PERCEPTIONS OF NURSE CARING BEHAVIORS

TOWARDS FAMILY MEMBERS

IN THE CRITICAL CARE SETTING.

LUCIE GAGNON

School of Nursing

McGill University, Montreal

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Families in critical care: Perceptions of nurse-caring behaviors

Lucie Gagnon
Nursing

Abstract

Although the concept of caring is widely accepted as an essential component of nursing, little is known about the behaviors that communicate caring, especially from the family's perspective. Such practical attention to the concept of caring in critical care is crucial to the therapeutic nurse-family relationship. The purpose of this study was to design and test an instrument to measure the perceptions of family members and nurses about the relative importance of 50 nurse-caring behaviors towards family members in critical care.

The Family Care-Q Instrument (FCQI) was originally based on the Care-Q Caring Assessment Instrument designed by Larson (1981). Items not relevant to family nursing in critical care were eliminated from Larson's instrument and new ones were formulated. The newly designed instrument identifies two categories of nurse-caring behaviors, expressive and instrumental, which were further delineated into six sub-categories based on Watson's Theory of Caring and the literature on caring behaviors. The FCQI was translated into French. Evidence of internal consistency, stability and validity was established partially during the development and testing of the FCQI.

A pilot study using the instrument was conducted.

Perceptions of 20 family members and 38 critical care nurses of most and least important nurse-caring behaviors towards family members in critical care were assessed. Similarities and differences in perceptions were identified between nurses and family members in specific behaviors and in the most and least important behaviors. Overall, critical care nurses ranked the category of instrumental caring behaviors as most important, while family members identified the expressive category as most important.

Sommaire

Bien que le concept de sollicitude (traduit de l'anglais "caring") soit généralement reconnu comme un élément essentiel des soins infirmiers, très peu d'informations sont connues au sujet des comportements de sollicitude ("caring behaviors"), manifestés par le personnel infirmier et ceci principalement du point de vue de la famille. Une attention particulière sur un tel concept est essentielle à la relation thérapeutique entre le personnel infirmier et la famille. L'objectif de cette étude était de concevoir et de valider un instrument permettant de mesurer les perceptions des membres des familles et du personnel infirmier sur l'importance relative de 50 comportements de sollicitude manifestés par le personnel infirmier envers les membres des familles.

L'instrument de mesure (F-COMSOL) a été élaboré initialement en anglais à partir d'un instrument développé par Larson (1981) intitulé "The Care-Q Caring Assessment Instrument". Les items de Larson ont été adaptés et d'autres modifiés afin de décrire des comportements de sollicitude envers les familles aux soins intensifs. Ce nouvel instrument identifie deux

catégories de comportements de sollicitude en soins infirmiers: la catégorie expressive et la catégorie instrumentale. Celles-ci furent par la suite réparties en six sous-catégories définies selon la théorie de Watson ainsi que par la littérature sur le concept de la sollicitude. Des mesures de consistance interne, de stabilité et de validité ont été partiellement établies durant le développement et l'utilisation de cet instrument.

Une étude pilote utilisant ce nouvel instrument fut conduite. Vingt membres de familles et 38 membres du personnel infirmier de l'unité des soins intensifs ont fait part de leurs perceptions face à l'importance relative des 50 comportements de sollicitude présentés dans l'instrument. Une comparaison entre les perceptions des familles et celles du personnel infirmier fut faite et les similarités et divergences entre ces perceptions furent identifiées. Les résultats de cette étude démontrent que le personnel infirmier accorde une plus grande importance aux comportements de sollicitude de la catégorie instrumentale tandis que les membres des familles attribuent une plus grande importance à la catégorie expressive.

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CHAPTER 1

Introduction

From a historical perspective, the concept of caring has always been central to the identity of the nursing profession. Indeed, caregiving activities taught by mothers to daughters were integral to feminine apprenticeship. Like mothering, nursing was a manifestation of familial love. As the responsibility for nursing went beyond familial relationships to strangers in the community, caring as a value for women became a value for nursing (Reverby, 1987). As a result, nursing has long been acknowledged for its personalized services and comprehensive care.

Although community nursing has always been oriented towards the family, the nursing profession has moved more recently towards a family centered approach rather than being exclusively focused on the individual. Indeed, the importance of recognizing the family in itself as a unit of concern regarding matters of health has resulted in emphasizing the role of nursing at the family level.

Life threatening illness represents one of the most intense emotional experiences for clients and

their families. The powerful influence of family members on the hospitalized member's condition and subsequent recovery, as well as the impact of the client's severe illness on the family system have been reported by several nursing leaders (Gillis, Highley, Roberts & Martinson, 1989; Wright & Leahey, 1987).

Indeed, the family has been identified as the primary source of support for the critically ill (Chavez & Faber, 1987). However, when experiencing high levels of stress and uncertainty, family members may become too vulnerable to support the acutely ill patient efficaciously (Chavez & Faber, 1987; Jacono, Hicks, Antonioni, O'Brien, and Rasi, 1990) and consequently have been known to affect the patients' emotional and physical condition negatively (Speelding, 1980). Therefore, for nurses providing care, the importance of the family system cannot be dismissed. Critical care nurses can play an important role in helping family members deal with the acute event by demonstrating a caring and comprehensive attitude to family members (Millar, 1989).

Leininger (1977) believed that the basis for caring is the development of a therapeutic

interpersonal relationship. In the health care environment, nurses are one group of the health care professionals who interact most frequently with families of clients with acute illness. While interacting with family members, nurses powerfully communicate their attitudes of care and concern and their availability for emotional support. Most of all, nurses can allow family members to express their feelings and concerns, and aid them in exploring ways of coping with the stressful situation (Chavez & Faber 1987). Such a relationship with family members contributes to the provision of a supportive environment for the family.

Within the last fifteen years, several research studies have focused on specific family interventions in the critical care setting. Numerous reports have described the powerful influence of specific nursing interventions with family members on the family members' satisfaction of needs (Dracup & Breu, 1978; Epperson, 1977; Hampe, 1975; Hodovanic, Reardon, Reese, & Hedges, 1984), their adaptation to the intensive care environment (Gardner & Stewart, 1978), and on the family members' condition (Chavez & Faber, 1987). More

specifically, several authors have reported that appropriate interaction with nursing staff may lead to enhanced family coping, growth, integrity, and fewer delayed stress reactions (Epperson, 1977; Gardner & Stewart, 1978; Speelding, 1980). However, nurses have not systematically investigated the nurses' and family members' perceptions of the importance of nurse-caring behaviors towards family members within the nurse-family relationship.

It is therefore important to identify which nurse-caring behaviors are perceived as most and least important for family members in order to better understand their experience and, thus, interact with them in a more meaningful way. A greater understanding of the family member's perceptions of nurse-caring behaviors may lead to more effective interventions as part of family nursing care as well as personalized patient care in a highly technical environment such as the intensive care unit.

The purpose of this study was to develop an instrument to operationalize the phenomenon of care provided to families in the critical care setting, and to conduct a pilot study to further test the

instrument. The results of this research study offer insight toward the study and practice of caring in nursing.

The following research questions were addressed:

1. What set of statements suitable for Q-sort instrument identifies important nurse-caring behaviors towards family members in critical care?
2. What are the internal consistency and stability of the set of Q-sort items?
3. What are family members' perceptions of important nurse-caring behaviors towards family members in critical care?
4. What are critical care nurses' perceptions of important nurse-caring behaviors towards family members in critical care?
5. Is there a difference between family members' and critical care nurses' perceptions of important nurse-caring behaviors towards family members in critical care?

This study required three major phases. Phase 1 was focused on the development of the instrument. In phase 2, the reliability of the instrument was tested during a pilot study conducted with nurses and family

members in critical care. In phase 3, critical care nurses' and family members' perceptions of nurse-caring behaviors towards family members in critical care were assessed.

CHAPTER 2

Literature Review

"Although care is one of the most elusive and taken for granted concepts in nursing, it nevertheless remains the heart of nursing" (Leininger, 1986, p.2).

The Meaning of Caring

Philosophers and behavioral scientists, such as psychologists, sociologists and educators, have discussed and examined the meaning of caring. Their reflections are rather complementary of each other. They have influenced and contributed to the clarification of caring as related to nursing.

Philosophical Perspective

Caring is generally characterized by existentialist philosophers as a quality of all human beings, a mode of being that motivates behaviors (Heidegger, 1962; Griffin, 1983; Mayeroff, 1971). Central to this existential approach is the notion that the desire to care is within all humans and that the capacity to care must be affirmed and actualized. Given that the self is understood most fully in relation to others, caring enhances maturation and actualization of self (Heidegger, 1962) and helps others to grow

(Mayeroff, 1971). Therefore, caring is intrinsic to human activity and essential to survival. In addition, caring actions require someone or something specific to receive care.

Mayeroff suggested that one should not confuse the meaning of caring with a momentary feeling or relationship, such as wishing well, liking, and comforting. He referred to caring as a process requiring devotion and trust which cannot occur by habit or automatically. Mayeroff identified eight essential ingredients of the concept of caring: knowledge, alternating rhythm, patience, honesty, trust, humility, hope, and courage.

Thus, caring as a response to the capacity of all human beings to be concerned for others, is believed to be essential to survival. The way that one expresses all aspects of humanness, one's membership in humanity, is individual and unique. Consequently, people demonstrate and interpret caring differently.

Based on their philosophical perspectives, Griffin (1980) and Gilligan (1982) chose to analyze the concept of caring in a nursing context. Griffin (1980) described caring as referring to acts and attitudes

which relate predominantly to the moral attitude of respect for persons. Gilligan (1982) also affirmed the moral component of the experience of caring in nursing. She defined caring as a response to another's need and a demonstration of consideration and responsibility in relationship.

Behavioral Sciences's Perspective

Gaylin (1976) contended that caring is an impulse that is biologically programmed in the human nature and which can be reinforced or impaired by environmental circumstances. Generally considered within the context of an interpersonal relationship, caring has been observed and examined within the familial and therapeutic contexts.

Erikson (1950), Gaylin (1976), and Simon (1976) have identified caring in parenting as a crucial element for growth and development of the child. Essential to survival, caring is learned as one is nurtured and taken care of by family members. In maturing, an interest to take care of others develops based on feelings of love, respect and responsibility

for others. Within this type of interaction, touch is described by Simon (1976) as a major modality of caring.

Within the adult therapeutic relationship, the importance of care has been emphasized by numerous psychologists and psychiatrists. Although caring is not explicitly described, several caring-related elements within the therapist have been identified. These include a desire to help, a genuine liking for others, honesty, trust, respect, understanding of the other, and empathy. They have been stressed as crucial elements for a therapeutic interaction to take place and need to be communicated to clients through supportive behaviors (Benjamin, 1981; Rogers, 1962). Most important behaviors identified as helpful in a therapeutic relationship are actions demonstrating respect by showing interest and desire to help, listening with understanding, and authenticity (Benjamin, 1981).

Nursing Perspective

Caring is generally described as an essential element of nursing practice. Some nursing leaders believe that all of nursing is caring because the

nursing mandate is essentially to assist, help and serve others (McFarlane, 1976). Others argue that nursing activities can be performed as routine actions and therefore caring activities in relation to clients are "caring" only if these acts are executed in a certain way; as an expression of certain emotions (Gaut, 1984).

Thus, caring in nursing involves more than just the performance of nursing activities. It refers to the way the giver of care interacts with the receiver of care. It is precisely this expression of feeling or emotion which has been most difficult for nurses to articulate. According to Watson (1979), this mode of relating to others is unique in nursing and encompasses two aspects of care: the caregiving actions and the attitude of the nurse during the performance of these actions.

The first component refers to the nursing activities involved in the attendance of the clients' basic and illness related needs. These activities are mediated within the nurse-client interaction and include tasks such as bathing, dressing wounds, monitoring vitals signs, giving medication, and other

role performance activities such as teaching, providing information, and so on. This component of care refers to the task dimension of care, and is demonstrated through instrumental caring behaviors.

The second aspect of caring encompasses the nurses's comprehensive attitudes and attentive feelings expressed towards the client during the performance of those helping activities. It is only when the nurse is concerned with the whole person, and practices with consideration and sensitivity for the integrity of the human self, that the nurse provides "caring." This emotional element is, no doubt, essential to the process of caring. Without it, caring is not experienced as caring by the client (Kreuter, 1957; Roach, 1987; Vaillot, 1966; Watson, 1979). This component entails the affective dimension of care and is transacted through expressive caring behaviors.

The concept of caring is inextricably bound to the belief system and practice of nursing (Forrest, 1989). Indeed, several nursing leaders believe that caring is the essence of nursing, the core of the nursing profession (Leininger, 1977; Roach, 1987; Watson, 1979), and the synonym for nursing itself

(Leininger, 1986). Furthermore, the process of caring, described as a dynamic, reciprocal interaction where the giver of care seeks to comprehend the reality of the other as a goal becomes an opportunity for both the nurse and the client to achieve personal growth and development (Watson, 1979).

Several authors have explored the cognitive, moral and emotional aspects of caring using a clinical or a research perspective. From a clinical perspective, the concept of caring has been described as a moral ideal and philosophy for nursing (Roach, 1987; Watson, 1979), as an ethic (Cooper, 1989; Fry, 1988), a science of nursing (McFarlane, 1976; Watson, 1979), as a characteristic of nursing practice (Benner & Wrubel, 1989), as well as an interactive set of client's expectations and nursing behaviors (Gaut, 1984; Larson, 1987; Reimen, 1986).

As exponents of the philosophical approach, nurse philosophers contend that caring calls for a philosophy of moral commitment (Roach, 1987; Vaillot, 1966; Watson, 1979). Roach (1987) suggested that caring entailed commitment, compassion, conscience, competence and confidence. As a manifestation of being human,

caring is the actualization of the capacity to care, a response to others in specific and concrete acts (Roach, 1987). Nursing activity which is based on caring becomes a way of being for the nurse (Watson, 1979). Several nurse philosophers have described caring as a way of life that finds expression in the therapeutic "use of self" (Vaillot, 1966). Gadow (1980), a nurse philosopher, claimed that caring represents the moral ideal of nursing given its enrichment of the personal dignity of both the client and the nurse. In these terms, caring keeps a sense of shared humanity which is constantly developed as one interacts with others (Watson, 1979).

From an ethical perspective, the recognition of the integrity of the individual as a person and not merely "a patient" makes of caring an ethical injunction (Carper, 1979). Indeed, of central importance to the practice of caring is the moral principle of respect for self and others (Gaut, 1984).

Based on the work of Gadow (1980), Watson (1985b) proposed a psychosocial approach to caring which views caring as both an art and a science for nursing. Watson's theory identifies ten carative factors upon

which a science of caring can be built. These carative factors are interdependent and constitute the primary ingredients for effective nursing practice (Watson, 1979). The ideal and value of caring becomes a starting point manifesting itself in concrete acts which are central to the delivery of quality care (Watson, 1985b).

