DETERMINANTS OF CRITICAL CARE NURSES' BEHAVIOR TOWARD
STRUCTURED AND OPEN FAMILY VISITING

by

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Abstract

This descriptive correlational study was designed to explore factors that influence critical care nurse’s behavior toward family visiting. The Ajzen-Fishbein theory of reasoned action provided the framework to examine the relationship between the nurse’s attitudes, subjective norms, and intentions toward structured and open family visiting. Data was collected through a researcher designed survey questionnaire completed by 279 members of the Canadian Association of Critical Care Nurses. The nurses’ attitudes and subjective norms toward family visiting were closely linked to their beliefs, and these determinants correlated with their intentions toward open family visiting. Neither the nurses’ educational level or critical care experience correlated with the nurses’ attitudes toward open visiting. These findings suggest that nurses who work directly with critically ill patients need to participate in the design of visitation policies, and that unit managers who advocate open visiting need to provide nurses with resources to facilitate the best visiting practice.
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CHAPTER ONE
INTRODUCTION

Within critical care units a multitude of highly specialized health care professionals monitor and manipulate sophisticated technological equipment in a frantic attempt to save desperately ill individuals from life threatening disease (Allan & Hall, 1988). Clearly, this environment has the potential to dehumanize care. Recently, some critical care professionals have proposed humanizing strategies, such as viewing the critically ill patient within the context of the family (Harvey et al., 1993; Marsden, 1992). These critical care authors advocate for more liberal visiting policies. In contrast, some critical care nurses believe that extended family visits precipitate unnecessary patient and family fatigue, and also create needless unit disruptions (Hamner, 1990; Molter, 1994). Moreover, these nurses individually interpret and implement unit visiting policies, and, hence, they actually determine family visitation in the critical care unit (Artinian, 1991; Kirchhoff, Pugh, Calame, & Reynolds, 1993). Therefore, critical care managers who seek to liberalize or even open family visiting policies need to understand the nurse's behavior toward family visiting.
Background to the Study

Traditionally, critical care nurses have imposed and valued controls on visitation, and many of these nurses would advocate continuing with current visiting policy restrictions (Kirchhoff, 1982; Molter, 1994). These nurses believe that the family’s presence in the critical care unit exacerbates patient fatigue and physiological instability (Fuller & Foster, 1982; Gardner & Stewart, 1978; Hickey & Lewandowski, 1988; Kirchhoff, Hansen, Evans, & Fullmer, 1988; Molter, 1994). Furthermore, many nurses are reluctant either to perform care in the presence of the family, or to ask family members to leave the bedside. Consequently, they equate family presence with a disruption in patient care delivery, and discourage extended family visits (Kirchhoff et al., 1993).

Family visits precipitate anxiety and discomfort for some nurses. Life threatening illness of one family member often triggers role conflicts among other family members, and threatens the stability, resources, and adaptability of the family unit (Wright & Leahey, 1987). Clearly, before the family can play a supportive or resource role, members must deal with the impact of their loved one’s illness (Galven & Bremmel, 1991; Northouse & Northouse, 1992). Nurses are expected to assess the impact of the illness on the family, and to meet the family’s needs for information and assurance about their relative (Gilliss, Roberts, Highley, Martinson, 1989; Jillings, 1981; Marsden,
Yet, many nurses believe that they lack the time, skill and knowledge to help family members cope with an illness crisis (Artinian, 1994; Hickey & Lewandowski, 1988; Loos & Bell, 1990).

On the other hand, more and more critical care units are seeking to liberalize their visiting policies (Brannon, Brady, & Gailey, 1990; Henneman, Cardin & Papillo, 1989). In fact, some critical care units, such as pediatric and neonatal intensive care, have open visiting policies that allow family members access to their young critically ill loved one twenty-four hours a day (Heater, 1985). The individuals who developed these policies recognized positive effects of increased family presence.

Nurses who believe that visiting benefits the patient, family, or nurse are likely to support more flexible visitation. For instance, many nurses believe that family members can act as a mediating force against the dehumanizing aspects of critical care environment (Marsden, 1992). They see families as not only buffering the patient’s stress and anxiety but also as connecting patients with their familiar, outside world, and as helping them solve day to day problems (Bouman, 1984; Fuller, & Foster, 1982; Schulte et al., 1993; Simpson, 1991).

Nurses also see that family members respond positively when they are invited to be near their critically ill loved one. This proximity often
reduces the family’s anxiety, and validates the seriousness of their relative’s condition (Stillwell, 1984). Explanations from the critical care nurse can increase the family’s understanding of the status of their loved one and the purpose of technological equipment. Similarly, information from the family can clarify the nurse’s understanding of the patient’s choice about care and treatment (Henneman et al., 1989). Moreover, nurses frequently benefit from positive family feedback about the patient’s care (Dunkel & Eisendrath, 1983). Ultimately, interacting with families allows nurses to broaden their roles as health care providers, and thereby increases their job satisfaction (Artinian, 1991; Dunkel & Eisendrath, 1983).

The individual nurse’s perceptions of the family’s presence as beneficial or stressful determines the nurse’s decision to include or exclude the family (Hickey & Lewandowski, 1988; Kirchhoff et al., 1993; Marsden, 1992). Nurses’ behavior toward the family is further influenced by their coworkers’ (other nurses, physicians, social workers, pharmacists) view of families as either helpful or interfering, and of family visits as either integral to the patient’s wellbeing, or disruptive to the smooth operation of the unit (Kirchhoff et al., 1993). Finally, the behaviors of unit leaders (head nurses, clinical nurse specialists, educators) that encourage or discourage family presence, as well as the demand for visiting from patients and families will influence the nurse’s enforcement of visiting policy.
Problem Statement

Critical care professionals are increasingly aware that highly complex technological management fosters powerlessness and helplessness for patients and their families (Harvey et al., 1993). At the same time, many health care workers are recognizing the importance of the family support system, and are advocating for more liberal visiting policies (Hamner, 1990; Heater, 1985). Nevertheless, the family’s presence in the unit is not a panacea for meeting all family and patient needs. In fact, many nurses believe that they must protect critically ill patients and their family members from excessive stress and fatigue associated with extended visiting during the critical illness experience.

In many critical care units, the individual bedside nurse actually translates visiting policy into practice. Thus, before liberal visiting policies are introduced, managers need to ascertain the nurse’s readiness to support the policy. These managers need to understand the factors that determine the nurse’s behavior toward the family’s presence in the critical care unit. There are limited studies on the critical care nurse’s perception of family visiting, and on the factors that influence that perception. Yet, the manager who can understand the determinants of the nurse’s behavior toward the family can design appropriate visitation policies.
Conceptual Framework

The conceptual framework used for this study is the theory of reasoned action (Ajzen & Fishbein, 1980). This theory proposes that behavior is ultimately determined by beliefs, but it does not suggest a direct link between beliefs and behavior. The theorists contend that beliefs about the consequences of a behavior (behavioral beliefs) influence attitudes, and beliefs about the social pressure to perform a behavior (normative beliefs) influence subjective norms. These two components, attitudes and subjective norms, then, influence behavioral intentions, and finally, intentions influence the performance, or non-performance of the behavior (Ajzen & Fishbein, 1980, p. 80).

According to this theory, people intend to perform a behavior when they evaluate it positively, and when they believe that important others think that they should perform it (Ajzen, 1988). The influence of attitude and subjective norm on intentions may not be equal. An individual may have a positive attitude toward performing a behavior, but may also believe that significant others think that the behavior should not be performed. Knowing the person’s attitude toward that behavior may reveal little about the person’s intention, if that intention is primarily determined by subjective norms (Ajzen & Fishbein, 1980). Thus, accurate prediction of a person’s intention requires knowledge of the determinant that most influences that intention. Figure 1 presents major components of the theory and their relationships.
The theory of reasoned action has been used to explain individuals’ intentions to engage in health promoting behaviors, such as cancer risk reduction (O’Rourke, Corcoran, & Dalis, 1993), cardiac risk reduction (Pender & Pender, 1986), and condom use (Ross & McLaws, 1992). The framework has also been used to explore the behavioral intentions of nurses toward the elderly (Robb, 1979), toward dying patients and their families (Waltman, 1990), and toward do not resuscitate orders (Savage, Cullen, Kirchhoff, Pugh, & Foreman, 1987).

The literature supports Ajzen and Fishbein’s (1980) assertion that intentions are highly predictive of behaviors (Ajzen and Fishbein, 1980; Chassin, 1981; Miller, Johnson, Garrett, Wickoff & McMahon, 1982; Saltzer, 1980). Furthermore, research findings suggest that attitudes and subjective norms are major determinants of behavioral intentions (Pender & Pender, 1986; Savage et al. 1987; Waltman, 1990). In Waltman’s (1990) study of nurses’ intentions toward dying patients and their families, the nurse’s attitudes were found to be the major predictor of their behavioral intentions. In contrast, subjective norms exerted a more powerful influence on the nurse’s intention to resuscitate critically ill neonates (Savage et al. 1987).

Kirchhoff and others (1993) used this theory to investigate the beliefs and attitudes of critical care nurses about the effects of visiting on patients, families, and nursing staff. They found that the nurse’s intentions toward visiting were explained in terms of the nurse’s
attitude (positive or negative evaluation) toward including the family. Further, this attitude was traced to the nurse’s beliefs about the likely consequences of including or excluding the family (behavioral beliefs). Finally, these researchers found that the nurse’s intention to engage the family in visiting determined the nurse’s behavior to extend or restrict visiting, which supports Ajzen and Fishbein’s (1980) contention that expressions of behavioral intention permit an accurate prediction of a corresponding volitional action. Kirchhoff et al., (1993) did not discuss the normative determinants of the nurses behavioral intentions toward family visiting. In fact, no study was found that examined the influence of both behavioral and normative determinants of nurses’ intentions and behavior toward family visiting.

Purpose

The purpose of this study is to examine the factors that influence critical care nurses’ behavior toward structured and open family visiting. The study will explore the relationships among the nurse’s attitudes, perceived expectations of significant others, and behavioral intentions toward family visiting in the critical care unit. The study will also examine the relationship between selected professional characteristics of the nurse and the nurse’s behavioral intention toward family visiting.
Research Questions

The study will seek to answer the following questions:

1) What are the critical care nurse’s attitudes about the effects of structured and open visiting on patients, family, and staff?
2) What are the critical care nurses’ perceptions of the expectations of head nurses, coworkers, and families toward structured and open family visiting?
3) What are the critical care nurse’s behavioral intentions toward structured and open family visiting?
4) Which behavioral determinant (the nurse’s attitudes or subjective norms) has the greater influence on the nurse’s behavioral intention toward open family visiting?
5) Does education or critical care experience influence the nurses’s beliefs or attitudes about open family visiting?

Definition of Terms

Family: "refers to any person, related by birth or not, who is considered significant or meaningful to the critically ill patient" (Simpson, 1991, p.229).

Critical Care Unit: "A highly technological and specifically designated area within a hospital that is established for the care of critically ill patients" (CACCN Standards, 1992, p.4).
Critical Care Patient: an individual who is experiencing a life-threatening health crisis (CACCN Standards, 1992).

Critical Care Nurse: A highly skilled health professional who works in a critical care unit and who plans and coordinates the care prescribed by and provided by physicians, nurses, and other members of the health care team to meet the critically ill patients’ needs (CACCN Standards, 1992).

Structured Family Visiting: Family members are allowed to visit the critically ill patient for a period of time and frequency determined by the critical care unit visiting policy (Stockdale & Hughes, 1988).

Open Family Visiting: Family members are allowed to visit the critically ill patient at any time during the entire 24 hour day (Kirchhoff et al., 1988).

Behavioral Belief: The person’s convictions about the outcomes of the performance or non performance of a particular behavior (Ajzen & Fishbein, 1980).

Normative Belief: The person’s convictions about the expectations of individuals or groups to perform, or not perform, a particular behavior (Ajzen & Fishbein, 1980).

Attitude: The person’s evaluation of the positive or negative effects of the outcomes of a specific behavior, measured by the location of an individual on a bipolar (positive-negative) scale (Robb, 1979; Savage et al., 1987).
Subjective Norm: The person's perceptions that the most significant individuals or groups expect, or do not expect, performance of the behavior in question, measured by location of an individual on a bipolar (positive-negative) scale (Ajzen & Fishbein, 1980; Robb, 1979; Savage et al., 1987).

Behavioral Intention: The reported degree of likelihood that the nurse will perform a certain action, measured by location of an individual on a bipolar (positive-negative) scale (Robb, 1979; Savage et al., 1987).

Assumptions

This study assumed that the information from the national office of the Canadian Association of Critical Care Nurses would correctly identify those nurses with critical care experience in Canada. The study also assumed that participants provided honest information to the study questions.

Limitations

One limitation of this study is that all participants were members of the Canadian Association of Critical Care Nurses (CACCN). Their responses may not accurately reflect the beliefs, attitudes, and subjective norms of the general population of critical care nurses in Canada. A further limitation is that not all extraneous variables affecting the nurse's behavior toward families were addressed in this
study. For example, the nurse’s educational preparation in family systems, and the nurse’s experience as a family visitor in critical care were beyond the scope of this investigation. Finally, potential subjects may have found preconceived survey questions irrelevant or confusing, and may have declined to answer such questions. Interviews with practising critical care nurses and a literature review of critical care nurses’ beliefs and attitudes about visitation were used to construct clear, relevant questions. However, because of time constraints on the investigator, the questions were not pretested.

Significance

This study provided insight into the nurse’s behavior toward the family’s presence in the critical care unit. This examination of the nurse’s attitudes, perceived expectations of significant others, and intentions toward structured and open family visiting has increased nursing’s knowledge of factors that influence the nurse-family relationship. Determining correlations between the determinants of the nurse’s behavior toward family visiting has unveiled nursing interventions that maximize the family’s ability to support the patient. Finally, knowledge gained from this study can be useful in redesigning policies that facilitate nurse-family alliance.
Organization of the Thesis

The succeeding chapters of this thesis will describe the process used to research the study’s questions and will discuss the results obtained. Chapter Two will review literature pertinent to the research problem. Chapter Three will explain participant selection, the method used to collect and analyze the data, and the ethical considerations of the study. The results of data analysis will be presented in Chapter Four, and comparison of these findings with other research will be presented in Chapter Five. Chapter Six will present a summary of the study, and will conclude with a discussion of the implications of the study for nursing.

Chapter Summary

This chapter presented background information in relation to the problem and purpose of this study. The conceptual framework, which provides direction to determine the nurse’s behavior, was explained. Terms central to the research questions were defined and assumptions and limitations of the study were noted. The next chapter reviews the literature pertinent to the identified research problem.
CHAPTER TWO
LITERATURE REVIEW

Critical care nurses’ behavior toward family visiting is determined by the nurse’s beliefs, attitudes, subjective norms, and intentions toward the family’s structured or open presence in the unit. The purpose of this chapter is to present an exploration and analysis of the literature relevant to these behavioral determinants. However, research specifically addressing these determinants is limited. Therefore, this review will examine literature that describes broader effects of critical care unit visiting policies. The review will be presented in three sections. The first section will discuss literature pertaining to general visiting policies in critical care. Next, the literature pertaining to the effects of visiting on critically ill patients and their families will be examined. The final section of the review will more specifically address the critical care nurse’s perceptions of visiting, with emphasis on their beliefs and attitudes.

