-453.

Marsden, C. (1992). Family-centered critical care: An option or obligation? American Journal of Critical Care, 1, 115-117.

Molter, N. C. (1979). Needs of relatives of critically ill patients: A descriptive survey. Heart & Lung, 8, 332-339.

Moseley, M. J., & Jones, A. (1991). Contracting for visitation with families. Dimensions of Critical Care Nursing, 10, 364-371.

Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.

Polit, D. F., & Hungler, B. P. (1987). Nursing research: Principles and methods (3rd ed.). Philadelphia: J.B. Lippincott.

Simpson, T. (1991). Critical care patient's perceptions of visits. Heart & Lung, 20, 681-688.

Simpson, T. (1993). Visit preferences of middle-aged versus older critically ill patients. American Journal of Critical Care, 2, 339-346.

Simpson, T., & Shaver, J. (1990). Cardiovascular responses to family visits in coronary care unit patients. Heart & Lung, 19, 344-351.

Stillwell, S. B. (1984). Importance of visiting needs as perceived by family members of patients in the intensive care unit. Heart & Lung, 13, 238-242.

Stockdale, L. L., & Hughes, J. P. (1988). Critical care unit visiting policies: A survey. Focus on Critical Care, 15, 45-48.

Villaire, M. (Ed.). (1993). Open forum on "what is your unit's policy for families visiting patients? Do you feel it is appropriate? Critical Care Nurse, 13, 80-81.

# APPENDIX A

## Newkirk's Visitation Questionnaire

NEWKIRK'S VISITATION QUESTIONNAIRE

**COMPLETION AND RETURN OF THE QUESTIONNAIRE WILL BE CONSIDERED AS YOUR CONSENT TO PARTICIPATE IN THE STUDY.**

**PLEASE RESPOND TO THE STATEMENTS ON THE LEFT BY PLACING A CHECKMARK (✓) IN THE APPROPRIATE COLUMN ON THE RIGHT. PLEASE UTILIZE THE RATING SCALE LISTED BELOW:**

**SD = STRONGLY DISAGREE, D = DISAGREE, U = UNCERTAIN, A = AGREE, AND SA = STRONGLY AGREE**

| | | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1. | Open visitation for family members is beneficial. | ___ | ___ | ___ | ___ | ___ |
| 2. | Family members should be allowed to visit at any time. | ___ | ___ | ___ | ___ | ___ |
| 3. | Children of all ages should be allowed to visit critically ill patients at any time, if given adequate explanations of what they will see and how to act. | ___ | ___ | ___ | ___ | ___ |
| 4. | It is essential for nurses to enforce strict visiting times. | ___ | ___ | ___ | ___ | ___ |
| 5. | Visiting a critically ill patient should be allowed anytime. | ___ | ___ | ___ | ___ | ___ |
| 6. | Allowing open visitation of critically ill patients will speed the patients' recovery. | ___ | ___ | ___ | ___ | ___ |
| 7. | Visitors help calm the patients' fears, uplift their spirits, and and help them maintain a positive attitude. | ___ | ___ | ___ | ___ | ___ |
| 8. | Open visitation should only be for patients who are terminally ill. | ___ | ___ | ___ | ___ | ___ |
| 9. | Open visitation is only beneficial for medical ICU patients. | ___ | ___ | ___ | ___ | ___ |

**CONTINUE TO ANSWER THE QUESTIONS USING THE SAME RATING SCALE LISTED BELOW:**

**SD = STRONGLY DISAGREE, D = DISAGREE, U = UNCERTAIN, A = AGREE, AND SA = STRONGLY AGREE**

| | SD | D | U | A | SA |
|---|---|---|---|---|---|
| 10. Open visitation facilitates the care of patients, as families are available to assist with care. | ___ | ___ | ___ | ___ | ___ |
| 11. Dealing with the families of critically ill patients is rewarding and allows nurses to give holistic patient care. | ___ | ___ | ___ | ___ | ___ |
| 12. Open visitation promotes the emotional support patients need. | ___ | ___ | ___ | ___ | ___ |
| 13. In an open visitation setting extra efforts are needed to maintain patients' privacy, but it can be done. | ___ | ___ | ___ | ___ | ___ |
| 14. Open visitation allows family members to continue to work and visit after work. | ___ | ___ | ___ | ___ | ___ |
| 15. Open visitation should be on a case by case basis. | ___ | ___ | ___ | ___ | ___ |
| 16. Open visitation allows nurses to practice their commitment to the "health, welfare, and safety of the patient." | ___ | ___ | ___ | ___ | ___ |
| 17. Open visitation has positive effects on patients' physiological functioning. | ___ | ___ | ___ | ___ | ___ |
| 18. Open visitation contributes to increased congestion and confusion in the unit. | ___ | ___ | ___ | ___ | ___ |
| 19. Open visitation could be frustrating for family members who might feel obligated to be there at all times. | ___ | ___ | ___ | ___ | ___ |