Benner and Wrubel (1989) have viewed caring as an essential and central element to effective nursing practice. They believed that caring characteristics within the practice of nursing need to be made more visible through several strategies, one involving learning from the personal experience of the recipient of care. From an anthropological perspective, Leininger (1986) has claimed that, although caring is a universal phenomenon, it has patterns, processes, and expressions that vary across cultures. Therefore, these cultural differences in the meaning, nature and expression of care outline important implications for nursing practice. Leininger stressed the importance of investigating the behavioral aspect of caring from the perspectives of the receiver and giver of care in order to understand these cultural differences. Thus, several

nursing leaders have described caring as an interactive set of client's expectations and nursing behaviors (Gaut, 1984; Larson, 1981; Reimen, 1986).

Empirical Studies on Caring

Qualitative Research Studies

Few research studies have explored the multifaceted aspects of care as part of a quality nursing practice. However, some notable studies have examined the meaning of caring in nursing and thus tried to clarify and understand the concept of caring in relation to nursing practice.

Caring as a qualitative descriptor of nursing function has been distinguished among actions of nursing practice. Clarification of the concept of caring has been attempted through several descriptive research studies using patients' and nurses' perceptions of a caring experience as indicators of care (Brown, 1981; Ford, 1981; Forrest, 1989; Harris, 1989; Ray, 1987; Watson, Burckhardt, Brown, Bloch & Hester, 1979).

Using a phenomenological research method, data have been collected via audiotaped interviews with subjects. Examples of open ended questions to nurses

were: "Describe caring in your own words" (Ford, 1981). "As a nurse, what is caring to you?" (Forrest, 1989). "A nurse who takes care of a client is one who..." and "A nurse who cares about a client is one who..." (Watson et al., 1979).

Recurrent themes of care have been identified mostly through qualitative research (Brown, 1981; Ford, 1981; Forrest, 1989; Harris 1989; Ray, 1987; Watson, 1979). Consistent findings on the meaning of caring were identified across studies. They revealed that the ability of the nurse "to be with" the client as a valued other and the demonstration of skilled and competent knowledge in assisting the needs of the person are fundamental to the experience of care for both the client and the nurse (Brown, 1981; Forrest, 1989; Harris, 1989; Riemen, 1986; Watson, 1979).

The emergent themes of caring across studies also pertained to feelings and attitudes. Ford (1981) identified the existential concept of "giving of self" as one major aspect of caring. The nurses sample consisted of nurses with a masters' degree who were teaching in nursing schools, and practising nurses employed in obstetric and pediatric departments.

Forrest (1989) identified 30 theme clusters under two broad classifications: 1) what is caring, and, 2) what affects caring. Themes relating to "what is caring" referred to two categories: involvement and interaction. Involvement was described by themes such as "being there", "respect", "feeling for and with" and "closeness" which referred to the nurse's attitude of confidence and hope. Themes related to the interactive aspect of care were "touching and holding", "picking up cues", "being firm" which referred to authenticity, and "teaching." Nurses' perceptions of caring denoted a particular quality of interacting based on actions involving more than being physically present. This interaction develops from anticipating the needs and responding to subtle cues of which the patient may not be aware (Forrest, 1989). The nurses sample in Forrest's study included staff nurses from diverse units within the hospital setting. The length of nursing experience varied from 2 to 24 years.

Watson and her colleagues (1979) identified themes of care that corresponded to the coordination of nursing functions and the communication process. The sample of nurses was heterogeneous with respect to the

degree of experience in nursing. Watson found that nursing students tended to define caring as nursing functions of assessment and coordination as opposed to registered nurses who identified nurses' feelings of concern and empathy as well as the provision of comfort, safety and security as caring. These differences in nurses' perceptions of caring may be related to the difference in years of experience in nursing practice.

One study investigated the meaning of caring for nurses in critical care (Ray, 1987). The expressions describing caring fell under five themes: maturation, technical competence, transpersonal caring, communication and judgment/ethic. Ray found that caring for critical care nurses is closely linked with ethics. Indeed, the process of growth emanating from the experience of caring is based on ethical decisions, moral reasoning and choices nurses confront in their daily practice in critical care.

In addition, Ray found that nurses in critical care need to gain the knowledge and the skills necessary to be technically competent. Indeed, technological achievement is perceived as essential to

being a critical care nurse. But even as caring for critical care nurses involves technical competence, it does also include interrelationships with clients, families and colleagues. Talking with family members, informing them, and keeping them updated about the client's condition as well as establishing a rapport with family members based on trust and respect, were identified as caring by nurses in relation to family members in critical care (Ray, 1987).

The results of these studies (Ford, 1981; Forrest, 1989; Ray, 1987; Watson et al., 1979), reveal that nurses' descriptions of caring imply a level of involvement and interaction with the client which incorporates a preference for "being with" rather than "doing to" a client. Two essential dimensions of caring were outlined: a task dimension and an affective dimension. Both dimensions are essential to quality nursing practice; the preference of one component over another may be dependent upon nurses' experience in nursing and/or the practice setting.

Patients' descriptions of caring have been identified through sets of questions addressing these two dimensions of care: "What does a nurse say or do

that makes you feel cared for and about?" and "Describe an incident in which you felt cared for and about by a nurse" (Brown, 1981). "A nurse who cares for you is one who..." and "A nurse who takes care of you is one who..." (Harris, 1989).

Brown (1981) identified two major aspects of care described by patients as related to "what the nurse does" and "how the nurse does". Themes of care under the first category were: 1) surveillance, 2) demonstration of professional knowledge, 3) provision of information, and 4) provision of pain management. This category referred to the task dimension of care. Thus, the affective dimension of care was identified as: 1) amount of time spent; 2) reassuring presence; 3) recognition of individual qualities and needs; and 4) promotion of autonomy. Both the task and affective dimensions of care seemed essential to get to the full and real meaning of caring for clients in this study.

Harris (1989) conducted a study similar to that by Watson and her colleagues and identified 44 themes of care which emerged into seven patterns of patients' responses. The dominant pattern of response was "relating to." Themes of care corresponding to this

category were: acts caring, responds to, special attention, interest in, reassurance, support, and concern. The patterns of "doing for" and "personal characteristics" were also noted as common responses. Subjects did not differentiate being "cared for" from "taken care of".

Riemen (1986) asked hospitalized patients to describe a caring and a non-caring interaction with a nurse. He found that patients consistently and immediately described the non-caring interaction first. Non-caring attributes of nurses according to patients' descriptions of caring were "being rough" and "in a hurry;" "doing a job;" "treating clients as objects;" and "not responding." By examining the absence of caring, Riemen concluded that the quality of the nurse's presence which conveyed a sense of value to the patient constituted caring.

The findings of these studies have provided a richly detailed view of the experience of caring for nurses and patients. The care behaviors derived from these analyses have been utilized by quantitative researchers to further study the behavioral aspect of caring.

Quantitative Research Studies

Several studies have focused mainly on the behavioral aspects of care as descriptors of caring. The behavioral aspects of caring refer to the task and affective dimensions identified by Watson (1979) as instrumental and expressive behaviors. Instrumental activities of caring are those activities that focus more on the physical and cognitive needs of the client, such treatment procedures and teaching, while expressive activities are more psychosocially oriented behaviors, such as offering emotional support, listening, and so on.

Leininger (1988) contended that to determine a precise definition of caring, the behavioral components of caring need to be clearly defined. Therefore, based on a definition of caring which refers to both dimensions of caring, researchers addressed the clarification of the concept of caring by classifying some nursing behaviors as caring behaviors.

Most of the empirical studies on perceptions of caring behaviors have been conducted within the field of oncology with patients as recipients of care (Brown, 1981; Ford, 1981; Larson, 1981; Larson, 1984; Mayer,

1987; Sloan, 1986). Only one study which investigated patient's perceptions of nurse-caring behaviors was conducted in the critical care setting (Cronin & Harrison, 1988). Perceptions of patients and nurses regarding the relative importance of care behaviors as indicators of care were studied.

The majority of the reported studies have used Q-methodology in asking patients, family members and nurses to identify the importance of specific actions and/or attributes of nurses that indicate care, mainly during the terminal phase of a family member's cancer or illness (Larson, 1981; Larson, 1984; Larson, 1987; Mayer, 1986; Sloan, 1986).

Larson's Care-Q Caring assessment instrument has been used in several studies for the ranking of nurse-caring behaviors by patients and nurses (Keane, Chastain & Rudisill, 1987; Larson, 1987; Mangold, 1991; Mayer, 1987; Sloan, 1986). This instrument used Q-methodology which calls for subjects to sort a set of items along a continuum of importance. Larson's instrument was comprised of 50 behavioral items each describing a nurse-caring behavior within the nurse-patient relationship. These items were attributed to

six intuitively derived caring sub-scales, which are: accessible; explains and facilitates; comforts; anticipates; trusting relationships; and monitors and follows through.

Larson's 50 nurse-caring behaviors were elaborated through a delphi survey of eight practising nurses on caring and a study of 15 patients' perceptions of nurse-caring behaviors. Reliability testing was initially done in a small (N=10) test-retest study resulting in r=1.00 for one most important and one least important item. A second test-retest study with 82 registered nurses randomly selected showed r=0.79 for the five most important items and 0.63 for the five least important items (Larson, 1984).

Findings of empirical studies on nurse-caring behaviors are consistent and show that patients rank instrumental activities as most important to care while nurses rank expressive activities most important. Although patients and nurses did not agree on the importance of specific behaviors, they agreed that both expressive and instrumental activities were necessary to the experience of care (Larson, 1987; Mayer, 1987; Sloan, 1986).

Only three reported studies have investigated the family members' perceptions of nurse-caring behaviors in oncology settings (Freihofer & Felton, 1976; Irwin & Meir, 1973; Skorupka & Bohnet, 1982). The purpose of these studies was to explore ways to improve the care to the dying and the bereaved by delineating nursing behaviors considered helpful or supportive to patients and/or family members. Family members in these studies were: caregivers to the clients (Skorupka & Bohnet, 1982), the most important relative as identified by the patient (Irwin & Meier, 1973) or any relative, spouse or close friend to the patient (Freihofer & Felton, 1976). Only one study revealed the family member's relationship to the patient (Freihofer & Felton, 1976).

Q-methodology was also used in these three studies to assess the perceived importance of the identified nursing behaviors. In each study, family members were asked to rank items on a continuum of importance. The number of items ranged from 60 to 88. Each set of items referred to behaviors of nurses acting as a resource person to the family members (Skorupka & Bohnet, 1982) or as primary caregivers to hospitalized patients (Freihofer & Felton, 1976; Irwin & Meir, 1973).

Behavioral items were developed based on the literature (Freihofer & Felton, 1976; Skorupka & Bohnet, 1982) or on interviews with hospital personnel such as pastoral services, physicians, nurses (Irwin & Meier, 1973). Only one study used a theoretical framework as a guide in the development of the instrument's items (Freihofer & Felton, 1976). The nurse-caring behaviors identified were directed primarily to the patients with only a little emphasis on the family members. Furthermore, the behaviors were formulated as imperative statements emphasizing the nurse's actions rather than the caring component of the nurse-family relationship.

When reported, the psychometric properties of these instruments were limited to content validity. Only one study (Skorupka & Bohnet, 1982) reported test-retest reliability testing with a sample of ten family members. No assessments were done regarding the degree of homogeneity of the items among the sub-categories of the newly designed instruments. In all three studies, categories of the identified nursing behaviors referred to the patient's physical and emotional needs as well as the psychosocial needs of the family members. The number of items per category was not indicated.

The results of these three studies are consistent and show that family members perceived nursing behaviors directed to the attendance of the patients' physical needs (mostly pain relief, surveillance, and hygiene) as being most helpful or supportive. Examples of these behaviors are: "keep patient well groomed" and "give pain medication as often as possible" (Freihofer & Felton, 1976); and "provide the patient with necessary emergency measures if need arises" (Skorupka & Bohnet, 1982).

Only one study identified helpful nursing behaviors for family members as being related to honesty, teaching and reassurance (Skorupka & Bohnet, 1982). Examples of these behaviors are: "answer my questions honestly, openly and willingly;" "teach me how to keep the patient physically comfortable;" "assure me that the patient can be readmitted to the hospital if necessary." Family members in this study were caregivers to the patients (Skorupka & Bohnet, 1982).

The least helpful behaviors identified in these three studies were all related to the needs of the family members. Examples of the identified least

helpful behaviors are: "plan for me to talk about my feelings with other people facing the same problems" and "listen to me" (Skorupka & Bohnet, 1982); "encourage me to cry" and "hold my hand" (Freihofer & Felton, 1976).

The family members' responsibility for the client's care may explain the importance given to the nurses' instrumental activities of caring (Skorupka & Bohnet, 1982). Because the patient continued to be the focus of care, family members may have given greater priority to nursing behaviors directed towards the patient's needs rather than to their own. Finally, the sample sizes were small and thus diminish the ability to generalize the results. These studies support the need for a study which addresses directly the nurse-caring behaviors towards family members. The current study has addressed this issue.

This review of literature reveals that findings regarding the relative importance of nurse-caring behaviors are consistent and show that patients, families and nurses hold different perspective of importance of nurse-caring behaviors (Sloan, 1986). Indeed, patients and families have ranked instrumental

activities as most important to care while nurses within the nurse-patient relationship have ranked expressive activities most important.

Although the literature revealed that caring is widely accepted as an essential component of nursing, little is known about the behaviors that communicate caring, especially within the nurse-family relationship. No study explored the family member's perception of nurse-caring behaviors in the critical care setting. Furthermore, nurses' perceptions regarding the importance of nursing behaviors towards family members have not been assessed in the same setting.

Caring and Families in Critical Care

In the intensive care unit, the nurse's technical competence is important because illness is at its peak. Therapy is therefore oriented towards curing and involves drugs, treatments and surgical procedures. The main goal is to diagnose, treat and prevent the complications of patient's illness. The nurses are asked to incorporate a large portion of the physician's

knowledge and skills. Great responsibility is placed upon them to be aware and recognize any changes in the patient's condition.

This cure-related role is known to be challenging and stimulating for intensive care nurses. However, nursing involves more than the technical aspects that are strongly required in intensive care settings. Strong caring elements are also required.

According to White (1989), families of critically ill patients need "caring" almost as much as the patient does. Indeed, the influence of the critical illness on the family is now well recognized. Roberts (1976) stated that when a patient is admitted to the intensive care unit, he/she is in a biological crisis whereas the family is in a psychological crisis.

The needs of families of critically ill patients have been addressed in several research articles over the last 15 years. The interest of nurse researchers in investigating families' needs in critical care is based on the belief that too often family members are considered as strangers by health care professionals, a situation that can only generate anxiety, helplessness,

fear and general emotional distress for the family system (Jacono et al., 1990).

According to two literature reviews on the needs of family members in the critical care setting (Hickey, 1990; Hull, 1989), information and reassurance needs are most frequently identified by families among their ten most important needs. The need for families to believe that hospital personnel care about the patient and to have reassurance that the best possible care is being given to the patient, is identified by families as part of their ten most important needs in 70 percent of the studies. For the most part, nurses were described as a useful source of information by family members.