Visiting in Critical Care Units

One of the first recommendations about visiting in critical care units was issued in 1962, from the United States Public Health Service, who suggested that visiting periods in intensive care units be restricted to 5 minutes every hour. Further, they recommended that a
family room be near the unit to allow the family to be close, without interfering with treatment. Subsequently, critical care managers designed visiting policies that restricted the family's presence at the patient's bedside to very short and infrequent periods. Nurses were expected to enforce these restrictive visiting policies to promote patient rest and to reduce patient stress.

Since the Public Health Service's recommendation, a number of researchers have described critical care visiting policies and practices (Brannon et al., 1990; Hamner, 1986; Henneman et al., 1989; Henneman, McKenzie, & Dewa, 1992; Kirchhoff, 1982; Kirchhoff et al., 1988; Kirchhoff et al., 1993; Schulte et al. 1993; Stockdale & Hughes, 1984; Youngner, Coulton, & Welton, 1984). Although visiting policies vary across units, most critical care units restrict visitation. Moreover, nurses may not always comply with the actual visiting policy, but, in practice, they generally regulate visits (Kirchhoff, 1982).

In a survey of over five hundred nurses about visiting policies for myocardial infarction patients, Kirchhoff (1982) found that the variations in policies seemed related more to institutional factors, than to patient factors. For instance, rural hospitals allowed short visits for immediate family only, with fewer exceptions to the visiting policy than urban hospitals. Smaller hospitals allowed fewer visitors for shorter, more frequent visits than larger hospitals.
Other variations in visiting policies were identified in a survey of 240 critical care nurses about visiting (Stockdale & Hughes, 1988). For instance, the number of visits allowed per day varied from 2 to 24. Moreover, the length of visit, the number, and the minimum age of visitors also varied from unit to unit.

Generally, research suggests that nurses favour restrictions. For instance, in Kirchhoff's (1982) survey, nurses ranked, on a scale of 1 (low) to 7 (high), the importance of nursing actions in the care of a myocardial patient. They ranked the importance of visitor restrictions at 5.9, and the frequency of this restriction at 5.5. Furthermore, sixty-eight percent of the 240 nurses surveyed by Stockdale and Hughes (1988) agreed that there should be restrictions on visits. The value placed on restrictive visitation is not confined to staff nurses. Seventy-eight intensive care unit head nurses acknowledged that their unit policies were restrictive, but about three quarters of the sample thought that the policies should remain unchanged (Youngner et al., 1984).

The variability of visiting practices occurs not only across but also within units. Hickey & Lewandowski (1988) explored the visiting practices of 226 critical care nurses employed in 18 critical care units. Only 39% of the sample agreed that the official policy in their unit was followed. Further, of the 18 units surveyed, approximately 70 different "official" policies were described. There was little agreement
among the nurses about the "best" visiting policy.

Other researchers have found a similar lack of consensus in regard to specific visiting restrictions (Brannon et al., 1990; Hickey & Lewandowski; Younger et al., 1984). Kirchhoff and others (1993) asked 70 critical care nurses to describe the ‘best’ visiting policy for the patient, for the family and for the nurse. These nurses varied the policy according to the recipient. However, their descriptions of ‘best’ policies also varied widely for each specific recipient. For instance, some nurses thought that the best policy for patients should be 5 to 15 minutes every hour throughout the day, while others thought that 30 minutes two to three times a day would be best.

Since the US Public Health Service’s 1962 recommendation about critical care visitation, some critical care units have liberalized their visiting policies (Brannon et al., 1990; Dunkel & Eisendrath, 1983; Henneman et al., 1989). Still, the majority of critical care units restricted the family’s presence in the unit. Some critical care nurses now extend family visiting time, but many nurses continue to limit the family’s presence in the unit. Clearly, the variability in visiting policies within and across critical care units continues (Kirchhoff, 1982; Hickey & Lewandowski, 1988; Younger et al., 1984).

The best visiting policy has not yet been determined, but researchers have evaluated the effects of visiting on the critically ill patient, the family, and the critical care nurse. Findings from these
studies would be expected to influence the design of critical care visiting policies and practices.

Critical Care Visiting and the Patient

Early research supported the view that family visits were stressful for the critically ill patient. For instance, one study showed that patients who had frequent visits developed more severe and frequent cardiac arrhythmias than patients who had no visits (Theorell & Webster, 1973). Also, patient's systolic blood pressure and heart rate were significantly higher during family visits than during periods when the patients were resting alone (Brown, 1976).

These findings strengthened critical care nurses’ belief that family visits are stress provoking for patients, and furthered the nurses’ resolve to adhere to the strict visiting rules (Hamner, 1990). Yet, other studies suggested that family visits were not as harmful to patients as first believed. For example, family visits were found to be no more stressful for patients than interactions with staff (Fuller & Foster, 1982). Besides, the restriction of visitors did not necessarily promote patient rest (Noble, 1979; Walker, 1972). Moreover, longer visits, and unrestricted visits, were found to lower patient’s heart rates (Schulte et al., 1993).

Other benefits of family visits have been described. For instance, in a small sample of neurological intensive care patients, the presence
of family members was associated with a decrease in the patients' intracranial pressure (Bruya, 1981). In another small sample study, patients accompanied by a family member during transfer from coronary care to the ward scored lower for patient stress and for reinfarction, than those patients not accompanied by a family member (Schwartz & Brenner, 1979). Furthermore, cardiac surgery patients regularly visited by spouses used less pain medication, and recovered more quickly, than patients recovering without benefit of a supportive spouse (Kulik & Mahler, 1989). Overall, patients find family visits to be very helpful. They recall many specific caring actions of their family members, such as cheering patients on, providing an opportunity for verbal closeness, and sharing news from home (Simpson, 1991).

Increasingly, researchers suggest that time spent with the family benefits the critically ill patient. Other critical care researchers have examined the effect of family visiting on the patient’s family. Their findings should also guide the critical care unit’s visiting policy.

Critical Care Visiting and the Family

Hampe’s (1975) study of the needs of grieving spouses of terminally ill patients, and Molter’s (1979) study on the needs of families of critically ill patients, provided the framework for research on the needs of critically ill patient’s families. The critical care family
needs inventory evolved from these classic studies. Researchers using this instrument found that one of the most important needs of the family was to be near their critically ill love one (Bouman, 1984; Boykoff, 1986; Daley, 1984; Kleinpell & Powers, 1992; Leske, 1986; Molter, 1979; O’Neill-Norris & Grove, 1986; Rodgers, 1983; and Stillwell, 1984). Additional studies showed that the critically ill patient’s family’s satisfaction with visiting increased when the policy was individualized or unrestricted (Brannon et al., 1990; Dracup & Breu, 1978).

Despite findings that support more liberal visiting, most critical care units continue to restrict visiting. Moreover, nurses inconsistently enforce visiting regulations, and frequently alter the rules according to patient, family, or unit status (Henneman et al., 1989; Kirchhoff et al., 1993). Some researchers report that families readily accept these restrictive, inconsistent visiting regulations (Hamner, 1986).

Hamner (1986) surveyed twenty cardiac patients and eleven of their family members about the importance of visiting, as well as visitation preferences. According to their family members, the most important aspect of visiting was the nurse’s explanation of the patient’s status and of the ongoing patient care. Knowing the visiting rules was rated more important by families than by patients, but both patients and family members wanted the nurse to address visitor concerns and to direct visitation length and frequency.
In contrast to Hamner’s findings, the inconsistent application of visiting rules has been a contentious issue for other families and nurses. Krumberger (1991) interviewed 15 critically ill patient’s family members about their satisfaction with critical care unit visiting policies. These families expressed confusion about unit visiting restrictions and found these related most to the variance in individual nurses’ implementation of the policy. On the other hand, some family members ignore posted rules and attempt to manipulate nurses to liberalize visiting practices (Brannon et al., 1990; Kirchhoff et al., 1988). Ultimately, regardless of the actual unit policy, or of research findings about the effects of visiting on patient or family members, family presence in the critical care unit is often controlled by the individual nurse.

Critical Care Visiting and the Nurse

Few nursing researchers have examined the critical care nurses’ intentions, attitudes, and subjective norms toward family visiting. On the other hand, a number of researchers and authors have explored the nurses’ beliefs about their role with the family, and about the effect of visiting on the nurse. According to the theory of reasoned action (Ajzen & Fishbein, 1980), beliefs are the determinants of attitudes. Therefore, a review of this literature may offer valuable insights into understanding the nurses’ behavior toward the family.
Nurses’ Beliefs about Visiting

Dunkel and Eisendrath (1983) described the effect of the presence of critically ill patient’s family members on nursing staff following implementation of a more liberal visiting policy. These nurses believed that increased family presence enhanced information sharing about the patient and patient’s wishes for care and treatment. Moreover, many of these nurses believed that more liberal visiting broadened their role and increased their satisfaction working with the family and patient.

Nevertheless, these nurses also perceived that more liberal visiting increased their own stress. For instance, they were uncomfortable asking family members to leave the bedside during painful patient procedures. Furthermore, many of their sample of nurses believed that they were inadequately prepared to provide support and comfort to the family at the bedside. Other researchers’ findings have challenged these results.

In a study designed by Hickey and Lewandowski (1988) to explore the critical care nurses’ role with families, two hundred and twenty-six nurses employed in 18 critical care units completed a researcher-designed questionnaire. The majority of these nurses strongly agreed that they had adequate knowledge to meet the psychological and emotional needs of families and that it was realistic to expect the bedside nurse to meet these needs. In addition, eighty-six percent of these nurses believed that the nurse was the person best able to judge
how long a family member should visit.

On the other hand, eighty-six percent of the sample reported that involvement with families is emotionally exhausting. Yet, the majority of nurses often did become involved with families, particularly in the face of the patient’s actual or impending death, or when the nurse subjectively liked the family members. The majority of nurses in Hickey and Lewandowski’s (1988) study indicated that they were uncomfortable having family members watch care. These findings suggests that, similar to Dunkel and Eisendrath (1983), the family’s presence negatively affected nursing care delivery.

In contrast, Henneman et al., (1989) found that increased family presence did not adversely affect nursing care. The critical care nurses in this study completed a questionnaire 6 months prior to and 2 months after implementation of an open visiting policy. Their sample consisted of nurses working in five intensive care units in one major teaching centre. The majority (91%) of nurses indicated that open visiting hours were beneficial for the patient and family, and that it improved information sharing between families and nurses. Moreover, eighty-one percent of these nurses felt that flexible visiting did not interfere with patient care. Only twenty percent of the sample indicated that family visits increased nurses’ stress, and most nurses reported that open visiting produced less stress for the family. However, after the introduction of open family visiting, the majority of
nurses felt that families did not get enough rest.

Insight into the conflicting beliefs of nurses about the consequences of visiting are provided in a study by Kirchhoff et al., (1993). These researchers used Ajzen and Fishbein’s (1980) theory of reasoned action to guide their study of nurses’ beliefs and attitudes about family visiting in adult critical care settings. They used open ended questions to elicit nurse’s beliefs about the consequences of visiting on patients, families, nurses and nursing care. Seventy nurses participated, twenty nine nurses practised in Utah, a state with a predominant religion and strong family values, and forty one nurses practised in Ohio, a state with a more diverse culture.

These groups reported some widely different beliefs about the consequences of visiting. For instance, over sixty percent of the Utah nurses, but only 22% of the Ohio nurses believed that visiting adversely affected nursing care. Further, only ten percent of Utah nurses, but 40% of Ohio nurses believed that visitors at the bedside enhanced care. Forty-five percent of Utah nurses but only 29% of Ohio nurses believed that visiting benefited the patient psychologically. Sixty-six percent of Ohio nurses but only 24% of Utah nurses believed that the effect of visiting on the patient depended upon a combination of factors, including the patient, visitor, and other factors. These results suggest that nurses’ beliefs about the consequences of visiting may be influenced by cultural factors.
On the other hand, there was general consensus between the groups about the negative effect of visiting on the patient’s physiological status, and about the exhausting effect of visiting on the family. Similarly, both groups believed that the consequences of visiting were quite negative on the functioning of the unit, and on the provision of uninterrupted care.

**Nurses’ Attitudes toward Visiting**

Only one study was found that explored critical care nurses’ attitudes about visiting. Kirchhoff and others, (1993) measured nurses’ beliefs and attitudes about the effects of visitors and open visiting. These researcher found that the nurse’s attitudes toward visitors followed their beliefs about the consequences of visiting. Their attitude toward the effect of open visiting was more negative than their attitude toward the effect of visitors. The nurses’ attitudes was more negative about the effect of visitors on the nursing staff and unit, than on the patient or family. The effect of open visiting was perceived to be extremely negative on the nursing staff.

**Nurses’ Subjective Norms toward Visiting**

Although Kirchhoff and other’s (1993) study documented critical care nurse’s beliefs and attitudes toward visiting, no study has looked at both the critical care nurses’ attitudes toward family visiting and
open family visiting and the nurses’ perceptions of the expectation of significant others toward family visiting and open family visiting. In fact, no study was found that measured the nurse’s subjective norms toward visiting. However, one sample of critical care nurses described heightened feelings of inadequacy when they perceived that other nurses were providing adequate family support (Dunkel and Eisendrath, 1983). This suggests that there may be a negative relationship between subjective norms and intention toward family visiting. On the other hand, Hickey and Lewandowski (1988) asked their critical care nurses to describe the factors that influenced their involvement with families. Less than one third of these nurses reported that their involvement with families was affected by the expectations of peers, unit leaders, or the patient’s physicians.

Clearly, these studies have provided beginning information about the nurse’s behavior toward family visiting. However, a study is needed that explores the nurse’s attitudes and perceptions of the expectations of significant others toward family visiting, and then compares the influence of these behavioral determinants on the nurse’s behavioral intention toward open family visiting. Such a study will facilitate the appropriate choice of intervention to promote appropriate visiting guidelines and positive nurse-family-patient interaction.

For instance, if the nurse’s own attitude is of more importance than
the subjective norm, interventions to assist the nurse in supporting the family should encourage positive changes in attitude. However, if the subjective norm is a greater influence on the nurse’s intentions, then external influences, such as informational sessions about visiting policy, could be applied to alter the nurse’s behavior. Without knowing whether an internal or external force is stronger, nursing leaders may suggest an intervention that is inappropriate.

Chapter Summary

In summary, this chapter has reviewed literature pertaining to visiting in critical care units. Critical care nurses have commonly enforced and appreciated visiting restrictions, and certainly, many nurses favour maintaining current restrictive practices (Brannon, et al., 1990, Henneman, et al., 1992). Evidently, these nurses believe that increased family presence at the bedside interferes with the nurse’s ability to provide care, disrupts unit functioning, and exhausts family members (Dunkel, & Eisendrath, 1983; Henneman, et al., 1988; Kirchhoff, et al., 1988). Yet, restrictive visiting schedules and the variability of their enforcement within units have not met the needs of all critically ill patients, or their family members, or nursing staff.