**CONTINUE TO ANSWER THE QUESTIONS USING THE SAME RATING SCALE LISTED BELOW:**

**SD = STRONGLY DISAGREE, D = DISAGREE, U = UNCERTAIN, A = AGREE, AND SA = STRONGLY AGREE**

| | SD | D | U | A | SA |
|---|---|---|---|---|---|
| 20. Open visitation is time consuming and interferes with nursing and physician rounds. | ___ | ___ | ___ | ___ | ___ |
| 21. Open visitation contributes to better communication between patient, family, and the health care team. | ___ | ___ | ___ | ___ | ___ |
| 22. It does not matter what my peers think about open visitation, I will still allow open visitation. | ___ | ___ | ___ | ___ | ___ |
| 23. If my loved one were in an ICU I would expect open visitation because I am a nurse, regardless of rules. | ___ | ___ | ___ | ___ | ___ |
| 24. Following an open visitation policy is harmful to patient outcomes. | ___ | ___ | ___ | ___ | ___ |
| 25. Open visitation in the critical care unit interferes with my nursing care because I have to slow down and answer questions. | ___ | ___ | ___ | ___ | ___ |

THANK YOU FOR YOUR TIME IN FILLING OUT THIS QUESTIONNAIRE.

# APPENDIX B

## Permission from Institutional Review Board in Agency where Study was Conducted

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE_ _____

GRANTS TO Trixie Diane Newkirk

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem.

Nurses' Attitudes Toward Open Visitation
in Critical Care Units

The conditions mutually agreed upon are as follows:

1. The agency ~~(may)~~ (may not) be identified in the final report.

2. The names of consultative or administrative personnel in the agency ~~(may)~~ (may not) be identified in the final report.

3. The agency ~~(wants~~) (does not want) a conference with the student when the report is completed.

4. Other:

July 1, 1994
Date

Signature of Agency Personnel

Trixie Newkirk
Signature of Student

Rosalie M. Hughes
Signature of Faculty Advisor

* Fill out & sign 3 copies to be distributed:
Original: Student, 1st copy: Agency
2nd copy: TWU College of Nursing

# APPENDIX D

## Permission from Graduate School to Conduct Study

TEXAS WOMAN'S
UNIVERSITY
DENTON/DALLAS/HOUSTON

THE GRADUATE SCHOOL
P.O. Box 22479
Denton, TX 76204-0479
Phone: 817/898-3400
Fax: 817/898-3412

August 23, 1994

Ms. Trixie Newkirk
6505 Rosebud Dr.
Rowlett, TX 75088

Dear Ms. Newkirk:

I have received and approved the Prospectus for your research project. Best wishes to you in the research and writing of your project.

Sincerely yours,

Leslie M Thompson

Leslie M. Thompson
Associate Vice President for Research
and Dean of the Graduate School

dl

cc Dr. Oneida Hughes
Dr. Carolyn Gunning

# APPENDIX D

## Human Subjects Review Committee Exemption Form

TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON
DALLAS CENTER

# PROSPECTUS FOR THE THESIS

This prospectus proposed by: Trixie Diane Newkirk

Social Security Number: 445-76-0584

Titled: Nurses' Attitudes Toward Open Visitation in Critical Care Units

Has been read and approved by the members of ~~his/her~~ research committee.
This research (check one):

__xx__ Is Exempt from Human Subjects Review Committee review because:

data will be gathered via anonymous questionnaire.