High priority was given by family members to the need for a caring attitude by the nurse in studies done by O'Norris & Grove (1986), Hampe (1975) and Molter (1979). It was also concluded by these authors that brief impersonal interactions between nurses and family members of critically ill clients may have a negative impact on the family's psychosocial status. In fact, it appears that nurse's failure to appropriately interact with family members can lead to heightened anxiety and

fear in the family, misunderstanding, mistrust, and hostility (Gardner & Stewart, 1978). Thus, critical care nurses can help families by conveying their caring, sensitive role to both patients and families.

Hull (1989) suggested considering "family" beyond a single person in defining the composition of "family" in research studies. In fact, the majority of studies have involved the participation of a single family member rather than multiple family members. The type of relationship to the hospitalized relative, whether it is a parent, child, spouse, or friend may contribute to the identification of different priorities in family perceptions of caring behaviors.

It is expected that families' perspectives will change over time (Hull, 1989). Studies have demonstrated that within the first 72 hours, family members tend to focus on the hospitalized relative rather than on themselves (Daley, 1984; Leske, 1986). According to Hickey (1990), the stability of families' perceptions of needs should be investigated especially with families of critically ill patients who have been in the critical care unit more than 96 hours.

Conceptual Framework

As the discipline of nursing develops, nurses increasingly seek theoretical bases to guide, clarify and interpret practice and research (Bunting, 1988). A conceptual model helps to make otherwise elusive and abstract ideas more concrete (Woods & Catanzaro, 1988). It also serves to clarify nursing practice and leads to theory development (Watson et al., 1979). Furthermore, the process of instrument development is believed essential to study nursing concepts accurately (Woods & Catanzaro, 1988).

This study proposed to operationalize the concept of caring within the nurse-family relationship in the critical care setting. More specifically, the purpose of this exploratory study was to design and test an instrument to assess the relative importance of nurse-caring behaviors within the nurse-family relationship in critical care. Watson's theory of human care was chosen as the foundation of the conceptual framework for this study.

Watson's health caring model for nursing seeks to identify, describe and research the interaction of both humanistic and scientific domains that form the basis

of caring (Watson et al., 1979). It emphasizes nurses' commitment to caring as a moral ideal for nurses as they engage in human transactions with their clients. Clients refer to persons, individuals or groups. In this study, clients are relatives of individuals hospitalized in critical care settings.

The values underlying the model integrate scientific and humanistic values. Values include concern and respect for the client's emotional responses to experiences, individual differences, and uniqueness or similarities (Watson et al., 1979). The humanistic value system must be combined with the scientific knowledge base that guides the nurse's actions (Watson, 1985a).

Nursing practice based on this model emphasizes caring as a will and commitment to preserve and restore the human aspects of transactions in an increasingly high technical environment (Watson, 1988). Thus, caring is based on a guiding force and value system that affects the encounters between the nurse and the client (Watson et al., 1979). Within this transpersonal caring perspective, nursing practice aims to assist the client to improve his/her health by becoming actively involved

in self-care, remaining well, self-growth, autonomy, quality of living and dying, survival, and self actualization (Watson et al., 1979).

Effective caring promotes health and a higher level of wellness (Watson, 1979). Health refers to unity and harmony within the person's mind, body and soul (Watson, 1985b). Health problems encountered are therefore not merely problems associated with a physical illness, but difficulties in coping with situations and problematic events. Family members experiencing the stress associated with the illness, moreover, a critical illness, of one of their members are then at risk of experiencing health problems.

According to Wittkower & Warnes (1977), psychological support is closely related to one's ability to cope as it promotes confidence, extroversion, and decrease in anxiety. Being one of the health care professionals who interact most frequently with families of clients hospitalized in the intensive care unit, nurses can have a powerful influence on how family members experience this stressful situation by creating an atmosphere conducive to coping. A variety of cognitive, affective and behavioral approaches,

based on Watson's ten carative factors, may be used by the nurse to promote coping and health. This is accomplished through caring transactions. In Watson's human caring theory, care/caring becomes the ethical principle or standard by which treatments and interventions are measured (Watson, 1988).

Such a perspective presents nursing as a human service wherein the person is the starting point. Indeed, a high value is placed on the subjective experience of the client involved in health-illness conditions. How a client perceives and responds in a given situation depends upon his/her subjective reality and not just upon the objective conditions or external reality (Watson, 1985b). As a result, the importance of the caring behavior must be interpreted based on the perspective of the receiver of care. Therefore, qualitative designs were chosen as the optimal method to study this model (Watson, 1985b). However, Watson contended that the choice of the method depends on the components one chooses to research (Watson, 1985b). The current study used a quantitative design, Q-methodology, to assess perceptions of nurse-caring

behaviors. This method was believed appropriate for this model as it explores the richness of human subjectivity.

Watson (1985a) proposed that the interventions related to the human care process can be referred to as carative factors which are all presupposed by a knowledge base and clinical competence. The carative factors are:

1) formation of humanistic-altruistic system of values;
2) instillation of faith and hope;
3) cultivation and sensitivity to self and others;
4) development of helping-trusting relationship;
5) promotion and acceptance of the expression of positive and negative feelings;
6) systematic use of the scientific problem solving method for decision-making;
7) promotion of interpersonal teaching-learning;
8) provision for a supportive, protective, or corrective mental, physical, sociocultural, and spiritual environment;
9) assistance with the gratification of needs;

10) allowance for existential-phenomenological forces (Watson et al., 1979, pp. 9-10).

Interventions based on these carative factors integrate both scientific and humanistic values and thus are characterized as caring interventions. They have been further classified as instrumental and expressive. Expressive interventions promote affective coping through emotional support. Instrumental interventions impart cognitive information through teaching-learning. They attempt to "clarify or alter the meaning of the developmental stress or alter the troubled transactions between the person and his/her environment" (Watson, 1985a, pp.259). Both kinds of nursing interventions are necessary and appropriate for different persons at different times.

In this research study, caring is seen as an important element of the nurse-family relationship in critical care. Watson's model proposes a nursing practice characterized by a "human-to-human" responsive attitude to offer and provide genuine support. The caring behaviors are viewed as acts aimed at meeting the needs of family members or improving their condition. These behaviors, however, require an

intention, a will, and a relationship with the client.

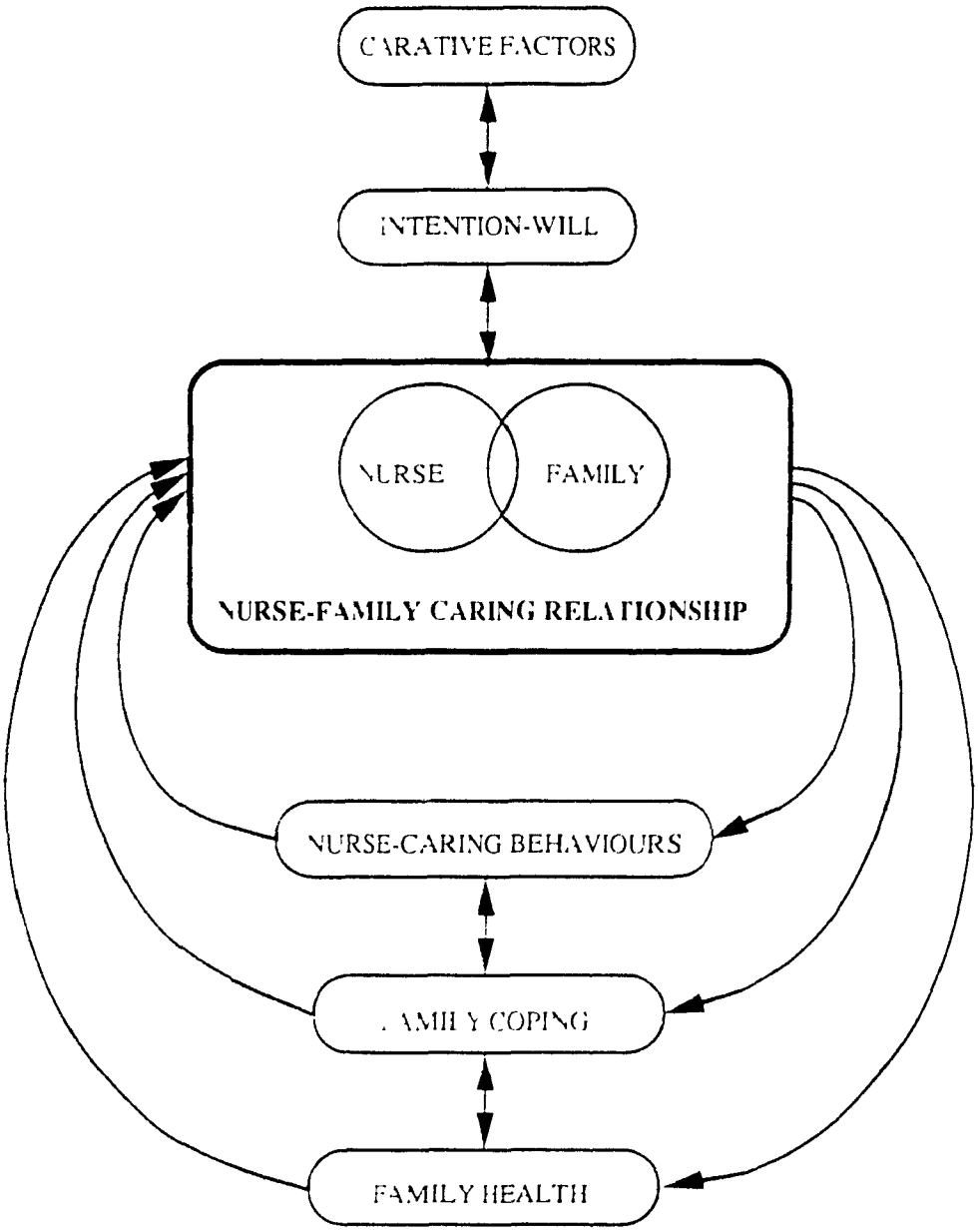
The "how" of the caring behavior is emphasized as much as the "what", that is, the caring transaction per se (Watson, 1985b).

This study endeavored to further clarify and classify nurse-caring behaviors to the level of family care in order to provide a better understanding of the family's experience in critical care. The family members' perceptions of important nurse-caring behaviors may help nurses to enact behaviors that may be more meaningful and supportive to family members of acutely ill clients. Such an identification is a critical factor in the therapeutic nurse-family relationship.

Figure 1 shows the model upon which this study is based. The focus of the study is to identify important instrumental and expressive behaviors as perceived by nurses and family members.

Figure 1

Conceptual Framework: The Caring Dynamics of the Nurse-Family Relationship



CHAPTER 3

Methods

The purpose of this study was to design and test a research instrument to assess nurses' and families' perceptions of important nurse-caring behaviors towards family members in critical care. The study was conducted in three phases.

In the first phase, a research instrument using Q-methodology was designed for the study. This new instrument was titled the Family Care-Q Instrument (FCQI). The second phase consisted of testing the instrument for reliability during a pilot study conducted with 38 nurses and 20 family members in critical care. The third phase was related to the pilot study and assessed the nurses' and families' perceptions of important nurse-caring behaviors towards family members in critical care. Details of the procedures of these three components follow.

Phase 1: Instrument Development

The first phase of this study addressed the following research question:

1) What set of items identifies important nurse-caring behaviors towards family members in critical care?

Background

The FCQI identifies a set of nurse-caring behaviors towards family members in the critical care setting. This research instrument is a modified version of the Care-Q Caring instrument designed by Larson (1981) to measure the perceived importance of nurse-caring behaviors within the nurse-patient relationship. Each of Larson's fifty statements of nurse-caring behavior towards patients in the oncology setting was adapted and/or changed to describe nurse-caring behaviors towards family members in the intensive care unit. Consent was obtained from Dr. Larson to proceed with these changes (see Appendix A).

Thus, major similarities exist between the FCQI and Larson's instrument. The similarities include the structure of the instrument, the content of some behavioral statements and the methods used. Indeed, both instruments contain fifty statements describing caring behaviors of nurses. Some of the nurse-caring behaviors described in Larson's instrument were applicable to the nurse-family relationship. Thus, few modifications were made to these statements. In addition both instruments use Q-methodology to address

the perceptions of subjects regarding the relative importance of a set of nurse-caring behaviors.

However, major differences exist between the two instruments. Mainly, the FCQI describes nurse-caring behaviors towards family members in critical care and thus highlights a different type of nurse-caring relationship in another context. Furthermore, Larson intuitively attributed her items to the following six sub-categories: Accessible; explains and facilitates; comforts; anticipates; trusting relationship; monitors and follows through. These sub-categories were modified for this study based on Watson's conceptual framework and the empirical studies on caring behaviors. The FCQI has four sub-categories. These are: Expressive-personal characteristics; expressive-affective behaviors; instrumental-physical behaviors; and instrumental-cognitively-oriented behaviors. On the basis of these dissimilarities, the FCQI was considered a new instrument.

Description

The FCQI contains fifty items, each describing a caring behavior that a nurse can have towards a family member in critical care. These nursing behaviors are

enacted with the will and intention to convey caring to family members. Therefore, the set of behaviors contains all positive statements about the nurse-family relationship, with a focus on the family member as the recipient of care. Each statement of behavior was elaborated with respect to Watson's ten caratıve factors. In addition, each item was formulated based on a review of the literature on caring, families' needs, and experience in critical care, and on the literature on supportive behaviors towards families in crisis.

Statements were developed using elementary reading level language to facilitate understanding. Each statement of behavior is described in a short and simple sentence. The singular form of nouns and pronouns was preferred to favor precision and personalization of the statement to family members. Consequently, the nurse was referred to as a female and the family member as a male. The reason for using this language was explained to subjects prior to the completion of the instrument.

Many of the behaviors identified in the FCQI are examples of nursing interventions towards families in crisis. The researcher's experience in caring for

family members in critical care contributed to the identification of realistic and feasible behaviors relevant to critical care practice. These behaviors were labelled as nurse-caring behaviors towards family members and became the items for the subsequent research instrument.

Content Validity

Content validity depends on the extent to which an empirical measurement adequately represents the universe of content (Polit & Hungler, 1987). According to several authors, validity is improved when experts are given the opportunity to make judgments regarding the appropriateness of the statements (Tetting, 1988; Polit & Hungler, 1987). Members of four panels of experts reviewed the items to ensure clarity, appropriateness and representativeness of caring behaviors in critical care. Experts were invited to make comments and suggestions. Finally, one panel of expert nurses in the field of caring categorized the fifty behavioral statements into four sub-categories of nurse-caring behaviors.

Items. The first review panel was constituted of three expert nurses selected because of their

experience and expertise in research and/or critical care. The panel were asked to identify behavioral statements which were not representative of the caring concept in nursing and not appropriate to critical care nursing.