Consequently, more and more managers are introducing more liberal, and even open visiting policies (Henneman et al., 1989). Although open family visiting is not a panacea for meeting all patient
and family needs, some nurses now recognize the benefits of increased family presence in the unit, and advocate for the family as a support system. However, as visiting policies become more liberal, nurses are confronted with the reality of dealing with families. This increased involvement can lead to family visits becoming a source of stress for unprepared staff.

Those designing visiting policies need to explore the nurse’s behavior toward the family visiting to facilitate the nurse’s acceptance of visiting policy change (Artinian, 1991; Kirchhoff et al., 1993). The next chapter will describe the method used to explore nurse’s attitudes, subjective norms, and intentions toward family visiting.
CHAPTER THREE
METHOD

This chapter describes the research process employed to answer the study's research questions. The purpose of this study was to explore and examine the relationships among the factors that influence the nurse’s behavior toward family visiting in the critical care unit, and therefore, a descriptive correlational survey design was chosen. The chapter identifies the study design, and then describes the process of sample selection, data collection, and data analysis. Finally, ethical considerations of the study are discussed.

Research Design

This study used a descriptive correlational design, in which five variables were measured and related to one another. An investigator-designed, three part, structured questionnaire facilitated collection of data related to the five variables, critical care nurses' attitudes, subjective norms, and intentions toward family visiting, and critical care nurses' education and experience.

Sample

The sample for this correlational descriptive survey, represented a cross-section of critical care nurses in Canada. A simple random
sample of subjects from the target population of approximately 1400 members of the Canadian Association of Critical Care Nurses (CACCN) was used in this study. A list of registered nurses who fit the selection criteria was produced by the national office of the CACCN.

The size of the sample of nurses to be included in this study was based on Neter, Wasserman, and Kutner's (1990) plan for sample size. This plan considers four factors in the determination of sample size: level of significance; power; effect size; and number of variables. First, the significance level, or \( p \) value, for this descriptive study, the significance level is set at 0.01, that is there is a .01% chance of accepting nonsignificant results as statistically significant. Next, the power, or \( B \) value, for this study, is set at .95, that is there is a 0.5% chance of rejecting statistically significant results. For the purposes of this descriptive study, the effect size, or the specified minimum difference which the researcher would want to detect (Woods & Catanzaro, 1988) is 1.0. The final factor in the determination of sample size is the number of variables in the study. This study contains 5 variables (nurse's attitude, subjective norms, intentions, education, and critical care experience).

The final sample size, considering the above factors, is based on Neter, and others (1990) determination of sample size for analysis of variance. The number of subjects per variable is 50, and there are 5 variables, therefore, the total number of subjects required is 250.
However, the response rate to mailed questionnaires can be as low as 20% (Wilson, 1987), that is 80% of potential subjects will not return the questionnaire. Therefore, a mail out sample of 250 plus 80%, or 450 was required. In addition, the employment status of some of the nurses may have changed. A mail out sample of 500 participants was selected.

**Selection of Participants**

The participants in this study were registered nurses who have experience working with critically ill patients, and interacting with critically ill patients' families. Many members of the CACCN meet this criteria. A questionnaire was mailed to those nurses who registered with the CACCN as having direct patient contact.

**Data Collection**

An introduction letter, study questionnaire, and postage paid return envelope was sent to each selected subject. A reminder letter was drafted to be sent to those participants who had yet to return their questionnaires. However the response rate from the initial mail out made this step unnecessary. Questionnaires were returned to the investigator's home.
Measurement

This study employed a questionnaire to gather data about current critical care visiting policies and practices. In addition, the questionnaire obtained information about five variables (attitudes, subjective norms, intentions, education level, and work experience) that influence nurses' behavior toward family visiting in the critical care unit.

Survey Questionnaire

The researcher-designed, three part, Critical Care Nurse Family Visiting Questionnaire employed concepts from Ajzen and Fishbein's (1980) theory of reasoned action, the conceptual framework used to guide the study. Additionally, the questionnaire incorporated current literature about critical care nurses' beliefs and attitudes toward family visiting (Artinian, 1991; Hamner, 1990; Henneman, et al., 1992; Kirchhoff, et al., 1992; Kirchhoff, et al., 1988; Molter, 1994; Simpson, 1991). Finally, the survey questionnaire utilized information from interviews with nurses currently practising in critical care. These nurses identified positive and negative consequences of visiting and open family visiting. They also identified individuals whose opinions about family visiting and open family visiting these nurses valued. The three individuals mentioned most frequently, coworkers, head nurse, and patient's family, formulated the subjective norms for the survey.
The content of this questionnaire was based upon current literature and judgements of practising critical care nurses about family visiting in critical care units. This contributes to the questionnaires’ validity. Nevertheless, with the exception of face or content validity, the reliability and validity of the questionnaire is not known. Neither the validity of the constructs nor the criterion validity have been established. Moreover, the questionnaire was not pretested, and was administered only once, therefore the stability of the instrument has not been determined.

Current visiting policies and practices.

Part One of the Critical Care Nurse Family Visiting Questionnaire consisted of fixed-answer questions that identified the critical care unit patient population, and visiting policies. Responses to these questions provided a basic understanding of the nurse’s beliefs about the institutional expectations toward family visiting. The nurse was asked to identify restrictions on visitor age, visiting times, and frequencies. Structured open ended questions were used to establish the usual practice of extending or further restricting visiting, and to allow the nurse to elaborate on visiting within the critical care unit (See Appendix A). Responses to these questions established the nurse’s beliefs about the consequences of family visiting on the patient, the family member, the nurse, and the critical care unit.
Determinants of nurses' behavior toward visiting.

Part Two of the Critical Care Nurse Family Visiting Questionnaire measured the nurses' attitudes, subjective norms, and intentions toward structured and open family visiting. Ten questions addressed the nurses' behavioral determinants toward structured family visiting, and ten questions addressed the nurses' behavioral determinants toward open family visiting (see Appendix B). All questions used evaluative 7-point scales anchored by bipolar adjectives (good-bad, harmful-beneficial, rewarding-punishing, likely-unlikely).

First, participants rated their behavioral intention toward structured family visiting and open family visiting on a scale from 1 (extremely likely) to 7 (extremely unlikely). The nurse's intention or plan is an indication of the degree of effort nurses are willing to exert in order to engage the family in visiting (Ajzen, 1988). The questions related to the nurses' intentions toward family visiting include the action (visiting), the target (critically ill patient's family) and the time (during visiting hours)/(throughout the twenty four hour day). These elements, according to the theory of reasoned action (Ajzen & Fishbein, 1980), correspond to the nurse's behavior to engage the family in visiting. The nurse's plan about visiting remains a behavioral disposition until, at the appropriate time and opportunity, an attempt is made to translate this intention into action. Generally, critical care nurses can voluntarily engage the family in structured or open visiting, that is,
nurses can be expected to do what they intend to do. Therefore, the nurse’s expressions of behavioral intention should permit an accurate prediction of corresponding behavior toward family visitation.

Behavioral intentions are determined by two major factors, attitudes and subjective norms (Ajzen & Fishbein, 1980). The most essential part of an attitude is evaluation, and the next questions on the Critical Care Nurse Family Visiting Questionnaire (Part Two) measured the participating nurses’ positive or negative evaluation of engaging the family in structured and in open visiting. When using a measure of attitude to predict and understand intentions, it is important to ensure that the measures of attitude and intention correspond to each other (Ajzen & Fishbein, 1980). In this questionnaire, the measure of intention was clearly the nurses plan to engage the family in structured or open visiting. However, participants were asked to evaluate the effects of general ‘family visiting’ or ‘open family visiting’ instead of the effects of the specific ‘nurse’s plan for family visits’ or the specific ‘nurse’s plan for open family visiting’. The measure of attitude was less specific than the measure of intention. Participants’ rated their general evaluation of family visiting practices using three, 7-point scales, anchored by bipolar adjectives (good-bad, harmful-beneficial, rewarding-punishing). Next, outcomes of the nurse’s general attitude was evaluated. Participants’ rated, on one 7-point scale anchored by bipolar adjectives (good-bad), the effects of
structured and of open visiting on the patient, patient’s family
member, nurse, and critical care unit.

Subjective norm is the other determinant of the nurse’s behavioral
intention toward family visiting. This factor reflects the social
influence, or the individual’s perceptions of the social pressure to
perform or not to perform the behavior under consideration (Ajzen,
1988). The final questions on the Critical Care Nurse Family Visiting
Questionnaire (Part Two) evaluated the nurse’s perceptions of the
expectations toward family visiting of three significant referents, head
nurse, coworkers, and family member. The questionnaire did not
measure the nurse’s motivation to comply with the specific referent.
An evaluative scale from 1 (extremely likely) to 7 (extremely unlikely)
was used to rate the nurse’s perceived expectations of each referent
toward structured family visiting and open family visiting.

Participant characteristics.

The Critical Care Nurse Family Visiting Questionnaire (Part Three)
used fixed-response questions to determine the nurse’s education and
critical care experience (see Appendix C). These questions established
the nurse’s educational preparation, type of practice, length of
experience in critical care, and the nurse’s employment status.
Data Analysis

In the Critical Care Nurse Family Visiting Questionnaire (Part One), responses to the four fixed-answer questions (patient population, visitor age, frequency and length of visits) were grouped into categories, then, frequencies and percentages of the categories were determined (see Appendix D for categories). Open-ended questions (extending visiting; restricting visiting) were grouped into common factors, and then percentages and frequencies of each group were determined. Responses to the final question in part one (other comments about visiting in the critical care unit) were grouped into common themes and recorded.

In the Critical Care Nurse Family Visiting Questionnaire (Part Two), data were analyzed using the SPSS statistical program. Descriptive statistics (means, frequencies, percentages, and standard deviations) were determined for the responses to all twenty questions. Correlational coefficients were performed to determine the relationship between nurse’s attitudes and intentions toward structured and open visiting, as well as between nurse’s subjective norms and intentions toward structured and open family visiting.

In Part Three of the survey questionnaire, frequencies and percentages were determined for responses to the fixed-answer questions (educational level, critical care area, length of critical care experience, employment status). In addition, means and standard
deviations were determined for the nurses education and critical care experience. Finally, SPSS statistical program was used to perform one way analysis of variance (ANOVA) to examine the relationship between the nurse’s attitude toward family visiting by educational level and by length of experience.

Protection of Human Rights

This study used a variety of methods to address the protection of the human rights of the participants. First, a proposal of the study was submitted for approval from the University of British Columbia Behavioral Sciences Screening Committee for Research and Other Studies Involving Human Subjects. Next, the national office of the CACCN produced a randomized sample, and a code number was issued to ensure subjects’ anonymity. Next, participants were informed that they were under no obligation to participate through the use of an information letter (see Appendix E). This letter described to the subjects the voluntary nature of their participation, the confidentiality of their responses, as well as their ability to access further information. Finally, this letter described the significance of the study to critical care nurses, and emphasized the importance of the nurse’s participation.
Chapter Summary

This chapter has described the method used to guide this study. The process of participant selection was identified, and the procedures used to collect data about visiting in critical care units were outlined. The methods employed to analyze the data obtained were presented. The chapter concluded with a discussion of the ethical considerations pertinent to this study. The following chapter will present the findings of the study.
CHAPTER FOUR
FINDINGS

The results that were obtained from the Critical Care Nurse Family Visiting Questionnaire are presented in this chapter. The chapter begins with a description of the sample of critical care nurses answering the questionnaire. The next section delineates specific visiting policies and practices existing in their critical care units. The third section presents the participant’s beliefs about family visiting in their unit. The final section introduces findings that address the determinants of the critical care nurses’ behavior toward family visiting outlined in the five proposed research questions.

Description of the Sample

A total of 500 survey questionnaires were mailed to critical care nurses across Canada. Three hundred and seven (61.7%) were returned. Twenty-eight of these questionnaires were unusable: seventeen were received after data analysis had been completed; one was missing major data; one respondent had no visitor contact; one respondent had resigned from her employment; eight subjects had moved, and their surveys were returned unanswered. Survey questionnaires from two hundred and seventy nine (56%) participants were used in the final analysis.
Professional Characteristics

The purpose of this study was to examine the factors that influence the critical care nurses' behavior toward structured and open family visiting. Various external variables may affect the nurses normative and behavioral beliefs about visiting, and subsequently their behaviors toward visiting (Ajzen & Fishbein, 1980). The Critical Care Nurse Family Visiting Questionnaire elicited participants' level of education, critical care nursing experience, and employment status.

Educational Preparation

Most of this sample were registered nurses (RN) with diplomas in nursing, plus additional post graduate courses (See Figure 2).

Figure 2. Nurse's educational preparation in percentages (n = 278)
The most commonly reported post basic RN course was in critical care nursing. The 'other' category included educational preparation that did not fit the defined categories, for example, nurses with both a baccalaureate education and a post-basic course, or those with a masters degree in nursing.

Critical Care Experience

The majority (76%) of this sample of nurses had more than 5 years of critical care experience, and most others (23%) had worked in critical care nursing for more than 1 year but less than 5 years. Only one respondent had less than 6 months critical care nursing experience. The total length of critical care nursing experience of most participants was the same as their experience in their current unit.

Employment Status

More than half the sample (58%) were employed in full-time positions, while 29% worked part-time, and a few respondents (9.0%) had casual positions. A small number of subjects (4.0%) worked in more than one job, for instance, part-time and one casual job. Most participants (91%) were general duty staff nurses. Others held head nurse (1.9%), instructor (1.9%), and clinical nurse specialists (1.0%) positions. The 'other' category (4.0%) charge nurses, clinical resource nurses, team leaders, and critical care transport directors.
Area of Critical Care Practice

More than half the nurses worked in medical/surgical intensive care units, and an additional thirteen percent classified their area of practice as coronary care combined with medical/surgical intensive care. The 'other' category was used when the respondent practised in an unlisted setting, such as bone marrow transplant unit, burn unit, or post anesthetic recovery room (See Figure 3).

Figure 3. Critical care nurses’ area of practice in percentages (n = 278).
Patient population

Most respondents worked with an adult patient population. The ‘mixed ages’ category was used when the respondent specified a combination of populations, for example, adult and pediatric patients, or pediatric and neonatal patients. Figure 4 presents the patient populations identified.

Figure 4. Nurses’ critically ill patient populations (n=279).

In review, the majority of these critical care nurses held a diploma in nursing with one or more post basic courses. Most were full time staff nurses working in adult medical/surgical intensive care units. Later in this chapter, these variables will be related to the nurses attitudes toward family visiting. The next section describes current visiting policies and practices in the participants’ critical care units.
Current Visiting Policies and Practices

This study sought to understand the critical care nurses' behavior toward family visiting by exploring their attitudes, subjective norms, and intentions toward visitation. According to the theory of reasoned action (Ajzen & Fishbein, 1980), the antecedents of attitudes and subjective norms are the nurses' beliefs about visitation. The Critical Care Nurse Family Visiting Questionnaire (Part One) determined the respondent's view of current visiting policies, as well as the current practice of extending and restricting visitation. These perceptions reflected the nurses' normative and behavioral beliefs about visiting.