_____ Requires Full Human Subjects Review Committee review because:

_____ Requires Expedited Human Subjects Review Committee review because:

Research Committee:

| Type name | Signature |
|---|---|
| Dr. Oralia M. Hughes (Chair) | Oralia M. Hughes |
| Dr. Rose M. Nieswiadomy | Rose M. Nieswiadomy |
| Dr. Gloria Byrd | Gloria Byrd |

Dean, College of Nursing — Signature: Carolyn Thurman — Date: 5/10/94

# APPENDIX E

## Cover Letter for Questionnaire

Dear Nursing Colleague:

My name is Trixie Newkirk and I am a graduate nursing student at Texas Woman's University and am working towards a master's degree in nursing. I am conducting a research study to find out about critical care nurses' attitudes towards family visitation in the intensive care units. You were selected for this study from a list obtained from the Director of Critical Care. Your participation and return of the enclosed questionnaire will contribute significantly to nursing knowledge regarding an important aspect of nursing practice.

The questionnaire should take approximately 10-15 minutes of your time. You are in no way obligated to fill it out. Your return of the completed questionnaire in the pre-addressed, stamped envelope will be <u>construed as your consent to PARTICIPATE in the study.</u> There is no risk to you at all and it will not affect your job in any way. To maintain anonymity, do not put your name or any other identifying information on the questionnaire. You will not be identified in the study and the data will be analyzed as group data.

The study should be completed by December of 1994. If you would like a summary of the results, please complete the

enclosed postcard, including your name and address, and mail it separate from the questionnaire.

If you have any questions about the questionnaire, feel free to contact me at my work phone 820-3391 or write to me at 6505 Rosebud Dr. Rowlett, TX 75088.

Sincerely,

Trixie Newkirk, RN, BSN, CCRN

# APPENDIX F

## Demographic Data Questionnaire

DEMOGRAPHIC DATA

PLEASE PLACE AN "X" BY THE MOST APPROPRIATE ANSWER (DO NOT CHECK MORE THAN ONE ANSWER PER QUESTION):

1. YOUR AGE IS:
   (1) ____20-29
   (2) ____30-39
   (3) ____40-49
   (4) ____50-59
   (5) ____60 and >

2. **NURSING** HIGHEST LEVEL OF EDUCATION
   (1) Associate _____
   (2) Diploma _____
   (3) Bachelor's _____
   (4) Master's _____
   (5) Doctorate _____
   (6) Other _____

3. PRIMARY SHIFT WORKED AT THIS TIME:
   (1) 7A-3P_____
   (2) 3P-11P_____
   (3) 11P-7A_____
   (4) 7A-7P TDA_____
   (5) 7A-7P M-F_____
   (6) 7P-7A TDA_____
   (7) 7P-7A M-F _____
   (8) Other_____

4. YEARS IN CRITICAL CARE NURSING:
   (1) Less than 1 year____
   (2) 1-5____
   (3) 6-10_____
   (4) 11-15____
   (5) More than 15 years____

5. TYPE OF ROOMS IN YOUR UNIT:
   (1) PRIVATE_____
   (2) SEMI-PRIVATE (2 PTS TO 1 ROOM)_____
   (3) PODS (4 PTS TO 1 ROOM)_____
   (4) MIXTURE (PRIVATE & PODS)_____

6. HAVE YOU EVER VISITED AN ILL FAMILY MEMBER IN AN ICU?
   (1) YES_____
   (2) NO_____

7. CHECK ONE OF THE FOLLOWING:
   (1) _____ MALE
   (2) _____ FEMALE

8. UNIT WORKING ON:
   (1)_____ CORONARY CARE UNIT/INTERVENTIONAL CARDIOLOGY CARE UNIT
   (2)_____ CARDIOTHORACIC SURGERY OR TRANSPLANT UNIT
   (3)_____ NEUROSURGICAL INTENSIVE CARE UNIT
   (4)_____ MEDICAL INTENSIVE CARE UNIT
   (5)_____ TRAUMA INTENSIVE CARE UNIT
   (6)_____ LIVER TRANSPLANT UNIT
   (7)_____ VASCULAR INTENSIVE CARE UNIT
   (8)_____ BONE MARROW TRANSPLANT UNIT

9. <u>USUAL</u> PATIENT/NURSE RATIO IN YOUR UNIT:
   (1) _____ 1:1
   (2) _____ 2:1
   (3) _____ 3:1
   (4) _____ 4:1
   (5)_____ OTHER, PLEASE SPECIFY_____

10. IS YOUR UNIT CURRENTLY PRACTICING OPEN VISITATION (open visitation is defined as a policy governing critical care nursing units which allows visitation privileges for 20 hours during the day or night)?

   (1) YES _____
   (2) NO _____