According to Sellitz et al. (1976), clarity in wording of items reduces the possibility of distortion in ratings. Therefore, a second expert nurse panel reviewed the items for clarity, uniqueness and representativeness of caring behavior in critical care. This panel was comprised of five master's prepared nurses, who had experience in critical care and/or family nursing.

The identified items were then reviewed separately by two other panels comprised of five critical care nurses and five potential critical care family members. Critical care nurses were randomly selected by a nurse clinician in one critical care unit of a large acute care hospital. Potential family members were identified through family and friends and selected to participate if they had had a past experience as a family member in a hospital setting. Subjects were asked to indicate on

a checklist if each item was clearly stated and understandable.

Sub-Categories. Five nurse researchers from Canada and/or the United States, who have studied the concept of caring, were asked to assign each of the fifty statements to one of four sub-categories of caring behaviors: Expressive-personal characteristics; expressive-affective behaviors; instrumental-physical behaviors; instrumental-cognitively-oriented behaviors. These four sub-categories were developed based on Watson's conceptual model and on empirical studies describing the concept of caring. They referred to two types of caring behaviors: expressive and instrumental.

The experts were given definitions of the sub-categories. They were told that expressive behaviors indicate feelings. They consist of activities involved in establishing relationships and in offering emotional support. This category included two sub-categories of nurse-caring behaviors. The expressive-personal characteristics related to the individual features of the nurse which accounts for his/her willingness to care. The expressive-affective behaviors sub-category contained caring behaviors

referring to establishing a relationship and providing emotional support to family members.

Instrumental behaviors emphasize the actions taken rather than the emotions felt. They included two sub-categories of nurse-caring behaviors. Instrumental-physical behaviors encompassed specific concrete caring actions demonstrating the nurse's intention of "wanting to do something for" the family member. Instrumental-cognitively-oriented caring behaviors consisted of caring behaviors referring to activities with an emphasis on cognitive functioning like teaching and assisting in problem solving.

Translation

The Family Care-Q items were translated into French. A French version of this instrument may constitute a useful tool for nursing research assessing French speaking subjects. Moreover, an instrument available in two languages has allowed more subjects to participate in the study.

The validity of the translation was addressed by an editor/translator who reviewed both versions of the items several times to determine the accuracy of the translation. This process brought an important

refinement to the elaboration of each behavioral statement because each word used was reassessed for its sense and each statement was evaluated for its meaning.

The French version of the instrument has been titled: F-COMSOL: Mesure de l'Importance des Comportements de Sollicitude du Personnel Infirmier vis-à-vis des Familles aux Soins Intensifs. The psychometric properties of the French version of the instrument have been partially assessed. Content validity was examined by four panels of French speaking experts. The process to ensure content validity was the same as the one described for the English version. Reliability of the French version has not been addressed in a test-retest.

Methodology

This instrument uses Q-methodology which identifies the dimensions of subjective phenomena from the viewpoints and experiences of individuals (Dennis, 1986). Developed to explore and understand the richness of human subjectivity, it is relevant to many substantive areas of scientific inquiry within nursing (Dennis, 1986; Polit & Hungler, 1987). Several nurse researchers have used this method to examine the

ranking of nurse-caring behaviors (Cronin & Harrison, 1988; Larson, 1987; Mayer, 1987; Sloan, 1986).

The Q-technique invites the individual to sort a set of statements along a continuum of significance (Dennis, 1986). Because the method focuses on the individual's perspective, there are no right or wrong answers. Subjectivity is revealed by the subjects; the challenge lies in understanding it (Dennis, 1986).

The sorting procedure. Each of the 50 nurse-caring behaviors toward family members in critical care of the FCQI was printed on 4 X 4 1/2 inch plastified card. Each card was numbered for coding purposes. Study participants were informed during data collection that the numbering was for these purposes only. Verbal and written instructions were given to subjects to sort the 50 behavioral items according to seven ranks of importance. A forced choice was required between the items available.

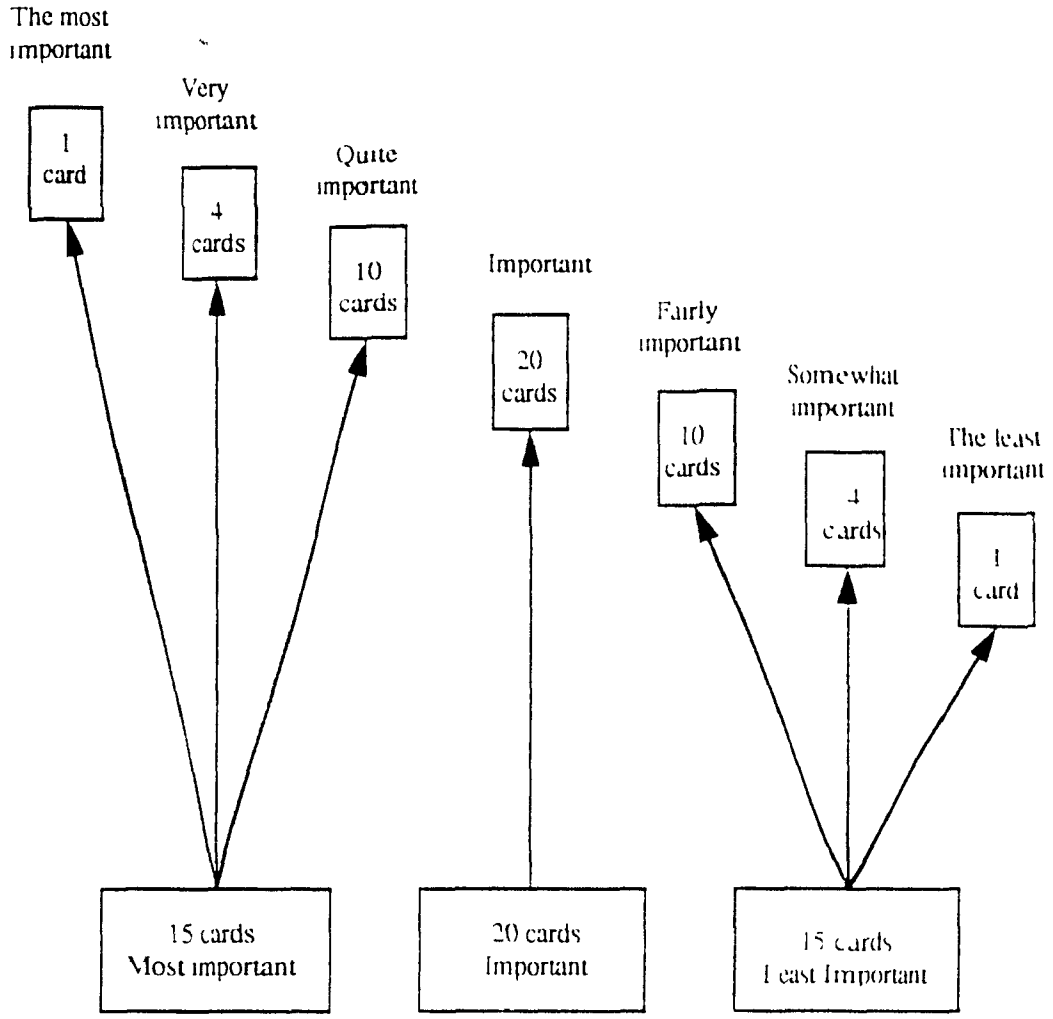
To help subjects conceptualize and enjoy the task, a 29 X 40 inch white rigid folding board constituted the form of the instrument. Three large squares were printed at the bottom of the board to represent the first part of the sort. Above these three squares,

seven envelopes were labeled and placed on a continuum from "the most important" to "the least important". These envelopes were positioned diagonally with "the most important" envelope placed at the top left of the board and "the least important" envelope placed at the bottom right. Envelopes were also colored in various shades denoting the level of importance with bright red for the most important envelope, to white, for the least important one. The number of cards/items to select for each pile as well as each envelope was printed in black. Figure 2 gives a representation of the instrument display.

Since a thorough comprehension of the instructions is essential to ensure valid and reliable results (Dennis, 1986) detailed verbal and written instructions were provided by the researcher to the participants. Participants were informed that the purpose of the study was to sort the cards into nursing behaviors most importantly desired rather than observed. First, subjects were asked to sort the 50 cards in three piles: 15 most important cards, 20 important cards and 15 least important cards. The next step was to take the 15 cards in the most important pile and to separate

Figure 2

Diagram of the Display of the Family Care-Q Instrument



them into three other piles. The same procedure was done in reverse for the 15 cards in the least important pile.

Instructions were explicitly stated to all participants who were: 1) informed that the 50 cards were all important; 2) asked to read all the cards; 3) and informed that the sorting task was divided into two steps: a) first, separate the fifty cards in three piles: most important, important, least important; b) and then assign an exact number of cards in each of the seven envelopes ranging from the most important to the least important. The researcher demonstrated to all individual participants how to proceed with the sort. Written instructions were also available for the subject to consult if needed (see Appendix B).

Method for data analysis. The item ranking of each participant was coded numerically. The item ranked as the most important was coded 7 and the least important item was coded 1. The Statistical Package for Social Sciences (SPSS) was used to analyze the data collected.

First, the mean rank for each of the 50 Family Care-Q items was calculated to determine which items

were most and least important for each group of subjects. It was done by using the Friedman test procedure. This statistic, used for analysis of ordinal-level data, placed the items by order of importance for each subject by attributing a rank value ranging from 1 to 50. Then, it calculated the mean rank of each item across all the subjects per group (Conover, 1971). Therefore the values obtained for the mean rank of items ranged from 1 to 50.

Secondly, the differences between nurses' and family members' perceptions of nurse-caring behaviors were analyzed. Multiple T-tests compared the two groups of subjects over each item as well as each sub-category of the instrument.

Advantages. The Q-methodology is a flexible and useful tool used in exploratory research (Kerlinger, 1973). Q-sort was developed as a means of recording and measuring multiple judgments, preferences, and impressions (Nunnally, 1964). Experience has indicated that the task of sorting cards seemed to be more interesting and agreeable to subjects than completing a questionnaire. In addition, social desirability,

response set and missing data are almost non existent with this method (Kerlinger, 1973).

Disadvantages. On the other hand, the Q methodology has been criticized to be time consuming and difficult (Polit & Hungler, 1987). Indeed, it has been estimated to take approximately 30 to 60 minutes per subject to complete the sort. Moreover, since the Q-sort's statements are ranked relative to other statements in the sort, interpretation of results should not view lower ranked items as unimportant or unsupportive, but only as less important or less supportive than higher ranked statements. In addition, it becomes problematic to generalize the results without a sizeable sample. This also limits the generalization of results to the sample under study (Hull, 1989).

Summary

The FCQI contains fifty nurse-caring behaviors towards family members in critical care. It was designed for this study to assess critical care nurses' and family members' perceptions regarding the relative importance of nurse caring behaviors towards family members in critical care. To achieve this measurement,

the instrument uses Q-methodology to rank the 50 items into seven ranks of importance ranging from "the most important" to "the least important". This instrument has also been made available in French. Both versions of the instrument were used in a pilot study conducted with 38 critical care nurses and 20 family members in the intensive care setting.

Phase 2: Instrument Testing

The purpose of this phase of the study was to test the reliability of the newly designed FCQI and revise the FCQI, if indicated. The following research question was addressed:

2. What are the internal consistency and stability of the set of Q-sort items?

Two approaches of estimating reliability were of interest: internal consistency and test-retest reliability.

Internal Consistency

"Items of an instrument that are not consistent with one another are most likely measuring different things, and thus contribute to (and may detract from) the instrument's assessment of the particular variable in question" (Corcoran & Fisher, 1987, p.14). The four

sub-categories of nurse-caring behaviors were tested for internal consistency using Cronbach alpha coefficient of correlation. This statistic, which is frequently used in instrument development, is based on the average correlations among items and thus reflects the degree of association between these items. Values approaching 1.0 suggest that the instrument's sub-categories are tapping a similar domain of interest.

Stability

Stability assessment gives information regarding the stability and dependability of an instrument (Guilford, 1954). Stability of the instrument was addressed in a small test-retest study with a group of six critical care nurses. These nurses agreed to complete the Q-sort a second time, three weeks after the first completion of the instrument. The nature of the retest was explained to participants as being for statistical purposes. The coefficients of correlations of the sub-categories were obtained with Pearson's correlations.

Evaluation of the Translation

Four bilingual nurses established the stability of the translation. Both versions of the instrument were completed individually and consecutively by each nurse. There was no time lapse in between the test-retest to prevent the effect of time on the perceptions. In order to avoid a direction bias in the translation, two nurses completed the French version first and then the English version and two other nurses first completed the English version followed by the French version.

This testing of the stability of the translation was addressed in order to consider the Family Care-Q as an instrument available in two languages rather than as two different instruments.

Phase 3: Pilot Study

The purpose of the pilot study was to assess nurses' and family members' perceptions of nurse-caring behaviors towards family members in critical care with a sample of 38 critical care nurses and 20 family members of critically ill clients. The pilot study addressed the following research questions:

3. What are family members' perceptions of important nurse-caring behaviors towards family members in critical care?
4. What are the critical care nurses' perceptions of important nurse-caring behaviors towards family members in critical care?
5. Is there a difference between the family members' and nurses' perceptions of important nurse-caring behaviors in critical care?

Conceptual Definitions

The definitions of the terms used in this study were:

Critically ill patient: an adult client who is seriously ill or injured and/or suffers from complex health conditions and requires critical care. In this study, these clients were patients admitted to a critical care unit.

Critical care: a blend of high technology and ongoing intensive attention by skilled professional staff working in units where clients requiring this type of care are centralized.

Critical care nurse: a nurse responsible for the care of critically ill patients and their family

members. In this study, critical care nurses were licensed to practice Nursing in the province of Quebec.

Family member: an adult person who expressed a close relationship to the critically ill patient by coming to visit the critically ill client while hospitalized in the intensive care unit. In this study, family members were relatives and/or friends.

Perception: defined by King (1981) as each individual's subjective view of reality, which includes awareness of objects, persons, and situations.

Caring: Caring involves values, a will and commitment to care, knowledge, caring actions and consequences (Watson, 1988).

Nurse caring behaviors include acts expressing concern, support, assistance and facilitation towards meeting clients' needs (Sloan, 1986).

Research Design

This study used a descriptive comparative design to describe the experience of caring within the nurse-family relationship. This type of design was judged to be appropriate to the exploratory nature of the study.

Because there is little documented information about the concept to be explored, hypothesis testing was not appropriate for this study.

The Setting

The medical-surgical intensive care unit of a large hospital affiliated with McGill University in Montreal was the setting chosen for this study. The project was approved by the Nursing Research Ethical Review Committee of the hospital. The target hospital's philosophy of nursing considers the client and his/her family as the focus of nursing practice. The chosen intensive care unit comprised 16 beds intended for critically ill adult clients sustaining medical and surgical health problems.

The Sample

This study used a sample of convenience with volunteers as participants. The sample consisted of two groups, one group included the visiting family members of crit cally ill clients, and the other consisted of the nurses taking care of clients and their family members in the intensive care unit (ICU).