Visiting Policies

First, respondents described various features of their critical care unit visiting policy, including minimum visitor age, and the number and length of visits allowed. These descriptions revealed the nurses' convictions about their institutions' expectations toward visiting, and these convictions constituted one of the determinants of the nurse's subjective norms (Ajzen, 1988).
Visitor age

The majority of critical care units restricted individuals from visiting based upon their age. Most commonly the minimum age of visitors was 12 years, however, the age of restriction varied widely. For example, in some units visitors had to be older than 1 year, while in others visitors had to be older than 18 years. On the other hand, forty-eight percent of respondents reported that their unit policy either did not address visitor age, or had no age restriction. Responses to this question are depicted in Figure 5.

![Figure 5. Minimum visitor age in critical care units. (n = 279)](image)
Frequency of visits

More than half the participants indicated that their critical care unit policy restricted the number of visits allowed. The most common limit set was a frequency of every hour. The 'other frequency category' included a wide range on the frequency of visits from every two to every four hours, to a range on the number of visits from 2 to 4 visits per day. In contrast, twenty-four percent of respondents reported no restriction on the frequency of visits, or no restriction except for an enforced patient rest period or for unit report (the 'except rest/report' category). Replies to this question are presented in Figure 6.

Figure 6. Frequency of visits allowed in critical care units. (n = 279)
**Length of visits**

Policies in the majority of critical care units included restrictions on the length of time allowed for visits, and the most common length of time was ten minutes. The ‘other’ category included time limits of 20 or 30 minutes. Forty-three percent of respondents indicated no restriction on the length of visits, or reported that their unit policy did not address length of visits. Figure 7 displays the responses to this question.

![Figure 7. Length of visits allowed in critical care units. (n = 279)](image)

In summary, a small majority of critical care unit visiting policies restricted visitor age, and the length and frequency of visits, but other units had less restrictive policies. Next, participants reported on their practice of extending and restricting visits.
Visiting Practice

Next, participants described factors that determined their practice of extending or restricting family visiting. Their responses to the open-ended questions on the Critical Care Nurse Family Visiting Questionnaire (Part One) reflected their beliefs about the consequences of visiting, and subsequently, these behavioral beliefs affect the nurses’ attitudes toward visitation (Ajzen & Fishbein, 1980).

Extending visits

Factors that determined the nurses’ extension of family visits are presented in Figure 8.

Figure 8. Factors influencing critical care nurses' decisions to extend family visits. (n = 279)
The participants’ responses to this open-ended question suggested that their practice of extending visits was influenced mainly by patient factors, but also by family and unit factors. The majority of nurses considered only their patient’s status when they extended visits. For instance, they allowed longer visits when their patient’s status was stable, or when death was imminent, or their patient desired visitors. Other respondents extended visits based only on the status of the unit. For example, the patient’s family could remain at the bedside for additional time when the unit was quiet or when the patient was in a private room. Only a small number of these nurses based their decision to extend visits on ‘family factors’ alone, such as, the family comforting the patient, or the family visiting from out of town.

Restricting visits

The majority of participants reported that their decision to restrict visits was based upon a combination of patient, family, and unit factors. Unit activity, such as patient rounds and shift report, invasive patient procedures, and the instability of neighbouring patients were among the ‘unit factors’ that caused participants to restrict visiting. Visits also were restricted for patient factors, such as patient instability, fatigue, or request to restrict visits. The ‘family factors’ that influenced a small number of nurse’s to restrict visits included abusive behavior by family members to staff, patient, or other patients, and family fatigue (See Figure 9).
To review, despite unit policy, respondents extended visits when the patient was stable or dying, when the unit was quiet, and when the family was helpful. They restricted visits when the unit was busy, when the patient's status was unstable, and when the family was abusive. The next section of this chapter will present the critical care nurses' beliefs about their units' approach to visiting and about the consequences of visiting on the family unit and the critical care unit.
Nurses' Beliefs about Family Visiting

In the Critical Care Nurse Family Visiting Questionnaire (Part One), participants were invited to comment about visiting policies in their unit. These responses reflect the nurses’ perceptions of visiting in their unit, as well as their beliefs about the consequences of visiting on the patient, the family, the critical care nurse, and unit. These beliefs influence their attitudes and their subjective norms, and ultimately their behavior toward family visitation.

Many participants described the individual nurse’s control over visitation, and discussed the consequences of this nurse-determined visiting practice on staff and family relationships. Other respondents elaborated on details of their unit’s visiting policy and practice that reflected a more liberal approach to the family’s presence. They described the repercussions of more open visitation on the patient, family, nurse, and critical care unit. The findings are presented as quotes from the participants.

Nurse-Determined Visitation

Nurses in this study described variations in visiting policy enforcement, some nurses favoured ‘bending’ the rules, while others were more rigid in their adherence to policy. Variation in the nurse’s adherence to unit policy, and the consequences of this practice on family and staff relationships was a common theme in the participants’ responses. For instance nurses wrote:
"Visiting varies from nurse to nurse. It depends upon how strictly she enforces the visiting policy."

"There are no strict rules, these are only guidelines. The nurse at the bedside usually decides when, and how long visitors can stay."

"We have good guidelines, but many nurses do not follow them."

"We are looking at this issue presently. Most nurses feel that there should be visiting guidelines, however some nurses want strict visiting rules."

As described in the previous section, nurses structured visiting to meet the needs of the patient, the family, and the unit. Many nurses extended visits to facilitate a supportive patient-family relationship, or to foster a peaceful death, as depicted in these comments:

"Patient status is always considered first. If the patient is stable, the family is usually allowed as much visiting time as possible. If the patient is unstable, visiting is very restricted. If the patient is dying, all family members are allowed in together (if space permits)."

"We have a written policy for visiting hours, but each nurse in our unit uses her own discretion for ‘bending’ the rules. For example, the nurse will allow the family to remain with a very critically unstable patient, or a terminally ill patient."

Nurses also extended visits based upon the family’s ‘likeability’ or helpfulness, as the following examples illustrate:

"....Some family members are easy to deal with, and we let them stay longer at the bedside, and stay during some nursing care."

"Visiting hours in our ICU are adhered to unless the patient is very critical, unstable, or the family’s presence is helping or is needed."

"Families are welcome to stay overnight in the visitors lounge, or to be present more often if there is a language barrier."
Many respondents indicated that their control of visitation promoted patient and family rest, and also facilitated the delivery of care. For instance, participants explained:

"The policies are made to enable the nurses to have some control over the care of her patient. There can be too many visitors, some visitors can stay too long, and some visitors tire the patient."

"I agree with very liberal visiting....On the other hand, I do feel that the nurse needs to have some control, to provide quiet rest periods."

"....there are times when you are comfortable caring for the patient in front of family, and other times you ask them to leave."

Regardless of the rationale used by nurses to determine visitation, the participants in this study recognized the difficulties inherent in individualizing enforcement. Respondents described the consequences of nurse-determined visiting rules on family and staff relationships.

Consequences of nurse-determined visitation

Many nurses chose to extend or restrict visits based upon their beliefs about the consequences of visiting on the patient, family, and unit status. Several participants suggested that this practice led to conflict among staff members and to visiting inconsistencies that confused and frustrated the family, and led to staff and family conflict. The subsequent statements reflect participants’ perspective of the conflicts surrounding nurse-determined visitation:
"Visiting hours are important to all three parties, bedside nurse, patient, and family. As a nurse, I feel we have an obligation not only to the patient, but also to the family. At times I see nurses using enforcement of visiting rules as a power issue."

"Visiting restrictions are up to the discretion of the nurse, which sometimes causes problems due to inconsistencies. Families talk to each other, and they can’t understand why one patient is allowed visitors, while another is not, or why one nurse restricts the length of visits, while another does not."

"Some nurses make their own visiting policies (for example, only 1 person at a time for 5 minutes), which only confuses the family."

"Visiting in our unit varies greatly with each individual bedside nurse, which has advantages (compassion for families’ needs), and disadvantages (inconsistent rules which frustrates the family)."

"At times, it’s very difficult to enforce rules, as not all nurses follow the policy. Families can become very upset when time limits are enforced (even when their visiting becomes detrimental to the patient)."

"Serious inequities exist in enforcement of the policy which has caused problems for both staff and visitors (especially who can visit, when, and how long they can visit)."

Finally, some respondents suggested methods to reduce the inconsistencies:

"Visiting in our unit is up to the discretion of each nurse. We pass on at report how long visiting was, and why, to give some consistency to the visitors."

"Our policy states only parents, grandparents, and siblings over 12 years of age can visit. Again, this guideline is flexible... any changes are noted in the patient care plan to help improve consistency."
Participants in this study were interested in nurse-determined visiting practice and its consequences. Participants also described visiting policies with few restrictions, and discussed the consequences of this practice on patients, families, nursing staff, and the functioning of the critical care unit.

**Liberal Visitation**

The language that participants used to describe their visiting policies and practices suggested a more open approach to visiting. For instance, in their responses to the open ended questions, nurses frequently employed descriptors such as ‘flexible’, ‘liberal’, ‘accommodate’, ‘adapt’ and ‘open’.

Some units had developed less restrictive policies, while others defined the family in broad terms, and still others adapted their policy to meet family needs. Some nurses welcomed this relaxed approach to visitation, but others objected to the loss of structure and control over visiting.

The following respondents reported that their unit had deleted restrictive features of their visiting policy:

"My unit policy is very liberal. We recently did away with the mandatory one hour rest period when no visitors were allowed."

"In newly admitted, non-arrest situations, we are trying to allow the family in earlier (even for a minute or two)."

"I’d say we are very liberal in our visiting hours, we do not even restrict visitors to ‘close family members only’!"
Other participants suggested that their critical care units had broader definition of family which implied increased support for non-traditional families. They wrote:

"...‘family members’ does not always mean blood relatives in our unit. We recognize alternate living arrangements and lifestyles, and allow partners or roommates to visit."

"We have a very flexible definition of family. Also, we move a dying patient into a private room to allow grieving family members to be together."

"Our visiting policy states ‘only immediate family members may visit’, but this rule usually ‘bent’, especially for ethnic families, who have many relatives."

Some respondents accommodated special requests from families and patients, and allowed families to stay in the unit during the provision of care. Their responses suggested a less rigid approach to visiting:

"We have accommodated many special occasions/circumstances, such as: allowing a wedding party to visit a father of the bride; permitting a 90th birthday party for a patient; enabling a seeing-eye dog to visit, the dog later participated in the patient’s recovery by accompanying the patient on walks."

"I try to structure care around times when family members are away. If the patient and spouse are not uncomfortable, I provide care with their participation or involvement."

In other units, participants adapted their policy through negotiation with family members:

"We have twenty four hour a day visiting...family visiting is often discussed and decided upon by the nurse and the family with each patient....We find this works very well."
"As there is no age restriction for visitors, the nurse, patient, and family discuss the effects of an infant or child visiting. The patient and family then make the decision."

Clearly, many nurses in this study believed that their unit advocated a more open approach to visiting. However, their support for these flexible policies varied.

Consequences of liberal visiting

Many nurses in this study described repercussions of liberalized visiting on critically ill patients, their family members, and on the critical care nurse and unit. Generally, participants perceived that the consequences of this practice were more positive for patients and families than for the critical care nurse and unit.

Consequences for patients and families.

Nurses reported positive psychological effects of visiting for patients and their families, as well as negative physiological effects. Some nurses wrote that visiting reduced the stress and worry of patients and families, and one respondent remarked that visiting improved family-staff relationships:

"We currently employ an open family visitation (unwritten) policy, and we find it very successful. It reduces the stress of the patient and family, which helps promote a positive working relationship between patient, family, and health care team!"
"In the past few years, we, nurses, have become more sensitive to families needs to see their loved one. We have ‘relaxed’ our visiting policies, recognizing their needs as well as the patient’s needs and alleviating their worry."

"In our unit, the importance of family support to the patient is stressed, as well as, peace of mind for the family to be able to visit whenever possible."

In contrast, other participants believed that limiting visitation helped families and patients cope with the stressful critical care environment:

"....sometimes we do have to set strict visitation rules according to the patient’s and family member’s ability to cope with the stress of being in "ICU" or any critical care unit."

Several respondents cautioned that visiting disrupted patient and family rest:

"Twenty four hour a day visiting has its downside in that patients may never get the rest or break when they most need it".

"I feel that patients do suffer because of a lack of structured visitation times. Some feel that they have to be prepared all day to receive family. Also, some families feel that they must always be there for the patient."

"...families who stay for a long time at the bedside also tend to become exhausted and emotionally frail. They need that (night) time away."

The following quote implies that some participants believed that visiting, and particularly open visiting, compromised patient privacy, or the privacy of other patients:
"...because our unit has an "open visiting policy", it sometimes gets out of hand! Families are requested to phone in before coming (there's a visitors lounge with a direct line to the nurses station), but they often don't.....Sometimes, when they come in to visit, a family member is in a compromising situation, or another patient's privacy is invaded."

Consequently, many participants restricted visits around shift report, and required family members to call into the unit before visits, to protect patient privacy and confidentiality. They wrote:

"The only rule we strictly enforce is 'no visitors at report time'." 

"Family visiting is pretty much up to the discretion of nurse, but we all enforce the one main rule, 'no visitors during change of shift' (except for dying patient)."

"The only true restriction we have is that the family must call in prior to each visit."

Participant's believed that liberal visiting had advantages and disadvantages for patients and their families. Many respondents also expressed their beliefs about the consequences of visiting on the nurse and the critical care unit.

Consequences for nurses and units:

The comments submitted by nurses in this study, suggested that the effects of visiting on the critical care nurse and unit were predominantly negative. Nevertheless, some participants suggested that a more liberal approach to visiting allowed the nurse to support the patient-family unit by encouraging families, and extending their presence in the unit. For instance, participants wrote:
"We encourage family visits and are very supportive of families needs. We don’t have a problem with families staying the night in our quiet room."

"We are very liberal and have relatively few problems with families. We will even set up recliner chairs at the bedside for family to stay overnight."

Other participants objected to the length of visits and to the lack of control over visitation. They stated:

"Visiting is too long in our area, visits should be limited to 15 minutes at a time."

"We, according to the college, cannot ask a patient’s family to leave the room at any time. Visiting in my opinion is far too liberal."

Some wanted to maintain a traditional definition of family:

"Only immediate family should visit"

"We must be strict when dealing with a teen population, because all the patient’s school friends become family."

Some nurses stated that visiting jeopardized patient care delivery, and increased frustration associated with the family’s inability to understand or comply with unit visiting rules:

"Family members frequently phone for updates. Sometimes staff spend more time dealing with families than looking after patient."

"There is a great deal of cultural variety in our city, and cultural response to illness varies. Some groups refuse to adhere to our guidelines, and make it very difficult for nurses to do what is in the patient’s best interest."
"Many of our visitors can't even speak or understand English. Since people don't always understand what we are doing, and for fear of being misunderstood, we will simply ask visitors to 'leave the room'. Many senior nurses have had bad experiences with families misunderstanding nursing interventions, therefore they are very strict with visiting regulations."

Finally, as one participant explained, the fact that most current visiting policies are more liberal than in the past does not guarantee family presence in the critical care unit:

"We have an open visiting policy, and we encourage the family to stay if the patient or the family show a need. There is a 'Family Room' with a sofa, lounge chair, and bathroom where family members can sleep all night. It is the most welcome addition to our ICU. However, the time spent with the patient is limited to the patient's condition."