Selection of family members. Family members were selected prospectively as qualified subjects visited

their hospitalized relative in the intensive care unit. Only one family member per family was asked to participate in the study. The type of relationship to the hospitalized client, the length of the client's hospitalization in the ICU and the client's diagnosis were recorded on the demographic data sheet as potential descriptive variables. No matching between the critical care nurses and the family members was done. The inclusion criterion for eligible hospitalized clients was that the length of hospitalization in the ICU was greater than 72 hours.

The inclusion criteria for family members were:

1) visited the hospitalized client in the ICU regularly:
   -at least two times during a patient's ICU hospitalization of less than 72 hours, or,
   -for a minimum of three times if the patient's hospitalization in the ICU is greater than 72 hours.
2) aged over 18.
3) literate in the English or French language
4) provided informed consent.

Selection of nurses. Nurses were voluntary participants from the designated intensive care unit. Nurses practising in critical care for less than one year were not included in the study. This criterion was chosen because, most commonly, nurses in their first year of practice in critical care concentrate on reaching a comfortable level of technical competence. When this level of expertise is attained, they can more fully concentrate on meeting the needs of their clients and families (Ray, 1987). According to this investigator, a one year period is the length of time needed to achieve this level. Thus, the inclusion criteria for nurses were:

1) licensed to practice in Quebec.
2) staff nurses.
3) had been working in the designated critical care unit for a minimum of one year.

Sample size. Twenty family members and 38 critical care nurses participated in this study.

Procedure for Data Collection

For ethical reasons, the subjects were not approached directly by the researcher for participation in the study. Patients who were hospitalized for a

minimum of 72 hours in the intensive care unit were identified by the researcher. Critical care nurses were thereafter consulted to assess if the patient's family members were visiting and if they met the inclusion criteria for the study. Nurses were then asked to inform the family members of the presence of a nurse researcher on the unit who was interested in the experience of families in critical care. Family members were invited to meet the nurse researcher. Appendix C gives an example of such statement of introduction to family members.

When a family member agreed to meet the researcher, the researcher explained the purpose of the study and what would be asked of him/her if he/she agreed to participate in the study (see Appendix C). Family members who agreed to participate were invited to sit in a private room within the area of the intensive care unit. Written consent (Appendix D) was signed, the demographic data sheet (Appendix E) was completed by the researcher as an interview with the family member and a concrete explanation of how to use the Q-sort was given using the instrument as an example. The FCQI was then completed privately by the

subjects. The researcher remained outside the room but still available to the family member if needed.

Critical care nurses were invited by the head nurse to meet the researcher for an information and recruitment session (see Appendix C). Critical care nurses were informed about the purpose of the study and what would be asked of them if they agreed to participate. A demonstration of how to do the sort was given during the information session. Nurses who did not attend the information and recruitment session were notified informally by the researcher when the researcher was on the unit.

Nurses who agreed to participate were asked to come to a private room near the intensive care unit. The consent form (Appendix D) was signed and nurses were asked to complete the demographic data sheet (Appendix E). Nurses completed the instrument during their working hours. A colleague nurse was asked to take care of the patient while the nurse who agreed to participate was gone to complete the instrument.

Assumptions

The major assumption underlying this study was that nurses demonstrate caring behaviors toward family

members in the intensive care unit. This assumption was made on the basis of this investigator's experience as a critical care nurse in the setting chosen for the study. In addition, there is evidence that caring is provided to families based on empirical studies on families in critical care (Cronin & Harrison, 1988; Hampe, 1975; Molter, 1979).

It was also assumed that the family members had had sufficient contact with nurses in the critical care setting to be able to formulate perceptions of nurse-caring behaviors. The type of instrument used assesses perceptions of caring rather than evaluation of nurse caring behaviors. It was assumed that this allowed family members to respond without fear of repercussions in the sorting of the items.

Finally, the instrument was believed to elicit nurse caring behaviors as it gave examples of several nursing behaviors based on caring which can be mediated within the nurse family relationship in the critical care setting.

Ethical Considerations

The investigator took the responsibility to inform the subjects of the purpose of the study as well as

their obligations if consent was given. The subjects were assured of privacy during the completion of the instrument and confidentiality of the results. Furthermore, family members were guaranteed that their participation in the study would in no way affect the care given to the hospitalized client or themselves. Nurses were assured that whether they participated or not would not affect their employment status in any way.

Therefore, the guidelines with respect to the rights of human subjects in research such as informed consent, privacy, confidentiality and protection from harm as well as the right to refuse and withdraw from participation, were adhered to in this research project. Descriptive information regarding the refusal of family members was collected when made available. This information included the reason of refusal, the type of client's illness and condition, and the relationship between the family member and the client.

Limitations

The nonprobability approach in the selection of the sample for this study has limited the generalizability of the results. The Q-method as well

as the lack of established psychometric properties of the new FCQI further limits the application of the findings. Should the subjects not have understood or not followed the instructions for completion of the instrument, results may have been inaccurate.

In view of the lack of qualitative studies on the meaning of caring for family members, this study assumed that the identified nurse-caring behaviors were perceived as caring behaviors by the family members.

CHAPTER 4

Results

The Family Care-Q instrument (FCQI) was developed in French and English for the specific purpose of identifying nurses' and family members' perceptions of nurse-caring behaviors towards family members in critical care.

This study required three major phases. Phase 1 was focused on the development of the instrument for the study. In Phase 2, the reliability of the instrument was tested during a pilot study conducted with nurses and family members in critical care. The results of this phase led to revisions in the instrument: the number of items (from 50 to 45) and the instrument's subcategories. In phase 3, nurses' and families' perceptions of important nurse-caring behaviors towards family members in critical care were assessed. Thus, the results of the data analysis are presented according to these three phases.

In phase 1, the following research question was addressed:

1. What set of items identifies important nurse-caring behaviors towards family members in critical care?

The results of this first stage are presented in four sections:

a. item development

b. content validity

c. translation

d. methodololgy

In phase 2, the subsequent research question was answered:

2. What are the internal consistency and stability of the set of Q-sort items?

The results of this phase are divided in three sections:

a. internal consistency

b. stability

c. evaluation of the translation

In phase 3, the following research questions were examined:

3. What are the family members' perceptions of important nurse-caring behaviors towards family members in critical care?

4. What are the critical care nurses' perceptions of important nurse-caring behaviors towards family members in critical care?

5. Is there a difference between these perceptions?

The results of the pilot study are presented in four sections:

a. sample characteristics

b. family member's perceptions of important nurse-caring behaviors in critical care.

c. nurses' perceptions of important nurse-caring behaviors in critical care.

d. differences between nurses' and family members' perceptions of important nurse-caring behaviors in critical care.

Phase 1: Instrument Development

Item Development

Fifty nurse-caring behaviors were developed to comprise the FCQI. Contrary to Larson's Care-Q Caring Assessment Instrument developed in 1981 to describe nurse-caring behaviors towards terminally ill clients, the FCQI identifies nurse-caring behaviors directed towards family members in the critical care setting.

The influence of Larson's instrument on the formulation of the FCQI items is acknowledged. Indeed, each of Larson's fifty statements of nurse-caring behavior was either adapted to the nurse-family relationship in critical care and/or changed to describe more specifically the nurse-caring behaviors towards family members in the critical care setting. Thus, several FCQI items are either similar to, closely related thematically to, or extracted from Larson's items. However, some of Larson's items were not included in the FCQI and other items were formulated. The relationships between the FCQI items and Larson's items are described in Appendix F.

Many of the behaviors identified in the FCQI are examples of nurses' responses to fulfil families' needs in the intensive care unit and thus reflect nursing interventions towards families in crisis. The researchers' experience in caring for family members in critical care ensured the identification of realistic and feasible behaviors relevant to critical care practice.

Content Validity

Items. Members of four panels of experts reviewed the items to ensure content validity. Panel 1, three nurses (a nurse researcher, a family-liaison nurse and a critical care nurse) reviewed each item for clarity, uniqueness and representativeness of caring behavior in critical care. Several terms identified as not clear and probably confusing for family members were changed for simpler words. Words such as "convey" and "explore" were modified to bring additional specificity and precision to item formulation. These expert nurses agreed on the fifty items as being representative of the caring concept of nursing in critical care. Their recommendations for changes resulted in the refinement of several items by adding specific examples.

The second panel was comprised of five nurses with masters' degrees who were asked to complete a checklist asking if each revised item was clearly stated, unique and representative of a caring behavior in nursing. Items that the experts found repetitive were modified to ensure distinction between items.

Thereafter, members of two panels reviewed the identified items for clarity in item formulation and

general understanding. A convenience sample of five critical care nurses and five potential family members constituted these panels. After they all reviewed the items of the instrument, words that nurses and/or lay persons found confusing were changed for synonyms. Except for these minor rewordings, the instrument remained unchanged.

Sub-categories. Two categories of nurse-caring behaviors and their sub-categories were developed conceptually based on Watson's Theory of Caring and on empirical studies describing the concept of caring. The two categories were identified as expressive and instrumental nurse-caring behaviors. The four sub-categories of caring behaviors were: expressive-personal characteristics; expressive affective behaviors; instrumental-physical behaviors; instrumental-cognitively-oriented behaviors.

Five nurse researchers, experts in the field of caring in Canada or in the United States, assigned the fifty statements to one of the identified four sub-categories of caring behaviors. There was limited agreement among members of the panel. In fact, only seven of the fifty items reached consensus over the

choice of the category and sub-category. Four out of five nurses agreed on the same category placement (expressive vs instrumental) for 39 items. For the choice of the sub-categories, four out of five members of the panel chose the same sub-category for 20 of the 50 items. As a result, each item was placed into one of the four sub-categories according to the greatest percentage of agreement over the choice of the subcategory.

Thus, a total of 17 items were classified as expressive nurse-caring behaviors and 33 items as instrumental caring behaviors. Within the category of expressive nurse-caring behaviors, 8 items were assigned to "personal characteristics" and 9 items to "affective behaviors". Within the category of instrumental nurse-caring behaviors, 15 items were assigned to "physical behaviors" and 18 items to "cognitively-oriented behaviors".

Translation

An editor/translator reviewed consecutively both versions of the items to determine the appropriateness of the translation. Appendix H shows the final French version. This process brought an important refinement

to the elaboration of each behavioral statement because each word used was reassessed for its sense and each statement was evaluated for its meaning.

Methodology

Responses to the instrument's Q-sort method varied. Several nurses and family members mentioned the difficulty of sorting 50 important cards by seven ranks of importance. The majority of family members enjoyed the task of sorting the cards. Several family members voiced their curiosity and interest when they saw the display of the instrument. Others commented on the behavioral statement printed on the cards and the incidence of such nurse-caring behavior in the intensive care unit chosen for the study. Many shared their appreciation of the nurses stating "they are so wonderful, so human!" Others commented at the end of the sort: "Really what is most important for family members is the care given to the patient". The time needed by family members to complete the sort ranged from 35 to 60 minutes.

In general nurses were enthusiastic about sharing their comments regarding the method of the instrument. Some nurses commented that the task required was

tedious and demanded concentration. Indeed, the sorting of the 50 cards in seven ranks of importance was experienced as difficult. Many nurses said: "they are all important! Really, I find it difficult to find the most important!" The time needed for nurses to complete the sort ranged from 35 to 50 minutes.

Phase 2: Instrument Testing and Revision

The purpose of this phase was to test the methodology of the instrument as well as the reliability of the newly designed FCQI. Two approaches of estimating reliability of the instrument were obtained: internal consistency and test-retest reliability. In addition, reliability of the translation was addressed with a small sample of bilingual nurses.

Internal Consistency

Initially, the 50 items of the FCQI were distributed into four sub-categories by a panel of experts. These sub-categories were tested for internal consistency using Cronbach alpha coefficient of correlation. The measure of internal consistency of each of these four sub-categories yielded values of Cronbach alpha ranging from -0.33 to 0.08 (Table 1).

Table 1

Coefficients Alpha of the Sub-Categories Derived by the Panel of Experts

Categories	Sub-categories	Number of items	Standardized Alpha
Expressive	Personal Characteristics	8	0.08
	Affective Behaviors	9	-0.33
Instrumental	Physical Behaviors	15	-0.02
	Cognitively Oriented Behaviors	18	-0.10

Note. Total=50 items

These results indicated that the clustering of items suggested by the panel was not statistically supported. Therefore items were reassigned to six new subcategories. These new subcategories were delineated with respect to the same two categories of nurse-caring behaviors, the expressive and instrumental categories.

As mentioned earlier, the category of expressive nurse-caring behaviors emphasizes the feelings of the nurses rather than the actions done. This category was divided into three sub-categories: "personal characteristics", which refer to the qualities of the nurse as an individual and a professional; "demonstration of affective interest" which consist of caring behaviors demonstrating the nurse's emotional availability and interest in helping the individual; and finally, "the emotion-focused caring interventions" which refer to the caring interventions of supporting and comforting.

The category of instrumental nurse-caring behaviors emphasizes the actions done rather than the emotions felt. This category was also divided into three sub-categories: "facilitation of adaptation to the environment" which refer to nurses' actions

performed to facilitate the family member's adaptation to the ICU environment; "demonstration of cognitive interest" relate to the nurses' actions demonstrating an interest to know more about the family members' experience; and "the problem-focused caring interventions" which refer to the caring interventions related to the problem, the patient's condition. They include nurse-caring behaviors like teaching, informing and reframing.

The new six subcategories were tested for internal consistency. These sub-categories yielded increased values of Cronbach alpha which ranged from 0.30 to 0.63. This kind of clustering of items suggested that the identified "dimensions" of the concept were more accurate because items within one cluster are highly correlated with one another and poorly correlated with items in other clusters (Volicer, 1984). During this process, five items were identified as significantly lessening the measure of internal consistency within sub-categories. In addition, they seemed to lack specificity in their formulation. Therefore, these five items were deleted from the instrument (see Appendix G). This resulted in decreasing the total

number of items from 50 to 45.

This revised version of the instrument contains 45 items divided into six sub-categories (see Appendix H). Table 2 shows the standardized alpha coefficient obtained for the new sub-categories.

Stability

Stability of the instrument was addressed in a small test-retest study with a group of six critical care nurses. The retest was completed three weeks after the first completion of the instrument. Values of 0.89 or greater were obtained as coefficients of correlation for five of the six subcategories (see Table 4).

Evaluation of the Translation

Four bilingual nurses compared the French and English versions of the FCQI to evaluate the accuracy of the translation. Three of these bilingual nurses were French, while one was italian. The small size of the sample did not allow for statistical analysis to be performed. Subjects reported that they were affected differently by the language version of the instrument. However, they found the translation accurate and therefore both versions of the FCQI were considered to be addressing the same behaviors.