To review, many participants believed that the individual nurse controlled visitation, and that this practice led to conflict among staff and family members. Others believed that their unit had a more open approach to visiting, and that this approach had advantages for patients and families, but was generally unacceptable for the critical care nurse and the unit. The nurses' behavioral and normative beliefs will affect their attitudes and subjective norms toward family visiting in their units (Ajzen & Fishbein, 1980). The next section will present the results from the Critical Care Nurse Family Visiting Questionnaire that address the determinants of critical care nurses' behavior toward family visiting outlined in the five research questions.
Determined of Nurses’ Behavior Toward Visiting

This thesis proposed to increase the understanding of critical care nurses’ behavior toward family visiting, by determining their attitude about the family’s presence in the unit, and their perceptions of the expectations of others to engage or not engage the family in visiting. Five research questions were developed to explore these determinants. The first question examined nurses’ attitudes about visiting, and the second explored their subjective norms toward family visiting. The third question addressed the participants’ intentions toward visiting, and the fourth compared the influence of their attitudes and subjective norms on their intentions toward visitation. The final question related the participants’ educational preparation and critical care experience to their attitudes toward visiting.

Attitudes Toward Visiting

Attitude is one of the antecedents of intention, and ultimately, of behavior (Ajzen & Fishbein, 1980). The first research question in this thesis sought to determine the critical care nurse’s attitudes about the effects of structured and open family visiting on patients, families, and nursing staff. In the Critical Care Nurse Family Visiting Questionnaire (Part Two), the nurses’ general evaluation of the effects of visiting, as well as significant outcomes of that attitude were determined. The nurses rated their general attitude toward structured
and open family visiting on three evaluative scales from 1 (extremely good, extremely beneficial, extremely rewarding) to 7 (extremely bad, extremely harmful, extremely punishing). The majority of nurses felt that structured family visiting, was either extremely or quite good, either extremely or quite beneficial, either extremely or quite rewarding (See Table 1).

Table 1  
Critical Care Nurses' Attitudes toward Structured Family Visiting

<table>
<thead>
<tr>
<th></th>
<th>Extremely Likely</th>
<th>Quite Likely</th>
<th>Slightly Likely</th>
<th>Neither Likely</th>
<th>Slightly Likely</th>
<th>Quite Likely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>48.9%</td>
<td>47.8%</td>
<td>2.5%</td>
<td>0.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Harmful</td>
<td>0.0%</td>
<td>1.1%</td>
<td>1.9%</td>
<td>1.9%</td>
<td>5.2%</td>
<td>48.0%</td>
<td>42.0% Beneficial</td>
</tr>
<tr>
<td>Rewarding</td>
<td>25.6%</td>
<td>47.3%</td>
<td>11.7%</td>
<td>11.7%</td>
<td>0.0%</td>
<td>2.9%</td>
<td>0.7% Punishing</td>
</tr>
</tbody>
</table>

(n = 273)

In contrast, the nurse’s general attitude toward open family visiting was much less clear. Nevertheless, they tended to rate this approach to visiting more positively than negatively (See Table 2).

Table 2  
Critical Care Nurses' Attitudes toward Open Family Visiting

<table>
<thead>
<tr>
<th></th>
<th>Extremely Likely</th>
<th>Quite Likely</th>
<th>Slightly Likely</th>
<th>Neither Likely</th>
<th>Slightly Likely</th>
<th>Quite Likely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>18.1%</td>
<td>33.6%</td>
<td>11.2%</td>
<td>5.8%</td>
<td>15.9%</td>
<td>12.3%</td>
<td>3.2% Bad</td>
</tr>
<tr>
<td>Harmful</td>
<td>2.6%</td>
<td>5.2%</td>
<td>21.5%</td>
<td>11.1%</td>
<td>11.9%</td>
<td>32.6%</td>
<td>15.2% Beneficial</td>
</tr>
<tr>
<td>Rewarding</td>
<td>15.0%</td>
<td>27.5%</td>
<td>15.0%</td>
<td>25.6%</td>
<td>9.2%</td>
<td>7.0%</td>
<td>0.7% Punishing</td>
</tr>
</tbody>
</table>

(n = 273)
In the Critical Care Nurse Family Visiting Questionnaire (Part Two), participants' evaluated on a scale of 1 (extremely good) to 7 (extremely bad) the effect of structured and open family visiting on the patient (physically and psychologically), the family, the nurse, and the critical care unit. Table 3 presents the percentage of nurses rating family visiting effects as extremely good and quite good.

**Table 3**

**Critical Care Nurses’ Attitudes about the Effects of Structured and Open Family Visiting**

<table>
<thead>
<tr>
<th>Effect of visiting</th>
<th>Extremely Good or Quite Good</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Structured visiting</td>
</tr>
<tr>
<td>Effect on patient physically</td>
<td>67.2% (n = 278)</td>
</tr>
<tr>
<td>Effect on patient psychologically</td>
<td>90.0% (n = 279)</td>
</tr>
<tr>
<td>Effect on family</td>
<td>76.0% (n = 278)</td>
</tr>
<tr>
<td>Effect on nurse</td>
<td>55.0% (n = 276)</td>
</tr>
<tr>
<td>Effect on unit</td>
<td>28.6% (n = 277)</td>
</tr>
</tbody>
</table>

Generally, respondents evaluated the effects of structured visiting more positively than open visiting, and the effects of visiting more positive for families and patients, than for the nurse, or the critical
care unit. In addition to the results in Table 3, nearly half the respondents evaluated the effects of open visiting as slightly to extremely bad on the functioning of the critical unit and nurse.

Subjective Norms toward Visiting

Subjective norms are the second determinant of the nurses’ behavioral intentions toward visiting (Ajzen & Fishbein, 1980), and the second research question explored the nurses perceptions of the expectations of coworkers, managers, and critical care patient’s families toward visiting. In the Critical Care Nurse Family Visiting Questionnaire (Part Two), participants rated their expectations of each significant referent toward structured and open family visiting, on a bipolar scale from 1 (extremely likely) to 7 (extremely unlikely). Most participants thought it likely that all referents would expect the nurse to allow structured visiting (See Table 4).

Table 4

Critical Care Nurses’ Perceptions of the Expectations of Significant Others toward Structured Family Visiting

<table>
<thead>
<tr>
<th></th>
<th>Extremely Likely</th>
<th>Quite Likely</th>
<th>Slightly Likely</th>
<th>Neither</th>
<th>Slightly Unlikely</th>
<th>Quite Unlikely</th>
<th>Extremely Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Nurse</td>
<td>54.9%</td>
<td>33.2%</td>
<td>2.9%</td>
<td>8.3%</td>
<td>0.4%</td>
<td>0.0%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Coworker</td>
<td>30.0%</td>
<td>44.4%</td>
<td>12.6%</td>
<td>7.6%</td>
<td>3.2%</td>
<td>1.8%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Family</td>
<td>69.8%</td>
<td>24.1%</td>
<td>3.2%</td>
<td>2.5%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

(n = 277)
The respondents’ perceptions of the expectation of others toward open family visiting were not as clear. The results (in percentages) are presented in Table 5.

Table 5
Critical Care Nurses’ Perceptions of the Expectations of Significant Others toward Open Family Visiting

<table>
<thead>
<tr>
<th></th>
<th>Extremely Likely</th>
<th>Quite Likely</th>
<th>Slightly Likely</th>
<th>Neither Slightly Unlikely</th>
<th>Quite Unlikely</th>
<th>Extremely Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Nurse</td>
<td>21.7%</td>
<td>25.0%</td>
<td>6.9%</td>
<td>17.4%</td>
<td>5.4%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Coworker</td>
<td>10.0%</td>
<td>19.6%</td>
<td>13.0%</td>
<td>12.3%</td>
<td>9.8%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Family</td>
<td>30.8%</td>
<td>40.6%</td>
<td>10.1%</td>
<td>10.9%</td>
<td>3.6%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

(n = 277)

Generally, the nurses felt that the family would be most likely, and that their coworker would be least likely to expect the nurse to allow open family visiting. This majority of this sample of nurses (90%) thought that their head nurse would expect structured family visiting, whereas only 53% thought it likely that their head nurse would anticipate open family visiting.

**Attitudes, Subjective Norms, and Intentions**

The immediate determinant of the performance or non-performance of a behavior is the individual’s intention toward the behavior (Ajzen & Fishbein, 1980). The third research question asked:
What are the critical care nurse's behavioral intentions toward structured and open family visiting? The Critical Care Nurse Family Visiting Questionnaire (Part Two) determined the nurse's intention to plan for structured and for open family visiting, on a scale of 1 (extremely likely) to 7 (extremely unlikely). Their responses are presented in Table 6.

Table 6
Critical Care Nurses' Intentions toward Structured Family Visiting (SFV) and Open Family Visiting (OFV)

<table>
<thead>
<tr>
<th></th>
<th>Extremely Likely</th>
<th>Quite Likely</th>
<th>Slightly Likely</th>
<th>Neither</th>
<th>Slightly Unlikely</th>
<th>Quite Unlikely</th>
<th>Extremely Unlikely</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFV</td>
<td>42.0%</td>
<td>42.0%</td>
<td>2.6%</td>
<td>4.4%</td>
<td>2.2%</td>
<td>4.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>OFV</td>
<td>13.4%</td>
<td>29.5%</td>
<td>13.8%</td>
<td>5.2%</td>
<td>10.1%</td>
<td>15.3%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

(SFV: n = 274) (OFV: n = 268)

Certainly, most nurses planned to engage the family in structured visiting, and more than half of this sample planned to engage the family in open visiting. In contrast, 38% of respondents are unlikely to plan for open visiting.

A person's intentions about performing or not performing a behavior are determined by their attitude, and their perceptions of the expectations of significant others toward the behavior. However, the influence of these behavioral antecedents may not be equal (Ajzen & Fishbein, 1980). The fourth research question in this study examined
which behavioral determinant (attitude or subjective norm) had the greater influence on the nurse’s behavioral intention toward open family visiting. Correlational coefficients showed the relationship among the critical care nurse’s attitudes, subjective norms, and behavioral intention toward open family visiting (See Table 7).

Table 7.
Correlation Results of the Relationship among the Critical Care Nurses’ Behavioral Intentions, Attitudes, and Subjective Norms toward Open Family Visiting

<table>
<thead>
<tr>
<th></th>
<th>Intention</th>
<th>Attitudes</th>
<th>Subjective Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes</td>
<td>0.62**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Subjective Norms</td>
<td>0.69**</td>
<td>0.60</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note: ** Significant at 0.01 level.

These results show a significant relationship between the nurse’s attitude and intention toward open family visiting. Furthermore, this correlational coefficient indicates a significant relationship between the nurse’s expectations of significant others and intention toward open family visiting.
Attitudes and Professional Characteristics

Extraneous variables such as educational level and experience may influence an individuals’ beliefs, and ultimately their behavior toward visitation. The final research question explored the relationship between the critical care nurse’s education and attitude toward visitation, as well as between the nurse’s critical care experience and attitude toward visitation. This question asked: Does education, length or type of critical care experience influence the nurse’s attitudes toward open family visiting?

Attitude by education level

The Critical Care Nurse Family Visiting Questionnaire established the educational level of study participants’ as well as their general attitude toward family visiting. Their general attitude toward open family visiting by level of education was then determined. Scores ranged from a mean of 9 (extremely good, extremely beneficial, extremely rewarding), to 14 (extremely bad, extremely harmful, extremely punishing). Table 8 presents the results.
Table 8
Critical Care Nurses’ Attitudes toward Open Family Visiting by Educational Level

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma (College or Hospital School)</td>
<td>11.35</td>
<td>1.57</td>
</tr>
<tr>
<td>Diploma plus one or more post basic courses</td>
<td>11.66</td>
<td>2.26</td>
</tr>
<tr>
<td>Diploma plus one or more university courses</td>
<td>11.06</td>
<td>1.70</td>
</tr>
<tr>
<td>Baccalaureate (basic program)</td>
<td>10.69</td>
<td>1.83</td>
</tr>
<tr>
<td>Baccalaureate (post-RN program)</td>
<td>10.97</td>
<td>2.02</td>
</tr>
<tr>
<td>Other</td>
<td>11.00</td>
<td>1.81</td>
</tr>
</tbody>
</table>

The results suggest that education made little difference to the nurse’s attitude toward open family visiting. One way analysis of variance (ANOVA) was also performed. ANOVA is used to determine the significance of differences between the means of two or more groups. An ‘F ratio’ is obtained by contrasting the variation between groups with the variation within groups. When the difference between groups is large relative to within groups, the difference is likely due to the effect of the variable, in this case, the nurse’s educational preparation (See Table 9).
Table 9

Oneway ANOVA Results of Critical Care Nurses' Attitudes toward Open Family Visiting by Education Level

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>5</td>
<td>29.8931</td>
<td>5.9786</td>
<td>1.5146</td>
<td>0.1855</td>
</tr>
<tr>
<td>Within</td>
<td>263</td>
<td>1038.1589</td>
<td>3.9474</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>268</td>
<td>1068.0520</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These results indicate that at the 0.01 level of significance, there is insufficient evidence to conclude that there is any differences among the nurses’ attitudes toward open family visiting with respect to the nurses’ educational preparation.

Attitude by experience

The number of years that nurses practice in critical care setting may influence their attitude toward family visitation. Therefore, data analysis also established the relationship between the nurse’s attitude and level of critical care experience. The Critical Care Nurse Family Visiting Questionnaire determined that with the exception of one respondent, critical care experience of participants was either more than 5 years, or more than one year but less than five years. The nurse’s general attitude toward open visiting by experience level was
determined, and ranged from a mean score of 9 (extremely good, extremely beneficial, extremely rewarding), to 14 (extremely bad, extremely harmful, extremely punishing). (See Table 10).

Table 10  
**Critical Care Nurses’ Attitudes toward Open Family Visiting by Years of Critical Care Nursing Experience**

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 5 years</td>
<td>11.16</td>
<td>2.07</td>
</tr>
<tr>
<td>More than 1 year less than 5 years</td>
<td>11.11</td>
<td>1.95</td>
</tr>
</tbody>
</table>

This suggests that the nurse’s attitude toward open family visiting did not vary by years of critical care experience. One way ANOVA confirmed that there were no differences between or within the experience levels and the nurses’ attitudes. (See Table 11).

Table 11  
**Oneway ANOVA Results of the Critical Care Nurses’ Attitudes toward Open Family Visiting by Years of Critical Care Experience**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>1</td>
<td>.1154</td>
<td>.1154</td>
<td>0.0288</td>
<td>0.8654</td>
</tr>
<tr>
<td>Within</td>
<td>266</td>
<td>1066.6122</td>
<td>4.0098</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>267</td>
<td>1066.7276</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
These results confirm that, at the 0.01 level, nurses' attitudes toward open family visiting is not affected by level of critical care experience. The final research question also explored the relationship between nurses' attitudes and area of critical care experience.

**Attitude by area of practice**

The focus of critical illness and patient population may influence nurses' attitudes toward family visiting, so data analysis determined the nurse's attitude by area of critical care practice. Results ranged from 9 (extremely good, extremely beneficial, extremely rewarding), to 14 (extremely bad, extremely harmful, extremely punishing). The results are presented in Table 12.