Table 2

Coefficients Alpha of the New Sub-Categories Derived by the Researcher

Categories	Sub-categories	Number of items	Coefficient alpha
Expressive	Personal Characteristics	6	0.63
	Demonstration of affective interest	6	0.59
	Emotion-focused caring interventions	9	0.30
Instrumental	Facilitation of adaptation to the environment	9	0.48
	Demonstration of cognitive interest	6	0.59
	Problem-focused caring interventions	9	0.53

Notes. Total=45 items

Table 3

Reliability Testing of the FCQI: Coefficients of Correlations of the Sub-Categories

Sub-categories	***Coefficients of correlation
Personal characteristics	0.98**
Demonstration of affective interest	0.61
Emotion-focused caring interventions	0.99**
Facilitation of adaptation to the environment	0.93**
Demonstration of cognitive interest	0.89*
Problem-focused caring interventions	0.89*

Note. * significant $p<0.01$
** significant $p<0.05$
*** calculated with Pearson's correlations

Phase 3: Pilot Study

The FCQI was used during this pilot study conducted with critical care nurses and family members in the intensive care unit. The French version of the instrument was used by four family members and 16 nurses while 16 family members and 22 nurses completed the English version. As the French and English versions of the instrument were considered to be reliable, the data obtained with both versions of the instrument were combined for analysis.

Sample Characteristics

Patients. The patients who were the point of reference for this study were critically ill patients hospitalized for a minimum of seventy-two hours in the intensive care unit. The age of the patients ranged from 17 to 82 years. Forty percent were female and sixty percent male. Forty-five percent of the patients had been previously hospitalized in critical care, while it was the first experience for 55 percent of patients. The length of hospitalization in the intensive care unit at the time of data collection ranged from 3 to 24 days with a mean of 9.2 days.

Sixty percent of the patients were diagnosed with a medical type of illness. These patients suffered from hepatic failure (n=3); pancreatic, gastric, or breast cancer (n=3); fourth stage of Hodgkin's disease (n=3); respiratory failure, meningitis, and brain infarct (n=3). Forty percent of the patients had a surgical type of illness (n=8). The majority of these patients had undergone vascular surgery (n=6). The remaining two had had cardiac surgery or splenectomy. Table 4 summarizes the descriptive data collected on critically ill patients in the critical care unit.

Family members. Twenty family members participated in this study. Their age range from 26 to 72 years with an average of 46 years. Twelve family members were female and eight were male. Eleven were born in Montreal, and three in Ottawa. The remaining were immigrants from Europe.

Seven family members had university education. Five had completed at least fifteen years of schooling and six, twelve years. Two family members who participated in the study had a maximum of six years of formal education.

Table 4

Characteristics of Critically Ill Patients (N=20)

Characteristics	Number (%)	Mean (Range)
Age		54 (17-82)
Sex		
Female	8 (40%)	
Male	12 (60%)	
Previous Hospitalizations in ICU		
Yes	9 (45%)	
No	11 (55%)	
Type of Illness		
Medical	12 (60%)	
Surgical	8 (40%)	
Number of Days in ICU		9.2 (24)

Six of the family members were spouses and seven were adult children of the hospitalized patient. The others were either the mother, sister or sister in law. Eleven family members were living with the hospitalized member prior to the patient's hospitalization. Thirteen family members stated they had a very close relationship with the hospitalized patient. The others described their relationship to the hospitalized relative as being close. No subjects stated they were not close to the patient.

For ten of these family members, it was their first experience having a significant other hospitalized in an intensive care unit. Eleven family members spent their days in the intensive care unit. Four visited once a day and four others came to see the hospitalized member once every other day. One family member visited twice a week. Nineteen family members stayed more than forty five minutes during their visit in the intensive care unit. Table 5 reports the descriptive data collected on family members.

Nurses. Thirty-eight critical care nurses participated in the study. Their age ranged from 23 to 49 years with an average of 30 years.

Table 5

Characteristics of Family Members (N=20)

Characteristics	Number (%)	Mean (Range)
Age		46 (26-72)
Sex		
Female	12 (60%)	
Male	8 (40%)	
Place of Birth		
Montreal	11 (55%)	
Ottawa	3 (15%)	
Europe	6 (30%)	
Education		
6 years	2 (10%)	
12 years	6 (30%)	
Around 15 years	5 (25%)	
University Degree	7 (35%)	
Relationship to Patient		
Wife	3 (15%)	
Husband	3 (15%)	
Son	4 (20%)	
Daughter	3 (15%)	
Mother	2 (10%)	
Sister	3 (15%)	
Sister-in-law	2 (10%)	
Closeness of Relationship to Patient		
Very close	13 (65%)	
Close	7 (35%)	

Table 5 (con't).

Characteristics of Family Members (N=20)

Characteristics	Number	(%)
Living with Patient		
Yes	11	(55%)
No	9	(45%)
Previous Experience in ICU		
Yes	10	(50%)
No	10	(50%)
Frequency of Visits		
Spend my days	11	(55%)
Once a day	4	(20%)
Every other day	4	(20%)
Twice a week	1	(5%)
Lenght of Visits		
Around 15 min.	1	(5%)
More than 45 min.	19	(95%)

Twenty-nine nurses held a nursing diploma and eight a baccalaureate degree in nursing. One had graduated from a hospital program. Twenty-nine nurses were working full time and the others were part-time. Thirty-four nurses were doing the rotation among the three shifts. Two were working only the day shift, and one, the evening shift or the night shift. Six nurses who participated in the study had one year or less of experience in critical care. Two nurses had less than the inclusion criterion of one year experience but felt they had reached a comfortable level of expertise and wanted to participate in the study. The judgment was made that they had satisfied the intent of the criterion and they were admitted to the study. Table 6 summarizes the descriptive data collected on critical-care nurses who participated in this study.

Family members' Perceptions of Important Nurse-Caring Behaviors in Critical Care

All 20 family members completed the FCQI. Four family members used the French version and 16 the English version. The Friedman test procedure was used to calculate the mean ranks for each item across subjects per group. The values obtained ranged from

Table 6

Characteristics of Critical Care Nurses (N=38)

Characteristics	Number (%)	Mean (Range)
Age		30 (23-49)
Sex		
Female	35 (92%)	
Male	3 (7%)	
Years in ICU		
Less than one year	2 (5%)	
1 year	4 (11%)	
1 - 2 years	5 (13%)	
2 - 3 years	7 (18%)	
3 - 5 years	9 (24%)	
5 -10 years	8 (21%)	
10-15 years	3 (8%)	
Education		
Hospital program	1 (3%)	
Nursing diploma	29 (76%)	
B.S.N.	8 (21%)	
Employment Status		
Full time	29 (76%)	
Part time	9 (24%)	
Shift		
Days	2 (5%)	
Evenings	1 (3%)	
Nights	1 (3%)	
Rotation	34 (89%)	

3.67 to 43.67. The highest mean rank indicates the most important item and the lowest mean rank, the least important item. Appendix I reports the listing of items by importance as determined by family members.

Table 7 shows the five nurse-caring behaviors towards family members perceived as most important by family members. Table 8 shows the five nurse-caring behaviors perceived as least important by family members.

In addition, the same procedure was used to determine the importance of the six sub-categories. The mean ranks for the six subcategories ranged from 1.30 to 5.42. The relative importance of these sub-categories, as perceived by family members, is shown in Table 9. Family members perceived problem-focused and emotion-focused caring interventions as most important. The caring behaviors demonstrating nurses' cognitive interest in the family member were perceived as the least important.

Nurses' Perceptions of Important Nurse-Caring Behaviors in Critical Care

Thirty eight critical care nurses completed the FCQI. Sixteen used the French version and 22 used the

Table 7

The Five Nurse-Caring Behaviors Perceived as Most Important by Family Members

	Items	*Mean Rank
7.	The nurse informs the family member when important changes occur in the patient's condition.	43.67
42.	The nurse is skilled in the technical aspect of the patient's care; such as intravenous, pumps, monitors, etc.	40.80
22.	The nurse takes the time to talk to the family member when he calls the intensive care unit.	38.97
21.	The nurse seeks additional information about the patient from the family member.	36.35
47.	The nurse is honest with the family member about the patient's condition and treatment.	36.22

*calculated by Friedman test procedure and ranging from 1 to 50.

Table 8

The Five Nurse-Caring Behaviors Perceived as Least Important by Family Members

	Items	*Mean Rank
11.	The nurse offers the family member to sleep in the waiting room.	14.27
31.	The nurse informs the family member of support systems available in the hospital, such as pastoral services.	13.88
28.	The nurse sits down with the family member.	12.42
13.	The nurse inquires if the family member has eaten, has slept.	10.75
10.	The nurse brings coffee to the family member when he is waiting to see the patient.	3.67

*calculated by Friedman test procedure and ranging from 1 to 50.

Table 9

The Relative Importance of the FCQI Sub-Categories as Perceived by Family Members

Categories	Sub-categories	*Mean Rank
Instrumental	Problem-focused caring interventions	5.42
Expressive	Emotion-focused caring interventions	5.38
Expressive	Demonstration of affective interest	3.20
Instrumental	Facilitation of adaptation to the environment	3.00
Expressive	Personal characteristics	2.70
Instrumental	Demonstration of cognitive interest	1.30

*calculated by Friedman test procedure and ranging from 1 to 6.

English version. The Friedman test procedure determined the relative importance of the items as perceived by the subjects. The mean ranks ranged from 3.54 to 41.89. Appendix I reports the listing of items by importance as determined by critical care nurses.

Table 10 shows the five nurse-caring behaviors towards family members perceived as most important by critical care nurses. Table 11 presents the five nurse-caring behaviors perceived as least important by critical care nurses.

The relative importance of the six sub-categories was also determined with the Friedman test's procedure and results are shown in Table 12. Mean ranks of sub-categories ranged from 2.00 to 5.67. Nurses perceived emotion-focused caring interventions as the most important sub-category followed by the problem-focused caring interventions sub-category. The sub-category of nurse-caring behaviors demonstrating nurses' affective interest in the family member was perceived least important by critical care nurses.

Anecdotally, nurses commented, in response to the FCQI, on the appropriateness and clinical relevance of the items. One nurse remarked: "It is interesting to

Table 10

The Five Nurse-Caring Behaviors Perceived as Most Important by Critical Care Nurses

	Items	*Mean Rank
32.	The nurse uses understandable language while talking to the family member about the patient's condition and treatment.	41.89
17.	The nurse gives the opportunity to the family member to express his feelings about the situation.	38.32
37.	The nurse informs the family member when important changes occur in the patient's condition.	37.95
47.	The nurse is honest with the family member about the patient's condition and treatment.	36.00
24.	The nurse invites the family member to ask any questions he might have.	35.75

*calculated by Friedman test procedure and ranging from 1 to 50.

Table 11

The Five Nurse-Caring Behaviors Perceived as Least Important by Critical Care Nurses

	Items	*Mean Rank
39.	The nurse offers reasonable alternatives to the family member, such as choice of visiting times, length of stay at the patient's bedside, etc.	14.76
40.	The nurse suggests questions for the family member to ask the doctor in charge.	13.79
11.	The nurse offers the family member to sleep in the waiting room.	13.66
45.	The nurse wears identifiable clothing with a name tag.	10.70
10.	The nurse brings coffee to the family member when he is waiting to see the patient.	3.54

*calculated by Friedman test procedure and ranging from 1 to 50.

Table 12

The Relative Importance of the FCQI Sub-Categories as Perceived by Critical Care Nurses

Categories	Sub-categories	*Mean Rank
Expressive	Emotion-focused caring interventions	5.67
Instrumental	Problem-focused caring interventions	5.16
Instrumental	Facilitation of adaptation to the environment	3.99
Instrumental	Demonstration of cognitive interest	2.13
Expressive	Personal characteristics	2.05
Expressive	Demonstration of affective interest	2.00

*calculated by Friedman test procedure and ranging from 1 to 6.

realize all we do with family members." Another nurse explained how she felt when she read the item stating: "the nurse brings coffee to the family member." This nurse explained: "This item makes me angry! I feel as if it reinforces the idea that nurses are waitresses."

Several nurses felt the need to explain the reasoning behind the way they had sorted the items. Three nurses revealed that items identified as less important were often behaviors they felt they had less frequently with family members. Another nurse explained: "I feel as if I am a cold and heartless person to rank the item regarding the technical competence of the nurse as the most important. I would feel better, if I could put two items in this category."

Several nurses mentioned that all the identified behaviors were important. However, the importance placed on one behavior is relative, and the choice depends on the family's situation and how family members deal with the critical illness. As one nurse said: "Sometimes, bringing coffee to the family member in the waiting room is the most important behavior that you can have to show you care."

Differences Between Nurses' and Family Members' Perceptions of Important Nurse-Caring Behaviors in Critical Care

Comparison of perceptions of nurse-caring behaviors between nurses and family members involved T-tests for each of the 50 nurse-caring behaviors as well as for the six sub-categories of the FCQI. The mean of each item was determined across subjects per group based on the raw scores coded from 1 to 7. The means for sub-categories were computed across items within each sub-category and across subjects per group. The alpha level was set at 0.01 because of the high risk of type I error involved in multiple T-tests.

Table 13 shows the nurse-caring behaviors perceived significantly more important by family members than by nurses. Table 14 presents the nurse-caring behaviors perceived as significantly more important by nurses compared to family members.

The sub-categories perceived significantly more important by family members and nurses are shown in Table 15 and 16. Differences between nurses and family members regarding the two categories of nurse-caring

behaviors (expressive versus instrumental) of the FCQI are presented in Table 17.