**Table 12**

**Critical Care Nurses' Attitudes toward Family Visiting by Area of Critical Care Practice**

<table>
<thead>
<tr>
<th>Area of Critical Care Practice</th>
<th>Structured Family Visiting Mean</th>
<th>Open Family Visiting Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical/Surgical ICU (n = 155)</td>
<td>10.01</td>
<td>10.9</td>
</tr>
<tr>
<td>Coronary Care (CCU) (n = 18)</td>
<td>10.57</td>
<td>11.1</td>
</tr>
<tr>
<td>Medical/Surgical/CCU (n = 38)</td>
<td>10.16</td>
<td>11.15</td>
</tr>
<tr>
<td>Pediatric ICU (n = 13)</td>
<td>10.41</td>
<td>10.8</td>
</tr>
<tr>
<td>Neonatal ICU (n = 3)</td>
<td>9.5</td>
<td>9.5</td>
</tr>
<tr>
<td>Emergency (n = 6)</td>
<td>10.0</td>
<td>10.14</td>
</tr>
<tr>
<td>Other (n = 45)</td>
<td>10.17</td>
<td>11.6</td>
</tr>
</tbody>
</table>
These results suggest that nurses practising in neonatal intensive care units may have a more positive attitude toward family visiting than nurse practising in other areas. However, the percentage of the sample that practised in neonatal ICU was extremely small, and these results must be interpreted cautiously.

In review, nurses in this study had a more positive attitude toward structured visiting than open family visiting. The effects of visiting were rated as more positive for the patient and family than for the critical nurse or the critical care unit. The nurses' intentions toward open family visiting correlated with the nurses attitude and subjective norms. Neither educational level or critical care experience appear to influence the nurse's attitude toward family visiting.

Chapter Summary

This chapter has presented the findings from the investigator-designed, three-part questionnaire surveying the visiting practices and policies of Canadian Association of Critical Care Nurses, as well as their attitudes, subjective norms, and intentions toward structured and open family visiting. The majority of subjects were full-time, general duty staff nurses, working with an adult patient population, in medical/surgical intensive care. Although a small majority of unit policies restricted visitation based on visitor age, length, and frequency of visits, several respondents indicated a more flexible approach to visiting.
Some nurses believed that an open approach to visiting reduced patient and family stress, while others believed that this lack of structure disrupted nursing care and unit function. Many perceived that visitation controlled by nurses promoted patient and family rest, and preserved patient privacy. Participants also recognized that this practice fostered staff and family conflict, and suggested that negotiating with families and patients reduced visiting related conflict.

Most nurses rated the effects of family visiting more positively for patients and families than for critical care nurses or the functioning of the unit. Their attitudes were more positive toward structured visiting than open visiting. Neither the nurses' educational preparation level or years of critical care experience influenced the nurse's attitudes about open family visiting. Participants perceived that their head nurses, coworkers, and patient's families would likely expect them to allow structured family visiting, but that their head nurses were less likely and coworkers were much less likely to expect them to allow open family visiting. The majority of nurses in this study indicated that they are likely to plan for structured family visiting, but less likely to plan for open family visiting. The next chapter will discuss the results in relation to relevant literature.
CHAPTER FIVE
DISCUSSION OF THE RESULTS

In this chapter, the findings from the Critical Care Nurse Family Visiting Questionnaire will be discussed. These findings will be considered in relation to relevant literature, and much of the literature introduced earlier in this study will be used for comparison. Additional literature will be employed to enhance discussion of the major findings. First, this chapter will explore participants' beliefs about visiting policies and practices. Next, the chapter will discuss determinants of critical care nurses' behavior toward family visiting, that were outlined in the study's five research questions.

Critical Care Nurses’ Beliefs about Visiting

Responses to the Critical Care Nurse Family Visiting Questionnaire (Part One) fixed-answer questions established participants’ convictions about their units’ expectations toward visiting. A small majority of units restricted the family’s presence, but many units had few, or no limitations to family visiting. Answers to the survey questionnaire’s open-ended questions, revealed participants’ beliefs about the consequences of liberal visiting, and of nurse-determined visitation.
Restrictive Visitation

The majority of critical care units restrict visitor age, as well as the frequency and time of visits. In fact, some participants reported that their unit allowed visitors for 5 minutes every hour, and described an adjacent family room that allowed the family to be close, without interfering with treatment. These were the exact visiting recommendations from the United States Public Health Service in 1962 (U.S. Department of Health, Education & Welfare, Public Health Service, 1962).

In the present study, the most common limitation on the length of visits was 10 minutes, but ranged from 5 to 30 minutes. Most units restricted the number of visits to one every hour, but the frequency restrictions varied from every two to every four hours, to two to four visits per day. Similar restrictions on the length and number of visits were reported by Kirchhoff et al., (1993), and Stockdale and Hughes (1988). In the current study, the most common minimum age of visitors allowed was 12 years, whereas Stockdale and Hughes (1988) found that most critical care units restricted visitors under 14 years of age. In both studies, this restriction varied from 1 year to 18 years.

Clearly, visiting restrictions in critical care settings are common, but are not standardized. Variation in patient diagnosis might account for the wide variation in policy restrictions. For example, adult cardiac patients may benefit from particular visiting limits, that
would be unsuitable for adult patients with sepsis. However, no respondent associated unit visiting policy with patient diagnosis. Moreover, no similarities were found in the visiting patterns described by nurses working with patients with similar diagnosis, such patients with coronary artery disease. Similarly, in her study of visiting regulations for patients with coronary artery disease, Kirchhoff (1982) concluded that the variability in visiting regulations across coronary care units seemed more related to institutional factors than patient factors.

Critical care units have commonly placed strict limitations on visits, and many units continue that practice. In 1988, Stockdale and Hughes reported that three quarters of the 197 critical care units in their survey restricted the frequency of visits, while eighty percent restricted the length of visit, and almost ninety percent restricted the minimum age of visitors. In contrast, many respondents in the current study reported that their unit visiting policy contained few limitations. For instance, nearly half the respondents reported no specific restriction on the minimum age of visitors, or length of visit, and nearly one third reported no specific policy addressing limitations on the number of visits. These findings suggest that visitation is becoming more flexible in critical care settings, a finding that is supported by other research (Brannon et al., 1990; Henneman et al., 1989). In addition, a number of participants reported that regardless of the visiting policy, the nurse determined the actual visiting practice.
Nurse-Determined Visitation

Responses to open-ended questions on the Critical Care Nurse Family Visiting Questionnaire (Part One) revealed that nurses altered visits to meet patient, unit, and family needs. Actual family visitation, then, depended upon the individual nurse's assessment of these needs, and upon the nurse's enforcement of unit visiting rules. Although some patients and families supported this nurse-determined visiting practice, a majority believed that it led to inconsistent visitation that frustrated families, and promoted inter-staff, as well as staff-family conflict.

Many participants indicated that their control of visitation promoted patient, family, and unit stability. Some believed that patients and families expected them to set visiting limits. This belief was reflected in Boykoff's (1986) study of patient and family perceptions of visiting in coronary care units. Participants in her study wanted the nurse to control the length and frequency of visits and to determine who could visit. Boykoff (1986) suggests that the nurse was allowed this control because "patients and families are in such a high stress state that they have decreased energy for decision making" and that "hospitalization may produce an iatrogenic behavioral helplessness in patients and families." (p. 577).

In contrast to Boykoff's (1986) findings, many respondents in the current study asserted that nurse-determined visiting practice
promoted inconsistent application of visiting rules that distressed staff and family. The individual nurse’s seemingly arbitrary enforcement of rules prompted family members to manipulate staff, and precipitated staff and family conflict. The nursing literature agrees that variation in visiting regulations is a contentious issue for families and staff (Brannon et al., 1990; Dunkel & Eisendrath, 1982; Kirchhoff et al., 1988; Krumberger, 1991). Some participants in the current study suggested that negotiating visiting rules with patients and families reduced conflicts and facilitated positive family-staff relationships.

Negotiating, or contracting visitation, was studied by Brady and others (1990). These researchers introduced contractual visiting after a survey about visiting preferences revealed little agreement among patients, families, and nurses. At the end of a one month trial, the researchers concluded that all parties accepted allowing choices in visiting, and that contracting visits reduced patient, family, and staff stress. Other studies also advocate for choice in visitation (Dracup & Breu, 1978; Henneman et al., 1989; Hickey & Lewandowski, 1988).

Unfortunately, contract visitation lacks the flexibility required in the constantly changing critical care milieu. Families may not understand patient care demands, or the functioning of the critical care unit, and moreover families may have differing beliefs about care, and may not always perceive nurses as caring. Planned, systematic interactions guided by a family framework can facilitate successful
family-nurse relationships and enhance patient care (Artinian, 1994; Jillings, 1981). The establishment of collaborative relationships with families can facilitate mutual understanding and can reduce the conflicts associated with visitation. Many theoretical family frameworks are available to critical care nurses for family assessment and appropriate intervention that supports and strengthens the family unit (Artinian, 1991; Wright & Leahey, 1987; Jillings, 1981; Jillings, 1990; Kupferschmid, Briones, Dawson, & Drongowski, 1991; McShane, 1991; Reeder, 1991).

Clearly, respondents believed that the bedside nurse ultimately controlled visitation. Nevertheless, many of them indicated that visiting policies, particularly open policies, also influenced their practice.

**Liberal Visitation**

Participant responses to the open-ended questions in the Critical Care Nurse Family Visiting Questionnaire (Part One), reflected their beliefs about the consequences of open visiting. Some nurses applauded this less structured approach toward visitation, believing that it reduced patient and family stress. Others contended that this approach disrupted patient and family rest, patient privacy, and patient care delivery. These conflicting beliefs about open visiting were echoed by nurses in other studies (Dunkel & Eisendrath, 1982;

Many participants in the current study believed that open family visiting alleviated patient and family worry. Also, the presence of a family member calmed a delirious patient and improved communication when language barriers existed. Nurse authors and researchers have recognized family member’s helpfulness in providing information about the patient’s normal coping mechanisms, and insight into the patient’s condition surrounding the disease (Artinian, 1991; Kirchhoff et al., 1988). Certainly nurses, in this and other studies, appreciated open and extended visiting for these ‘helpful’ family members.

On the other hand, nurses wanted restriction on visits when the family’s behavior disrupted unit function or patient care. Adversarial behavior, such as challenging patient management, may reflect the family’s disenchantment with the health care system (Robinson & Thorne, 1988). Indeed, families who exhibit negative behavior often need the most support, but receive the least attention from nurses (Hickey & Lewandowski, 1988). Robinson and Thorne (1988) advise critical care nurses to recognize disruptive family behavior as "an inevitable clash in perspectives", and a "manifestation of the family’s shattered trust in health care relationships" (p. 157). Nurses need to value the family’s interpretation of the critical care experience, provide
them with honest explanations, and reassurance.

Respondents also claimed that visiting disrupted care, a belief expressed by nurses in other studies (Dunkel & Eisendrath, 1982; Hickey & Lewandowski, 1988). Nurses in this study restricted visits when they were uncomfortable with the family watching care, or when they sensed that families were uncomfortable watching care. Undoubtedly, some families may wish to leave the bedside during patient procedures, and some nurses may equate the family's presence with the family's evaluation of nursing care. However, flexible visiting hours do not necessarily interfere with patient care delivery (Henneman et al., 1989). Conceivably, nurses need to explore the family's need to be near the patient, and their need to understand patient care and management.

Several participants believed that open visiting compromised patient privacy and confidentiality. These nurses prohibited visits during report or rounds, and required visitors to contact the unit prior to visits. They advocated for restrictions to prevent family members inadvertently hearing restricted patient information. Critical care nurses commonly request restricted visits during report (Henneman et al., 1989; Dunkel & Eisendrath, 1983). Alternatively, Molter (1994) contends that the family could attend rounds "to provide important information about the patient's response to treatment, and to receive information related to prognosis, progress, and patient care planning..."
issues" (p.3). Although Molter's suggestion has some validity, in the current critical care nurse-family visiting milieu, family attendance during unit rounds or shift reports may not enhance patient care.

Many nurses in this study believed that liberalized visiting precipitated patient physiological instability, as well as patient and family exhaustion. These nurses wanted visitation regulated to promote rest. In contrast, nursing authors and researchers argue that the restriction of family visits for the purpose of providing rest to the patient is a myth (Heater, 1984; Nobel, 1979; Walker, 1972). They contend that health care workers are the greatest source of interruptions to patient rest. For example, Walker (1972) observed that in an 8 hour period, patients experienced from 25 to 56 staff interactions lasting 2 to 3 minutes. Moreover, Nobel (1979) found that thirty-nine percent of inter-staff communication took place within the hearing range of patients, regardless of rest periods.

Heater (1985) argues that a family member who sits at the bedside and only speaks to and touches the patient when he is awake may provide the "reassurance necessary for the patient to close his eyes and rest" (p. 184). Thus, open visiting may enhance patient rest, if patients are reassured by visitors about home and family concerns. On the other hand, when visiting is restricted, patients may feel obligated to stay awake knowing that the time for communication is limited. Clearly, nurses need to question policies and practices that
claim to promote patient rest through the restriction of visitors.

To summarize, a small majority of respondents reported unit policy visiting restrictions, but many indicated that critical care visitation is becoming less structured. Indeed, nurses commonly controlled visiting limits, a practice that precipitated staff-family conflict. Critical care nurses extended visits to decrease patient and family distress, and restricted visits to reduce their fatigue, as well as to reduce nursing stress, and to improve patient care delivery. The conflict surrounding critical care family visiting may be ameliorated through clarification of the family’s perspective about visiting, through negotiation of visiting rules, and through the consistent application of a family framework.

Participants’ beliefs about the family’s presence, influence their attitudes and subjective norms toward visiting (Ajzen and Fishbein, 1980). Subsequently, those determinants influence their behavioral intentions, and ultimately their behavior toward family visiting. Next, the discussion will focus on findings related to the nurse’s behavioral determinants toward family visiting.
Determinants of the Nurse’s Behavior toward Visiting

This study proposed five research questions to examine the factors that influence the critical care nurse’s behavior toward family visiting. The first three questions addressed the critical care nurses’ attitudes, subjective norms, and intentions toward structured and open family visiting. Participant responses to the Critical Care Nurse Family Visiting Questionnaire (Part Two) established those behavioral determinants. Analysis of the survey questionnaire data answered the final research questions by determining the relationships between the nurses’ attitudes, subjective norms, and behavioral intentions toward open family visiting, and by determining the relationships between the nurses’ attitudes toward open visiting and specific professional characteristics.

Attitudes and Intentions toward Visiting

Overall, critical care nurses in this study evaluated the effects of structured visiting much more positively than the effects of open family visiting. Furthermore, the nurses’ general evaluation of the effects of structured and of open visiting was consistent with their evaluation of the specific effects or outcomes of structured and open visiting on the patient, family, nurse, and unit. These results are similar to those of Kirchhoff, et al., (1993). Their 70 critical care nurses also rated structured visiting more positively than open visiting,
and the overall effect of visiting most positive for the patient and most negative for the critical care unit.