Table 13

The Nurse-Caring Behaviors Perceived More Important by Family Members (N=20) than by Critical Care Nurses (N=38)

	***Mean	Standard Dev.	p value
The nurse responds quickly to the family member's requests.			
Family members	4.45	1.10	0.002**
Nurses	3.50	1.01	
The nurse is open to the family member's suggestions regarding the patient's care.			
Family members	4.30	0.73	0.000**
Nurses	3.42	0.76	
The nurse seeks additional information about the patient from the family member.			
Family members	4.75	0.55	0.001**
Nurses	3.79	1.10	
The nurse takes the time to talk to the family member when he calls the intensive care unit.			
Family members	5.10	0.85	0.006**
Nurses	4.53	0.65	
The nurse suggests questions for the family member to ask the doctor in charge.			
Family members	3.80	1.00	0.006**
Nurses	3.08	0.85	

Table 13 (con't)

The Nurse-Caring Behaviors Perceived More Important by Family Members (N=20) than by Critical Care Nurses (N=38)

	***Mean	Standard Dev.	p value
The nurse is skilled in the technical aspect of the patient's care; such as intravenous, pumps, monitors, etc.			
Family members	5.45	1.23	0.000**
Nurses	3.95	1.39	

Note. ** significant at $p<0.01$
*** calculated by T-test on scores ranging from 1 to 7

Table 14

The Nurse-Caring Behaviors Perceived More Important by Critical Care Nurses (N=38) than by Family Members (N=20)

	***Mean	Standard Dev.	p value
The nurse gives the opportunity to the family member to express his feelings about the situation.			
Family members	4.20	1.06	0.002**
Nurses	5.05	0.90	
The nurse comforts the family member by using eye contact, a soft voice and touch.			
Family members	3.55	0.69	0.000**
Nurses	4.47	0.95	
The nurse listens attentively to the family member.			
Family members	3.95	0.51	0.000**
Nurses	4.82	0.96	
The nurse uses understandable language while talking to the family member about the patient's condition and treatment.			
Family members	4.50	1.19	0.002**
Nurses	5.47	1.03	

Note. ** significant at $p<0.01$
*** calculated by T-test on scores ranging from 1 to 7

Table 15

The Sub-Categories Perceived More Important by Family Members

Sub-Categories	Groups	***Mean	Standard Dev.	p value
Demonstrates Affective Interest	Family members	4.54	0.43	0.000**
	Nurses	3.92	0.45	
Personal Characteristics	Family members	4.36	0.56	0.001**
	Nurses	3.75	0.66	

Note. ** significant at $p<0.01$
*** calculated by T-test on scores ranging from 1 to 7

Table 16

The Sub-Categories Perceived More Important by Nurses

Sub-Categories	Groups	***Mean	Standard Dev.	p value
Demonstrates Cognitive Interest	Family members	3.59	0.526	0.012*
	Nurses	3.97	0.523	
Emotion Focused Caring Interventions	Family members	4.21	0.45	0.045*
	Nurses	4.43	0.35	
Facilitates Adaptation to Environment	Family members	3.37	0.37	0.006**
	Nurses	3.70	0.43	

Note. * significant at $p<0.05$
** significant at $p<0.01$
*** calculated by T-test on scores ranging from 1 to 7

Table 17

Differences Between Nurses and Family members Regarding The Two Categories of Nurse-Caring Behaviors of the Family Care-Q Instrument

Categories	Groups	***Mean	Standard Dev.	p value
Expressive				
	Family members	4.35	0.24	
				0.001**
	Nurses	4.10	0.29	
Instrumental				
	Family members	3.73	0.22	
				0.004**
	Nurses	3.93	0.25	

Note. ** significant at $p<0.01$
*** calculated by T-test on scores ranging from 1 to 7

Summary of Findings

The Instrument

The FCQI was designed to assess the nurses' and family members' perceptions of important nurse-caring behaviors towards family members in critical care. Fifty such nurse-caring behaviors were elaborated based on an instrument developed by Larson (1981) which identified fifty nurse-caring behaviors towards terminally ill clients.

The FCQI uses Q-methodology to determine the relative importance of nurse-caring behaviors. Subjects were asked to sort 50 behavioral items according to seven ranks of importance. A forced choice was required to rank all items in seven levels of importance.

This instrument was translated into French by this bilingual researcher and further verified several times by an editor/translator. The psychometric properties of the French version of the instrument were addressed partly.

Content validity was determined by four panels of experts who reviewed the items for clarity and relevance. Content validity was initially addressed with a panel of five nurse researchers in the field of

caring who categorized the 50 statements into four theoretically derived sub-categories based on Watson's conceptual framework.

The FCQI was then tested statistically to obtain the estimates of reliability. The initial measure of internal consistency of the four sub-categories yielded poor values of Cronbach alpha ranging from -0.33 to 0.08. A revision and reclassification of items into six-sub-categories retained 45 items. The testing of these new sub-categories yielded increased values of Cronbach alpha ranging from 0.30 to 0.63.

Test-retest reliability of the FCQI with six critical care nurses showed high correlations ($r>0.89$) for five of the six subcategories. The items of only one subcategory, "demonstrates affective interest" had a relatively low correlation ($r=0.6\_$).

Thus, evidence of content validity was established during the development of the FCQI. In addition, findings show that the 45 items constituting the final instrument are fairly consistent and reliable. In consideration of the relatively unexplored and abstract nature of the concept of caring, this newly designed

instrument offers insight into the operationalization of the concept of caring.

The Pilot Study

The major demographic finding pertaining to nurses was regarding the level of formal education. Only twenty-one percent of nurses held a baccalaureate degree in nursing while thirty-five percent of family members held such a university degree.

Family members' demographic information revealed that most family members were female (60%) and were spending their days in the unit (55%). In addition, 30% percent of family members were spouses and 35% percent were adult children.

Nurses and family members shared similar perceptions regarding the importance of informing family members when important changes occur in the patient's condition and being honest about the information given regarding the patient's condition. They also shared similar perceptions of least important behaviors.

Family members perceived nursing behaviors directed to meet the physical needs of family members as least important whereas behaviors enacted in

relation to the patient, such as those of technical competence and provision of information regarding the patient's condition, were perceived to be most important. As well, greater importance was given to statements indicating the nurse's availability to talk to family members, and interest to release or get information about the patient.

Nurses perceived that using understandable language while talking to family members, giving them the opportunity to express their feelings regarding the situation, and inviting them to ask questions, were also most important ways to care for family members.

Finally, nurses and family members perceived the problem-focused caring interventions sub-category as one of the most important sub-category of nurse-caring behaviors. However, statistical differences were found in the five other sub-categories.

More importantly, significant differences were found between nurses and family members regarding the two major categories of behaviors of the FCQI. Indeed, the study revealed that critical care nurses perceived instrumental nurse-caring behaviors most important

while family members perceived expressive nurse-caring behaviors most important.

CHAPTER 5

Discussion

The purpose of this study was to design and test a research instrument to assess nurses' and families' perceptions of important nurse-caring behaviors towards family members in critical care.

This study had three major phases. In the first phase, a set of Q-sort items identifying important nurse-caring behaviors towards family members in critical care was developed. This instrument used Q-methodology and was titled: the Family Care-Q Instrument (FCQI). It was also translated into French. The issue of reliability of the FCQI was addressed in the second phase of the study. Finally, in the third phase, a pilot study was conducted to examine family members' and nurses' perceptions of important nurse-caring behaviors towards family members in critical care. As well, the differences between these perceptions were explored.

The discussion regarding the results of this study will be presented in four parts. First, the findings regarding the development and testing of the instrument will be considered. Second, findings of critical care

nurses' and family members' perceptions of most and least important nurse-caring behaviors will be examined. Third, differences between the groups' perceptions will be discussed. Finally, implications for future studies will be addressed.

The Instrument Developed in this Study: The Family Care-Q Instrument

Considering the relatively unexplored and abstract nature of the concept of caring towards family members, the FCQI provides a beginning foundation for further research studies on this topic. Indeed, the FCQI has distinct features in comparison to the three reported instruments designed to assess perceptions of nurse-caring behaviors towards family members (Freihofer & Felton, 1976; Irwin & Meier, 1973; Skorupka & Bonhet, 1982).

First, the FCQI proposes a unique set of nurse-caring behaviors directed essentially towards the family member. The emphasis is put on the nurse-family relationship and the care provided to the patient is referred to only in this context of caring for family members. Consequently, the behaviors comprising this instrument conceptualize caring within an interpersonal

process evolving from more than just the recognition of the family members' needs but the dynamics of a relationship: its reciprocity, collaboration and mutual involvement.

Secondly, compared to the other three instruments, the classification of the FCQI behavioral items into sub-categories ref :ts the literature on caring behaviors rather than that of patients' and family members' needs. Furthermore, the testing of the FCQI included thorough assessments of both validity and reliability whereas the psychometric testing of previously cited instruments was limited to general assessment of content validity. Finally, a French version of the FCQI is available for use with French speaking subjects.

During the process of testing this instrument for reliability, findings suggested that the items classified initially under the first four sub-categories were not internally consistent and therefore may have been describing more than the identified dimension of nurse-caring behaviors. Later, the six sub-categories of nurse-caring behaviors derived by the researcher were found to be more consistent. Further

testing of the instrument is recommended with a larger sample of subjects to assess the need to enlarge the number of items in some of the least consistent sub-categories.

In the reported pilot study, assumptions were made regarding the accuracy of the translation of the English version of the FCQI into French. In fact, four bilingual nurses who participated in the evaluation of the translation commented positively on the accuracy of the translation. However, their response to the two versions revealed cultural differences. This interesting fact supports Leininger's beliefs in the cultural components of the perceptions of caring (1986). However, it also questions the content validity of translated instruments assessing these kinds of perceptions. Therefore, further evaluation of the translation is indicated. Finally, because data obtained with the French and English versions of the FCQI were combined for analysis, this may have brought further limitation to the findings of the pilot study.

The ease with which nurses and family members completed the FCQI suggests that this instrument uses a realistic and appropriate method to assess nurses' and

family members' perceptions regarding the relative importance of nurse-caring behaviors towards family members in critical care. The subjects showed interest in the presentation of the instrument and did not reveal any trouble regarding the understanding and interpretation of the sorting procedure. Such positive response may be partly explained by the high level of education of the family members in this study. Indeed, according to Whiting (1955), the task of discriminating many levels of variation can be extremely difficult and uncomfortable, even for a well motivated subject. Thus, further testing of this methodology with a larger sample of subjects is recommended for future studies.

Several researchers have suggested investigation of familial units rather than just the individual family members (Gillis et al., 1989; Hull, 1989). While the data were collected from individual family members in this study, three sessions were conducted with groups of three family members who completed the instrument by reaching a consensus. Although these data were not included in the analysis, the experience demonstrated that the instrument may use an appropriate method for measuring perceptions of familial units.

In conclusion, in view of the paucity of valid and reliable instruments describing nurse-caring behaviors towards family members, the FCQI offers several advantages for nursing research on this subject. With additional psychometric testing, this instrument, available in two languages, may contribute to developing a knowledge base regarding perceptions of important nurse-caring behaviors towards family members in critical care settings.

Family Members' Perceptions of Nurse-Caring Behaviors

The nurse-caring behaviors perceived as most important by family members in this study appear to focus on two aspects: the problem, that is the patient's condition and/or illness situation, and the attitude of the nurse while he/she interacts with the family member. These findings are consitent with those reported in the three research studies on nursing behaviors towards family members (Irwin & Meier, Feihofer & Felton, Skorupka & Bohnet). In addition, these findings are in agreement with findings reported in studies on needs of family members in critical care (Hickey, 1990; Hull, 1989).

Given the serious nature of the patient's illness and the intensity of stress in the intensive care unit, it is not surprising that behaviors which refered to providing honest information about the critically ill patient's condition and care were perceived as most important by family members. According to Cohen & Lazarus (1979), information seeking behavior mediates the process of appraisal and coping, and maintains the basis for hope (Sabo et al., 1989). Perhaps by providing competent care to the patient and providing information to family members about the patient condition, nurses give to family members a sense that they are competent and knowledgeable. Thus by giving the best competent care to the patient, nurses care for their patients' family members.

Furthermore, the importance placed on getting honest information about the patient's condition may suggest that family members perceive trust as one important component of caring in their relationships with nurses. Taking the time to talk to family members may be a way to communicate to family members the nurse's accountability and desire to establish a trusting relationship with family members.

Family members in this study perceived the sub-category of providing emotional support to family members as one of the two most important sub-categories of the instrument, virtually at the same level as problem-focused behaviors. It may be possible that family members' perceptions of their need for emotional support from nurses may change after having spent long periods in the intensive care unit. In fact, family members may cope with the onset of the crisis by showing emotional control and being more receptive to problem-focused caring interventions. After more than 72 hours, family members may be more inclined to receive emotion-focused caring interventions. However, no study was found to support this hypothesis. Thus, this interpretation calls for a longitudinal study of families's perceptions of important caring behaviors in critical care.

The lack of emphasis placed by family members in this study on attending to the physical needs of family members is consistent with previous studies on needs of families in critical care (Bouman, 1984; Daley, 1984). Family members may interpret behaviors directed to meet their physical needs as being "extra" rather than

meaningful interventions enacted to promote coping with the stress associated with a relative's prolonged hospitalization in the intensive care. On the other hand, nurses in this study placed more importance on these nurse-caring behaviors directed towards such family members who must surely have experienced physical needs.

Finally, the behaviors demonstrating cognitive interest in the family member were perceived as the least important sub-category by the family members in this study. The behaviors in this sub-category are emphasizing the nurse's interest in learning more about the family member's experience, views, and so on. Therefore, it may be that family members perceive behaviors directed towards them as persons rather than as family members as relatively less important. They may value their relationship with critical care nurses in relation to the patient's care rather than family care.

Nurses' Perceptions of Nurse-Caring Behaviors

The behaviors identified as most important for nurses in this study reflect the literature on nurses' perceptions of most important needs of family members

in critical care (Forrester, et al., 1990; Jacono et al., 1990; O'Norris & Grove, 1986; Prowse, 1984). In addition, these findings are consistent with the most commonly recommended interventions towards families of critically ill clients (Gardner & Stewart, 1978; Wright & Leahey, 1987). Thus it appears that nurses in this study were knowledgeable about meaningful ways to care for family members in critical care.

As expressed through the items perceived most important by the nurses in this study, behaviors demonstrating respect towards family members were valued. Indeed, such behaviors as those involved in the process of communicating verbally with family members, using understandable language and allowing expression of feelings and concerns, were seen as most important.

It is interesting to note that while nurses were interested in giving understandable information, family members perceived receiving information about the patient's condition as most important. These perceptions may be qualified as complementary to each other. This finding may illustrate one basic component of the nurse-family caring relationship in the intensive care unit. It may refer to the reciprocal

characteristics which tend to satisfy people in a caring interaction (Leininger, 1978).

According to Ray (1987), the nurse's experience of caring for clients in critical care is closely linked with ethics. The provision of information to family members in a sensitive and meaningful way may represent for these nurses the basis for responsible and ethical nursing care. Family members who are well aware of the patients' condition and care may take a more participative stand in decisions regarding the management of patients' care.

In this study, critical care nurses have ranked the instrumental category of nurse-caring behaviors as most important whereas in studies done with nurses and patients (Cronin & Harrison, 1988; Larson, 1987; Mayer, 1987; Sloan, 1986), nurses had given greater importance to the expressive category of behaviors. This finding emphasizes the notion that perceptions of caring are influenced by the context of the nurse-client (patient and/or family member) interaction (Larson, 1987). A comparative study on perceptions of important nurse-caring behaviors across settings and between various participants is recommended for future studies.

The importance placed by the critical care nurses in this study on the instrumental category of nurse-caring behaviors may have several explanations. First, these critical care nurses may have perceived the instrumental category as responding more to the family members' needs and expectations in the intensive care unit. Indeed, nurses in critical care have indicated their awareness of the family members' need for information, and thus, may consider as most important, the behaviors of providing information about the patient's condition as well as facilitating the family members' adaptation to such a stressful environment.

On the other hand, nurses may have perceived the instrumental category of nurse-caring behaviors as responding more to their own needs. Indeed, it has been demonstrated in various studies that family members are a source of stress for nurses (O'Malley et al., 1991). Interacting on an emotional level with family members requires a lot of energy and involvement (Hull, 1989; Mailick, 1979). Thus, nurses may prefer adopting instrumental nurse-caring behaviors rather than ones centered on emotions (O'Malley et al., 1991). Furthermore, critical care nurses may feel more

comfortable in assisting family members using a teaching role rather than a role focusing on emotions (Hickey & Lewandowski, 1988). However, family members have indicated the importance of receiving such emotional support from nurses. Thus, nurses may need support and guidance in learning ways to protect their own emotional vulnerability while caring for family members in crisis.