In accordance with the theory of reasoned action, the attitudes of study participants toward family visiting reflected their beliefs about the consequences of visiting. For instance, most believed that visits reduced patient and family stress, and the majority rated the effect of visiting on the family very positively, and on the patient’s psychological status most positively. Many respondents believed that visiting increased patient fatigue and instability, and less than half of them rated the effects of open visiting on the patient’s physical status positively. According to a number of nurses in this study, the lack of control over visitation disrupted patient care delivery and frustrated the bedside nurse. Less than one third of the respondents rated the effects of open visiting on the nurse positively, and less than one quarter rated the effects of open visiting on the critical care unit positively.

The attitudes of participants toward open family visiting correlated significantly with their intentions toward open family visiting, which supports Ajzen and Fishbein’s (1980) assertion that attitudes are predictive of intentions. These findings suggest that critical care nurses may justify extending visits when the family’s presence calms the patient. On the other hand, nurses may justify restricting family visits to protect the patient from negative physiological effects, to
escape stressful family interactions, and to avoid disruptions in unit routines and care delivery.

**Subjective Norms and Intentions toward Visiting**

Generally, nurses in this study perceived that all significant referents would be more likely to expect structured visiting than to expect open visiting. Also, the majority of respondents perceived that the patient’s family would be most likely, and that their own coworkers would be least likely to expect the nurse to allow structured or open family visiting. Few nurse researchers have looked at the influence of social pressure on the nurse’s behavior toward family visiting. However, Hickey and Lewandowski (1988) found that nurses’ involvement with families was influenced more by their expectations of peers than by their expectations of unit leaders. In contrast, in the current study, the nurse’s intentions toward open visiting matched more closely with their perceived expectations of head nurses than with their perceived expectations of coworkers. Dunkel and Eisendrath (1983) looked at the influence of perceived expectations of other critical care nurses on the nurse’s behavior toward the family. They found that nurses’ behavior toward families was negatively affected by the nurses’ perceptions of ‘super’ nurses, who appeared to meet all the family’s needs (Dunkel & Eisendrath, 1983). Participants in the current study did not discuss this variable.
Findings from this study support Ajzen-Fishbein’s (1980) contention that normative beliefs influence subjective norms. The majority of participants believed that their hospital promoted visiting restrictions, as outlined in their unit policy. Subsequently, participants’ responses to the Critical Care Nurse Family Visiting Questionnaire indicated that they perceived their head nurse more likely to expect structured visiting than open visiting. Moreover, many subjects believed that critical care nurses wanted control over visitation, hence, they perceived that their coworkers would be unlikely to expect them to allow open visiting for families. Finally, visiting policies have traditionally determined family access to their critically ill loved ones, and therefore, respondents perceived that their patient’s family members would be more likely to expect structured than open visiting.

Results of the study also showed that the participants’ subjective norms correlated significantly with their intentions toward open family visiting, which supports Ajzen-Fishbein’s (1980) contention that subjective norms are predictive of behavioral intentions. Nurses in this study were much less likely to plan for open visitation than for structured visitation. These findings suggest that nurses may justify restricting family visits to support institutional based policies, and to avoid unpleasant confrontations with their coworkers.
Intentions, Attitudes, and Subjective Norms toward Visiting

The fourth research question compared the influence of attitude with the influence of subjective norms on the nurse’s intention toward open visiting. Results from the Critical Care Nurse Family Visiting Questionnaire (Part Two), showed that nearly ninety percent of participants would likely plan for structured visiting. On the other hand, only fifty-six percent would likely plan for open visiting, and, in fact, nearly one third were extremely unlikely, or quite unlikely to plan for open visiting.

Analysis of the survey questionnaire data revealed a significant correlation between nurses’ attitudes toward open visiting and intentions toward open family visiting, and also between nurses’ expectations of significant others toward open family visiting and intentions toward open family visiting. In addition, there was a significant correlation between the nurses’ attitudes toward open family visiting and the nurses’ expectations of significant others. These results support Ajzen and Fishbein’s (1980) concept that the person’s intention to perform a behavior can be predicted from the person’s attitude and subjective norms. Although the correlation between the nurse’s intention toward open family visiting and subjective norm is slightly stronger than the correlation between attitude and intention, both are statistically significant. These findings suggest that internal factors, such as positive beliefs and attitudes about the effects of visiting, as well as external factors, such as open
visiting policies supported by head nurses and coworkers will influence the nurse to engage the family in open visiting.

**Attitude, Education, and Experience**

Study results showed that nurses' attitudes toward open family visiting varied little by the nurses' educational preparation, or by the nurses' critical care experience. The most common educational preparation for participants in this study was a registered nursing diploma (RN), supplemented by either post-basic or university courses. The next most common level of education was a generic bachelor of nursing degree. These results support those of other studies (Kirchhoff et al., 1993; Hickey & Lewandowski, 1988). However, educational differences exist between nurses in the present study, and nurses in studies conducted in the United States. First, in Canada, many critical care nurses had an RN diploma, plus, a certificate program in critical care nursing. In contrast, some critical care units in the United States employ licensed practical nurses (Hickey & Lewandowski, 1988). In Kirchhoff et al.'s 1993 study, some nurses had achieved Critical Care Registered Nurse (CCRN) certification. Although all nurses in the current study were members of the Canadian Association of Critical Care Nurses (CACCN), this association is only in the process of developing a certification exam. Finally, no study was found that identified the nurses' educational preparation in family systems nursing. Education that prepares the
nurse to intervene with the family in crisis may change the nurses' beliefs about family visiting.

Years of critical care experience did not influence the nurse's attitude toward family visiting in the present study, or in other research (Hickey & Lewandowski, 1988; Kirchhoff, et al., 1993). In the current study, regardless of the nurse's area of critical care practice, the nurses' attitude was more positive toward structured visiting than toward open visiting. Nurses practising in emergency, neonatal intensive care, and pediatric intensive care units had the most positive attitudes toward open visiting. However, those practice areas included few nurses in this study, and the results must be interpreted with caution. No other study looked at the relationship between the attitude toward visiting and area of critical care practice.

Chapter Summary

In summary, the nurses' interpretations of their units' visiting policy, and their practice of extending and restricting visitation reflected their beliefs about family visiting. The policies and practices described in this study suggest that visiting restrictions are common but inconsistent across and within critical care units. Visiting practice is influenced more by individual nurse enforcement and unit specific policy, than by research findings about the effects of visiting. Inconsistencies in visiting practice often trigger staff and family conflicts that may be ameliorated through negotiation, clarification of
expectations, and implementation of a family nursing framework. The nurses’ attitudes and subjective norms toward open family visiting were consistent with their behavioral and normative beliefs. Generally, visiting was rated more positively for patients and families than for the critical care nurse and unit, and structured visiting was rated more positively than open visiting. These results support the findings of other research. Respondents perceived that significant referents would be more likely to expect structured than open family visiting, and that the patient’s family member would be most likely, while the nurse’s coworkers would be least likely to expect open family visiting. Both the nurses’ attitudes and subjective norms correlated significantly with their intentions toward open family visiting, which suggests that nurses may restrict visits to avoid the negative effects, and to avoid conflicts with head nurses who design restrictive policies and with coworkers. Finally, neither the nurses’ educational level nor critical care experience influenced the nurses attitude toward open family visiting.
CHAPTER SIX
SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This chapter will summarize the study reported in this thesis. Major conclusions which arise from the study's findings are drawn. Finally, implications of this study for nursing are presented.

Summary

The purpose of this study was to examine the factors that influence critical care nurses' behavior toward family visiting. The impetus for the study arose from the implications in the literature, and from the researcher's observation that family visiting in critical care is a contentious issue for nurses and families. Critical care research supports increasing the family's access to critically ill patients, and many critical care managers are moving to liberalize visiting policies. Yet, the individual critical care nurse translates these policies into practice, and many of these nurses advocate restricting visitation to promote patient, family, and unit stability.

Although some research has addressed the effect of visiting on critically ill patients and their families, very few studies have looked at the critical care nurse's beliefs and attitudes about visiting. No study was found that explored the impact of attitudes and subjective norms on nurses' behavioral intentions toward family visiting. A study was needed that would increase understanding of the determinants of
critical care nurses' behavior toward family visiting, and that would provide direction for the design of appropriate visiting policies.

The Ajzen-Fishbein (1980) framework was used to examine the critical care nurses' attitudes, subjective norms, and intentions toward visiting. These behavioral determinants toward structured and open family visiting were described and relationships among them explored. In addition, the study examined the relationships between the nurse's education and experience, and the nurse's attitude toward open visiting.

A descriptive correlational method was used to guide this study. This design facilitated building on the limited information known about critical care nurses' behavior toward family visiting. Furthermore, this method was congruent with the purpose of the study, which was to describe the relationships among the determinants of the nurses behavior.

In order to obtain the data, two hundred and seventy-nine members of the Canadian Association of Critical Care Nurses returned a completed three-part, researcher-designed Critical Care Nurse Family Visiting Questionnaire. Because all participants were CACCN members, the results may not be generalizable to the general population of critical care nurses. Moreover, although current literature and judgements of practicing critical care nurses determined the content of the questions, the construct and criterion validity have not been determined. Further, the questionnaire was not pretested,
and therefore its reliability has not been established.

Data analysis included performing descriptive statistics (frequency, percents, and standard deviations) for all study variables. In addition, correlation coefficients were calculated to establish the relationship between the nurses' attitudes, subjective norms, and intentions toward structured and open family visiting. Finally, analysis of variance (ANOVA) was determined to determine the relationship between the nurses' attitudes toward open family visiting by educational level, and by years of critical care experience.

The majority of participants were employed in full-time, general duty staff positions, in adult medical/surgical intensive care units. Most nurses had more than five years of critical care experience, and all, but one had worked in critical care for more than one year. The sum of critical care experience for most of these nurses had been gained in their present unit.

Responses to the Critical Care Nurse Family Visiting Questionnaire established the participants' beliefs about family visitation in their critical care unit. Slightly more than half of the critical care nurses surveyed characterized their unit visiting policies as restrictive toward the number and length of visits, and the minimum age of visitors. However, these restrictions were not standardized across critical care units. Furthermore, many participants described policies with few or no limitations to visitation. Many participants believed that the bedside nurse actually controlled family visitation, but that, the
inconsistencies associated with this nurse-determined visiting practice precipitated staff and family conflict. Nurses in this study believed that liberal visiting policies reduced patient and family worry, but that open visiting increased patient and family fatigue, disrupted care delivery, and breached patient privacy and confidentiality.

In accordance with the theory of reasoned action (Ajzen & Fishbein, 1980), participants' behavioral and normative beliefs about family visiting were congruent with their attitudes and subjective norms toward visiting. Generally, the critical care nurses in this study rated the effects of visiting more positively for the family and patient than for the nurse or critical care unit. They also evaluated the effects of structured visiting much more positively than the effects of open family visiting. Respondents perceived that all significant referents would be more likely to expect structured visiting than open visiting. As well, they perceived that the patient's family would be most likely, and that their own coworkers would be least likely, to expect structured, or open family visiting. In addition, the study found that participants' attitudes and subjective norms toward open family visiting correlated significantly with their intentions toward open family visiting. Results also showed that neither educational preparation or critical care experience influenced the nurse's attitude toward open visitation.

The findings from this study provide a rationale for critical care nurses’ behavior toward family visits. Nurses justified extending visits
when patients were calmed by the family, and when the patient’s physiological status was stable. Participants’ justified restricting visits to protect patients and families, and to improve patient care delivery.

These results were compared with other nursing research and nursing literature. There was support for the findings pertaining to the variability of visiting policies and practices. However, results from the current study suggest that critical care unit visiting policies are less restrictive than those described in other studies. Beliefs about the consequences of visiting reported by this study’s participants were echoed by nurses in many other studies. Particularly, Kirchhoff et al. (1993) showed that nurses restricted visits to accommodate patient and family rest and to protect patient privacy. However, Brannon et al. (1990) and Henneman et al. (1989) found that open visiting did not interfere with patient care delivery, or increase the stress level of the nurse. The respondents’ attitudes and intentions toward visiting provided support for the one other study (Kirchhoff et al., 1993) that addressed this issue. In contrast to the findings of Hickey and Lewandowski (1988), the current study found that the participants’ intentions toward open visiting matched more closely with their perceived expectations of head nurses than with their perceived expectations of coworkers. Finally, no other study was found that explored the relationship between nurses’ subjective norms and intentions toward family visiting.
Conclusions

On the basis of the study’s findings a number of conclusions have been drawn:

1. Family visiting is a significant facet of the critical illness experience that affects the patient, the patient’s family members, the critical care nurse, and the function of the critical care unit.

2. Visiting policies set by institutional or unit managers will not guarantee visitation.

3. Inconsistent enforcement of visiting regulations is a major variable that can confuse and frustrate family members and nursing staff.

4. Nurses who work directly with critically ill patients are more likely to engage the family in structured visiting than in open family visiting.

5. Nurses make decisions about visitation based upon their convictions about the specific unit policy, as well as their beliefs about the effects of visiting on patient, unit, and family needs.

6. Nurses justify extending visits when the patient’s status is stable, when families are helpful, and when the unit is quiet.

7. Nurses justify restricting visits to protect patients and families from negative effects, and to avoid conflicts with staff and with family members, and to enhance patient care delivery.
Implications for Nursing

The findings from this study generate many implications for nurses who work with critically ill patients and their families, for nurse managers who design critical care visiting policies, and for nurse researchers who study nurse family relationships. The Ajzen-Fishbein model offers a valuable way to determine the factors that influence nurses’ behavior toward family visiting, and to determine the interventions that will facilitate nurses’ support of flexible visitation. Results from the Critical Care Nurse Family Visiting Questionnaire confirmed that nurses’ attitudes and subjective norms correlated with their intentions toward open family visiting. Furthermore, those determinants were closely linked to their behavioral and normative beliefs. Thus, interventions that promote nurses’ positive beliefs about the consequences of open visiting, and nurses’ convictions that others expect open visitation, will encourage critical care nurses to engage families in open visitation.

Implications for Nursing Practice

A major implication that arises from this study is that critical care nurses who work directly with patients and their families, and who translate visiting policy into action, need to be involved in designing these policies. Nursing literature suggests that nurses should facilitate family visits for their beneficial effects, but critical care unit visiting policies may need to be modified to expedite this practice. Nurses,
managers, family members, and patients need to carefully examine the current practice of restricting visits, and then collaborate to design the best pattern of visitation. Patients do not abandon their relationships when they become critically ill, indeed, the family’s presence can provide the patient with familiar, caring interactions that humanize the critical care environment. Policies that enforce mandatory family separation during the life-threatening illness will not meet the patient’s or family’s needs. Therefore, visiting policy determination should not begin with setting limits on family access, but with facilitating the family’s access to the patient. Nurses need to reconsider automatic, mandatory exclusion of the family during routine care and even during emergencies. Individual visiting guidelines should be negotiated between the nurse, patient, and family, and then clearly communicated to other health care workers.

A second implication arising from this study is that barriers to the family’s presence are less easily justified when examined carefully. A wealth of nursing research indicates that the family plays a vital role in patient recovery, and as patient advocates, nurses are obliged to incorporate the results of these studies in their practice with critically ill patients and families. Undoubtedly, nurses are more likely to actively support open visiting if they believe that they, their patients, and their patients’ families benefit from this practice. Traditionally, family visits were restricted to protect critically ill patients from negative physiological effects, to protect their families from
exhaustion, and to protect nurses from disruptions in patient care. Now, nurses need to compare current restrictive visiting practices with research that shows the beneficial effects of visiting. Findings of significant research could be circulated to unit staff, or presented at formal nursing research rounds, or incorporated into case study presentations.

This study also found that some nurses restrict visits when they are uncomfortable interacting with the family. These nurses will be more likely to advocate for open visiting when they feel confident in their ability to meet the family’s needs in crisis. These needs have been well documented, and could be met through implementation of a research-based plan of care. Once met, the family will be able to support their critically ill member. Undoubtedly, a catastrophic illness is frightening for patients and disruptive to normal family functioning. The critical care nurse has the opportunity to support families and enhance their coping abilities through the illness experience. During the initial crisis period, family members need to reduce stress and alleviate uncertainty. The nurse should allow the family to maintain close contact with the critically ill patient, provide honest explanations, and foster realistic hope. Information provided to families should be factual and concise, with minimal extraneous details. In addition, nurses should consistently document identified family needs and interventions successful in meeting those needs. Later in the illness experience, families should be included patient
management decisions, and encouraged to participate in care.

A further implication arising from this study is that critical care nurses must broaden their focus of care to include the family. Traditionally, these nurses have concentrated on providing care for critically ill individuals within families, but now, they need to view the family as the unit of care. Implementation of a theoretical family framework, such as symbolic interactionism, family systems, developmental, or social change theories, will allow nurses to observe the family as a unit with interacting parts. Certainly, nurses have a unique opportunity to observe the interactions between patients and their families during a sudden catastrophic illness, and the consistent application of a family framework can assist nurses to develop insights about the family's functions, interactions, and perceptions. Nurses can identify those families who will be most at risk for ineffective coping patterns, alterations in normal family processes, and inaccurate family perceptions. Finally, nurses can intervene to clarify the family's perceptions and beliefs, and to facilitate therapeutic communication between family members and staff. Clarification of the family's expectations of visiting will reduce visiting-associated conflicts, and will allow families and nurses to negotiate individualized visitation to enhance patient care.

Findings from this study also have implications for critical care nurse managers. These managers, who expect nurses to support families twenty-four hours a day, need to provide opportunities for
nurses to acquire the skill and knowledge needed to effectively comfort and support patients' families during their catastrophic illness experience. Although traditional nursing education did not influence the nurses' behavioral determinants toward family visiting, nurses familiar with concepts of family systems nursing and conflict resolution may have a better understanding of family structure and function. These concepts can be introduced with family-centered nursing rounds and integrated with current clinical examples that address topical family issues.

Critical care managers that advocate open family visiting must provide staff nurses with functional and structural resources to actualize this practice. First, nurses need support and commitment from health care workers dedicated to providing family centered care. A social worker, or a clinical nurse specialist, should be available to assist the nurse initially interacting with families in crisis, and to assist families utilizing ineffective coping strategies. Next, nurses need the time to support families during their initial critical care unit visits. Someone must help family prepare for the realities of critical illness and the critical care environment prior to entering the critical care unit. Unit managers either must provide either the time for nurses to work with families, or alternatively, a volunteer who will provide families with accurate information. Finally, unit managers must provide structural resources to accommodate family visiting without compromising the patient's access to care. For example, the family
should have access to a family room with washroom facilities, also chairs should be available at the patient’s bedside, without jeopardizing the nurse’s ability to manoeuvre around the patient’s bedside. Families should have easy access to information about their loved ones by telephone, when they are unable to be at the hospital. Economical accommodation easily accessible to the critical care unit should be available for families from out of town. Parking or transportation to the hospital should be available to families throughout the day and night.

**Implications for Nursing Research**

This descriptive, correlational study has contributed to the understanding of nurses’ behaviors toward the family in critical care. Several suggestions for further research can be generated from this study’s findings. This study showed that nurses’ behavioral intentions correlated significantly with the nurses’ attitudes toward open family visiting, as well as nurses’ expectations of head nurse, family member, and coworker toward open family visiting. This study did not determine nurses’ level of motivation to comply with each significant referent, and this information would broaden the understanding of nurses’ behavior toward family visiting. In addition, future research should consider all individuals who are affected by critical care visiting. Comparing nurse, patient, and family beliefs, attitudes, and subjective norms about visiting will explain interactions
between specific nurses and families. Comparing the behavioral
determinants toward visiting of nurses who work directly with
patients and families, with the behavioral determinants of the unit
managers who design visiting policies may explain discrepancies in
policy interpretation.

Findings from this study suggest that the best visiting policy has
yet to be determined. Visiting restrictions in critical care units are
widespread but not standardized. Research should compare the
outcomes of different visiting patterns on patients, families, and
nurses level of satisfaction. In addition, researchers could assess the
effect of alternate visiting patterns on patient anxiety, pain medication
requirement, and development of complications.

Participants in this study identified potential interruption in patient
care delivery as a factor in restricting family visits. However, the
literature suggests that open family visiting does not interfere with
care delivery, and that families should be encouraged to participate in
that care. Clearly, some family members are uncomfortable remaining
at the bedside during particular patient care activities. Researchers
need to identify which families are likely to experience anxiety related
to care delivery, which patient interventions are most likely to cause
the family distress, and what strategies are most useful in reducing
the family’s discomfort. In addition, researchers should compare
patient, family and nurse satisfaction between units that allow
families at the bedside during care and those units that exclude
families from the bedside during care. This information could assist in the design of therapeutic visiting guidelines.

Participants also identified restricting visits to protect patient privacy and confidentiality. It would be beneficial to investigate the effects of sharing exclusive ‘unit report’ and ‘unit rounds’ patient information with a group of families. Researchers could compare staff-family interactions between those families receiving and those families not receiving this restricted information. The results would increase understanding of staff-family interactions during catastrophic illness.

Finally, research should be undertaken that will identify interventions which enhance collaborative nurse-family relationships. Literature suggests that the consistent application of a family framework will assist nurses in working with families in crisis. A study could be designed to compare the effectiveness of different family theoretical frameworks in identifying family problems in coping with life-threatening illness. In addition, a study that compares nurses and families level of satisfaction with different family theoretical frameworks may help identify the framework that is most appropriate for working with families in crisis.
Concluding Remarks

Family visiting in critical care has been fraught with staff-family conflicts and individual frustration. Nurses, with the best intentions, have enforced mandatory separation of families during their catastrophic illness experience. Now these nurses need to recognize the family’s need to be together in a time of crises, and unit managers need to recognize that providing the critical care nurse’s with appropriate resources will facilitate meeting that family need. All health care workers need to recognize that increasing family members’ access to critical care ill patients, and maximizing their ability to support patients will humanize the critical care environment and enhance patient care.
References


Appendix A

Critical Care Nurse Family Visiting Questionnaire
Part 1
Current Unit Visiting Policies

1. In your critical care unit, the patient population is:
   ___ Adult
   ___ Pediatric patients
   ___ Neonatal patients
   ___ Mixed ages
   ___ Other (please specify)________________________

2. In your critical care unit, the age of visitors must be:
   ___ older than 1 year of age
   ___ older than 6 years of age
   ___ older than 12 years of age
   ___ older than 16 years of age
   ___ older than 18 years of age
   ___ other (please specify)________________________

3. In your critical care unit, the frequency (for example every hour, or every 2 hours, or every 4 hours) of family visiting during a 24 hour period is:
   ________________________________
   ________________________________

4. In your critical care unit, the length (for example 5 minutes or 10 minutes or 15 minutes) of each family visit is:
   ________________________________
   ________________________________

5. Families are allowed to visit for longer periods when:
   ________________________________
   ________________________________

6. Family visits are restricted when:
   ________________________________
   ________________________________

Other comments about visiting policies in your critical care unit:
   ________________________________
   ________________________________
Appendix B

Critical Care Nurse Family Visiting Questionnaire
Part 2
Nurse’s View of Family Visiting & Open Family Visiting

Questions 1 to 10 address critical care nurse’s view of family visiting. Family visiting is defined as "family members allowed to visit the critically ill patient for a period of time and frequency determined by the critical care unit manager".

1. I plan that my critically ill patient’s family will visit during visiting hours:
   extremely quite slightly neither slightly quite extremely

2. Family visits to critically ill patients are:
   GOOD ______ : ______ : ______ : ______ : ______ : ______ : ______ BAD
   extremely quite slightly neither slightly quite extremely
   extremely quite slightly neither slightly quite extremely
   extremely quite slightly neither slightly quite extremely

3. The effect of family visiting on my patient’s physical status is:
   GOOD ______ : ______ : ______ : ______ : ______ : ______ : ______ BAD
   extremely quite slightly neither slightly quite extremely

4. The effect of family visiting on my patient’s psychological status is:
   GOOD ______ : ______ : ______ : ______ : ______ : ______ : ______ BAD
   extremely quite slightly neither slightly quite extremely

5. The effect of family visiting in the critical care unit on my patient’s family members’ is:
   GOOD ______ : ______ : ______ : ______ : ______ : ______ : ______ BAD
   extremely quite slightly neither slightly quite extremely

6. The effect of family visiting on the critical care nurse is:
   GOOD ______ : ______ : ______ : ______ : ______ : ______ : ______ BAD
   extremely quite slightly neither slightly quite extremely

7. The effect of family visiting on the functioning of the critical care unit is:
   extremely quite slightly neither slightly quite extremely

8. My head nurse thinks that I should allow my patient’s family to visit:
   extremely quite slightly neither slightly quite extremely

9. My coworkers think that I should allow my patient’s family to visit:
   extremely quite slightly neither slightly quite extremely

10. My patient’s family members think that I should allow family visits:
    extremely quite slightly neither slightly quite extremely
Questions 11 to 20 address the critical care staff nurse's view of open family visiting. Open family visiting is defined as "family members allowed to visit the critically ill patient at any time for as long as they wish during the entire 24 hour day".

11. I plan that my critically ill patient's family will visit as long as they wish throughout the 24 hour day:

LIKELY ___________________________ UNLIKELY
extremely quite slightly neither slightly quite extremely

12. Open family visiting to critically ill patients is:

GOOD ___________________________ BAD
extremely quite slightly neither slightly quite extremely
HARMFUL ___________________________ BENEFICIAL
extremely quite slightly neither slightly quite extremely
REWARDING ___________________________ PUNISHING
extremely quite slightly neither slightly quite extremely

13. The effect of open family visiting on my patient's physical status is:

GOOD ___________________________ BAD
extremely quite slightly neither slightly quite extremely

14. The effect of open family visiting on my patient's psychological status is:

GOOD ___________________________ BAD
extremely quite slightly neither slightly quite extremely

15. The effect of open family visiting in the critical care unit on my patient's family members' is:

GOOD ___________________________ BAD
extremely quite slightly neither slightly quite extremely

16. The effect of open family visiting on the critical care nurse is:

GOOD ___________________________ BAD
extremely quite slightly neither slightly quite extremely

17. The effect of open family visiting on the functioning of the critical care unit is:

LIKELY ___________________________ UNLIKELY
extremely quite slightly neither slightly quite extremely

18. My head nurse thinks that I should allow open family visiting:

LIKELY ___________________________ UNLIKELY
extremely quite slightly neither slightly quite extremely

19. My coworkers think that I should allow open family visiting:

LIKELY ___________________________ UNLIKELY
extremely quite slightly neither slightly quite extremely

20. My patient's family members think that I should allow open family visiting:

LIKELY ___________________________ UNLIKELY
extremely quite slightly neither slightly quite extremely
Appendix C

Critical Care Nurse Family Visiting Questionnaire
Part 3
Professional Characteristics

1. The educational preparation that most closely describes you is:
   ____ Diploma (College or Hospital School)
   ____ Diploma plus one or more post basic courses
   ____ Diploma plus one or more university courses
   ____ Baccalaureate (basic program)
   ____ Baccalaureate (post - RN program)
   ____ Other (please specify) __________________________

2. The critical care area in which you are presently working is:
   ____ Medical/Surgical ICU    ____ Pediatric ICU
   ____ Coronary Care           ____ Neonatal ICU
   ____ Emergency              ____ Other (please specify) __________________________

3. The length of time that you have been employed in your current unit is:
   ____ less than 6 months
   ____ more than 6 months but less than 1 year
   ____ more than 1 year but less than 5 years
   ____ more than 5 years

4. The number of years that you have worked in critical care is:
   ____ less than 6 months
   ____ more than 6 months but less than 1 year
   ____ more than 1 year but less than 5 years
   ____ more than 5 years

5. Your critical care position is:
   ____ Full time
   ____ Part time
   ____ Casual
   ____ Other (please specify) __________________________

6. The position that you hold in your critical care unit is:
   ____ Staff nurse       ____ Assistant head nurse
   ____ Head nurse        ____ Instructor
   ____ Nurse Clinician   ____ Clinical Nurse Specialist
   ____ Other (please specify) __________________________
Appendix D

Critical Care Nurse Family Visiting Questionnaire
Criteria for Categorizing Responses

1. Patient population:

Four groups were listed: adult; pediatric; neonatal; mixed.

2. Age of visitors:

Five ages were listed: older than 1; 6; 12; 16; 18 years.

Additional categories included:

Other age: a different age was specified, for instance 14 years.
No policy: this visiting restriction was not addressed in the unit policy or the age restriction varied from case to case.
No restriction: there was no age restriction.

3. Frequency of visiting periods:

Every hour: visitors permitted to visit once every hour.

Other frequency: another frequency was specified, for example every two hours, or from 1000 to 1600.

No set policy: this restriction was not addressed or that the frequency restriction varied from case to case.
No restriction: no restriction given or open visiting.

Except rest/report: the restriction indicated either no restriction except 0630 to 0830 and 2030 to 2030 or no restriction except during mandatory rest period.

4. Time limit of visits:

Three time periods were listed: five, ten, and fifteen minutes. When the respondent indicated a range of time, such as 5 to 10 minutes, the highest number in the range was used.

Other time: another time was indicated, for example 20 minutes.

No set policy: this restriction was not addressed or the time restriction varied from case to case.
5. Extension of visiting time:

No restriction: there was never a restriction, and therefore no need to extend.

Patient factors: the extension depended on factors related to the patient, for instance, the patient was dying, or the patient was very stable.

Unit factors: the extension depended upon factors related to the unit, for instance that the unit was quiet.

Family factors: the extension depended upon factors related to the family, for instance, the family requested to be there.

Combination: the extension depended upon a combination of any or all of factors.

6. Restriction of visiting time:

No restriction: there was never a reason for restriction.

Patient factors: the restriction depended on factors related to the patient, for instance, the patient was very unstable, or the patient required rest.

Unit factors: the restriction depended upon factors related to the unit, for instance that the unit was busy, rounds enforced rest period or shift report were occurring.

Family factors: the restriction depended upon factors related to the family, for instance, family members were distressed or abusive during visits.

Combination: the restriction depended upon a combination of any or all of the above factors.