In addition, specific aspects of instrumental behaviors towards patients, such as administering medications and providing physical care, seem to be more clearly delineated from the expressive dimension of caring behaviors than those addressed towards family members. Thus, the instrumental categories of nurse-caring behaviors towards family members identified in this study may not be considered comparable with the instrumental categories of nurse-caring behaviors towards patients.

Differences between Nurses' and Family Members' Perceptions

Nurses and family members in this study have both recognized the importance of caring behaviors referring to the patients' condition and care. In view of the

patient's critical condition, it is understandable that behaviors in relation to other aspects of care, such as those directed to making the environment more convenient, were perceived as least important by both groups of subjects.

Thus, in view of the similarities in the findings of this study, it may be suggested that both family members of critically ill patients and nurses valued trust as an important element of their caring relationship. As opposed to the study by O'Norris & Grove (1986), nurses and family members in this study shared similar perceptions regarding the importance of nurse's honesty while interacting with family members.

However, family members and nurses in this study also had different perceptions over the importance of several nurse-caring behaviors. Some of these differences are consistent with those observed in other studies where nurses thought that family members did not want to participate in patient care when findings indicated that they did (Stanick, 1989). Other differences can be considered as supporting previous

observations made where nurses did not appear to realize that family members needed to feel accepted by them.

In general, family members in this study perceived as more important those behaviors demonstrating the nurse's responsive attitude in interacting with family members and his/her technical skills in caring for the patient. On the other hand, nurses seemed to emphasize the verbal and non-verbal (supportive) types of communication with family members.

Although family members value receiving information from nurses they seem to also appreciate how nurses most commonly respond to them daily. Thus, nurses' non-verbal communication represents an important way of making family members feel accepted and cared for by nurses.

Perceptions regarding the overall importance of the two categories of nurse-caring behaviors differed significantly. Indeed, the family members in this study perceived the expressive category as more important whereas the critical care nurses perceived the instrumental category as more important. Nurses may not be aware that behaviors demonstrating feelings towards

family members may be important for family members. Critical care nurses may also underestimate this affective component of their relationship with family members as a way of protecting themselves from the intense emotional situations occurring in the intensive care unit.

Family members who have been in the intensive care unit for a minimum of three days may appreciate nurses who share their feelings and demonstrate affective interest. By these behaviors, nurses may communicate to family members their acknowledgement and understanding of the families' situation in critical care settings and share their concerns for them as persons.

Finally, the findings of this study suggested that nurses were less educated than the participating family members. Only 21 percent of nurses held a baccalaureate degree in nursing while 35 percent of family members held such a university degree. This stresses the importance to promote education for nurses in order to increase the knowledge necessary to practice nursing at a professional level rather than at the level of technically oriented work.

Situational Influences

While gathering data for this study, it became evident that certain factors within the situations of family dynamics, organizational policies and philosophical approaches may have affected nurses' and family members' perceptions of important nurse-caring behaviors. These were: the visiting policies and philosophy of nursing of the unit chosen for the study.

The setting chosen for the study was found to place importance on family care. Indeed, the unit was open to family members to visit at the time of their choice, and nursing staff were sensitized during staff meetings and hospital presentations to the needs of family members in the intensive care unit. If family members had been in a setting where the philosophy of nursing focused only on the patient and visiting hours were restricted, they may have had different perceptions regarding the relative importance of categories of nurse-caring behaviors. As well, nurses may have been influenced by their experience of providing care to family members.

Nursing Implications

Although the results of this study are limited due to the lack of psychometric properties of the FCQI, several implications for nursing practice and nursing education can be identified.

This study provides evidence that caring behaviors towards family members can be addressed in the intensive care unit. The instrument designed in this study delineates behaviors that are expressive and instrumental transactions within a caring relationship between nurses and family members. Integration of both expressive and instrumental caring behaviors needs to be addressed in nursing schools and in practice settings. Similarly, nurses need to learn ways to cope with intense emotional situations, such as families in crisis, in order to protect themselves effectively rather than using avoidance behaviors in dealing with emotional situations.

The results of this study also demonstrate that caring can be investigated quantitatively. The Q-methodology of the FCQI provides an opportunity to assess the perceptions of nurses and family members regarding the relative importance of nurse-caring

behaviors in the intensive care unit. Further testing of the instrument is recommended with a larger sample to bring precision of the identified sub-categories of nurse-caring behaviors towards family members.

Conclusion

A common problem encountered in the measurement of the concept of caring is the lack of understanding of the behavioral components that constitute caring. Based on Watson's Theory of Caring, this research study proposed an instrument which identified two categories of nurse-caring behaviors towards family members in critical care, the expressive and instrumental categories of nurse-caring behaviors.

The findings of the pilot study conducted with nurses and family members in one critical care setting revealed that both nurses and family members perceived patient's care as a priority. Thus, family members valued their relationship with critical care nurses as secondary to the relationship nurses share with the patient. Important caring behaviors such as those demonstrating trust and honesty to family members were recognized as most important by both groups.

Several issues preclude generalization of the results of this study. However, the identified important caring behaviors do provide an essential step in "knowing" the behavioral components of caring towards family members. This knowledge has implications

for both the theoretical and the practice perspectives of caring in nursing.

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Appendix A

Communications from Patricia Larson

[illegible] 1992

Ms. [illegible] Gagnon B.Sc. [illegible]
[illegible] Boul. Laird #302
TMR Montreal
Quebec, CANADA H3P 1 [illegible]

Dear Ms. Gagnon

Enclosed is my response to your request to categorize your Family CARE-Q instrument items by category. I would suggest that if you are going to use it with family members you change the wording so that it is more personalized, [illegible] the nurses asked me about my most important concerns.

While I complement you for your work in reviewing the items I recognized many of the items reflected the wording from the Caring Assessment Questionnaire (CARE-Q). Other items may be your own or reflect other instruments. As the originator of the CARE-Q I do hope you will acknowledge the contribution these others works have made to the Family Care-Q.

Sincerely,

Patricia J. Larson RN DNSc
Assistant Professor and Director of the
Oncology Specialty, Physiological Nursing
American Cancer Society Professor

Appendix B

INSTRUCTIONS

Here are **50 cards.** Each one reprsents a caring behavior a nurse can have towards family members of patients hospitalized in the intensive care unit.

THE PURPOSE OF THIS EXERCISE IS TO SORT THESE 50 CARDS BY ORDER OF IMPORTANCE. To achieve this, here are the steps you are asked to follow:

- **FIRST** **IN READING EACH CARD;**

  1. SELECT **15 cards** you find **MOST IMPORTANT** and put them in **stack #1**, at the left.
  2. amongst the remaining 35 cards, SELECT **15 cards** you find **LEAST IMPORTANT** and put them in **stack #3**, at the right.
  3. there are now **20 IMPORTANT cards** remaining; PUT them in **stack #2**, in the center.

  NOTE: Make sure that each stack has the right number of cards.

- **SECOND** **TAKE THE 15 CARDS IN STACK #1 AND**

  1. SELECT **THE MOST IMPORTANT** card and place it in the **RED** envelope.
  2. SELECT,then, **4 cards** that are VERY IMPORTANT and place them in the **ORANGE** envelope.
  3. PUT the remaining **10 QUITE IMPORTANT** cards in the **YELLOW** envelope.

- **THIRD** **PUT THE 20 IMPORTANT CARDS IN STACK #2 IN THE CREAM ENVELOPE.**

- **FORTH** **TAKE THE 15 CARDS IN STACK #3 AND**

  1. SELECT **THE LEAST IMPORTANT** card and put it in the **WHITE** envelope.
  2. SELECT, then, **4 cards** that are **SOMEWHAT IMPORTANT** and put them in the **GRAY** envelope.
  3. PUT the remaining **10 FAIRLY IMPORTANT** cards in the **GREEN** envelope.

- **FINALLY** **MAKE SURE THAT YOU HAVE PLACED THE RIGHT NUMBER OF CARDS IN EACH ENVELOPE.**

Appendix C

1. Statement of Introduction to Family Members by the Nurse.

> "There is a nurse in this unit who is studying for her masters in nursing. Her name is Lucie Gagnon. As part of her studies, she is doing a research study on the experience of family members in the intensive care unit.
> She would like to meet you to explain her study and ask for your participation. Would you like to meet her?"

2. Statement of Introduction to Family members by the Nurse Researcher

Hello! I am Lucie Gagnon. As you were told, I am presently doing a study at the critical care unit of this hospital. Thank you for being interested in my research project. As it has been already explained, this research study is in partial requirement for my Masters degree in Nursing from McGill University.

The purpose of this research study is to explore how family members perceive the importance of "caring behaviors of nurses" in the intensive care unit. You were selected as a potential candidate in this study because of the nature of your experience as a family member in the hospital setting. All family members of clients hospitalized in this intensive care unit for more than 72 hours and aged 18 years or more, English or French speaking, will be approached and asked to participate.

What I am doing in this study is asking family members like you, who have experienced or who are experiencing the hospitalization of a family member in the intensive care unit, to indicate among a set of nurse-caring behaviors which ones you feel are most and least important for family members. Your participation in this study may allow nurses to give more help to other family members like you in the future.

2. Statement of Introduction to Family members by the Nurse Researcher (con't)

If you are willing to participate, you will need to sign a consent form. Then, I will ask you to sort 50 cards, each card describing a particular nursing behavior, into 7 piles ranked by importance. I will finally ask you simple questions about yourself and your family. It is expected to take approximately 30 to 60 minutes of your time.

To ensure that your responses stay confidential and anonymous, all your answers will be assigned a number. The doctors and nurses from the critical-care unit will not have access to your responses. Feel free to participate or not in this study. Your decision will in no way affect the services you, or your hospitalized family member, receive today or in the future.

Thank you for your interest.

3. Statement of Introduction to Critical Care Nurses by the Nurse Researcher

Hello, my name is Lucie Gagnon. I am a masters student from McGill University. I would like to inform you about my research study and ask for your participation. The purpose of this research study is to explore how family members and nurses rank ideal nurse caring behaviors by importance. What I am doing is asking family members and you, nurses, to sort out 50 cards, each of them describing a particular nurse caring behavior toward family members and rank these cards according to what you think is most and least important for family members.

If you decide to participate, you will be ask to sign a consent form, to fill out a questionnaire about your background as a nurse, and finally, to complete the instrument involving the ranking of the 50 cards. (concrete example of how to complete the sort).

Your responses will be coded numerically in order to be kept anonymous and confidential Your willingness to participate or not will in no way affect your employment status at this institution.

Thank you for your interest.

Appendix D

McGill University

School of Nursing

1. Written Consent Form to Famil Members

I understand that I have been asked to participate in a research study to investigate the perceptions of nurses and family members of desired nurse-caring behaviors directed toward family members. This study is being done by Lucie Gagnon to fulfill partial requirements for the Master of Science of Nursing degree at McGill University.

I understand that if I agree to participate:

A) I will be asked:
First, to complete a small questionnaire about some general information about myself and my hospitalized family member and;
Second, to sort out 50 cards, each card describing a desired nurse-caring behavior toward family member, and to rank them by importance. It is expected to take 50 to 60 minutes.

B) There are no expected risks for me or my hospitalized family member as a result of participating in this research study. Whether I participate or not in this study will have no prejudice to present or future care. This study will have no direct benefit for myself or my hospitalized family member, but it may help others in the future.

C) I understand that my answers will be assigned a number, so that I can not be identified by my responses.

D) I also understand that I may withdraw from this study at any time without affecting the present of future care of myself and/or my family member.

I further understand that I am giving consent for this information to be used anonymously in this study. If I so wish, the results of this study will be communicated to me. Finally, if I have questions, I can contact Lucie Gagnon at local xxxx.

On the basis of the above statements, I agree to participate in this research project.

_____ Date: _____
Participant's signature

_____ Date: _____
Researcher's signature

2. Written Consent Form to Critical Care Nurses

I understand that I have been asked to participate in a research study to investigate the perceptions of nurses and family members of desired nurse-caring behaviors directed toward family members. This study is being done by Lucie Gagnon to fulfill partial requirement for the Master of Science of Nursing degree at McGill University.

I understand that if I agree to participate:

A) I will be asked,

First, to complete a small questionnaire about some general information about myself and;

Second, to sort out 50 cards, each card describing a desired nurse caring behavior toward family member, and to rank them by importance. It is expected to take 30 to 60 minutes.

B) There are no risks expected as a result of participating in this research study. Whether I participate or not in this study will have no effect whatsoever on my employment in this hospital. This study will have no direct benefit for myself but it may help others in the future.

C) I understand that my answers will be assigned a number, so that I can not be identified by my responses.

D) I also understand that I may withdraw from this study at any time.

I further understand that I am giving consent for this information to be used anonymously in this study. If I so wish, the results of this study will be communicated to me. Finally, if I have questions, I can contact Lucie Gagnon at local xxxx

On the basis of the above statements, I agree to participate in this research project.

_____ Date: _____
Participant's signature

_____ Date: _____
Researcher's signature

Appendix E

1. Demographic Data Sheet: Family Member

Code: _____

1) The patient is your: (check)

husband	____	aunt	____
wife	____	cousin	____
father	____	mother in law	____
mother	____	father in law	____
sister	____	sister in law	____
brother	____	brother in law	____
son	____	daughter	____
uncle	____	friend	____

other:(specify) _____

2) Your gender is: (circle) M F

3) In what country were you born? _____

4) Last year of school education completed: _____

5) Did the patient live with you before he/she was hospitalized? (circle) Y N

6) How close would you define your relationship to your hospitalized family member:

Very close ____
Close ____
Not close ____

7) Have you had previous experience(s) in the ICU?
Y N

8) On the average, how often do you visit your hospitalized family member? (check)

I spend ny days in the unit	____
once a day	____
every other day	____
twice a week	____
once a week	____
once every two weeks	____

9) General lenght of visit?

_____ < 5 minutes
_____ 5-15 minutes
_____ 15-30 minutes
_____ 30-45 minutes
_____ >45 minutes

10) When was your family member admitted to the ICU?

(date) ____/____/____

11) Is your family member discharged from the ICU?

Y N

If the answer is affirmative, when was the patient discharged from the ICU:

(date)____/____/____

12) Has your family member been previously admitted in ICU?

Y N

13) Can you tell me your family member's diagnosis?

_____

14) a) What type of illness does your family member have:

a) medical
b) surgical

b) Acuity of illness:

a) severe
b) acute
c) mild
d) monitoring

15) Is visiting restricted? (eg: Isolation, very unstable condition)(circle)

Y N

If the answer is affirmative, specify:_____

2. Demographic Data Sheet: Nurse

Code: _____

1) Name of the unit you work in: _____

2) What type of unit is it? (check)

medical	____
surgical	____
cardiac	____

3) In what year were you born? _____

4) Your gender is? (circle) M F

5) Number of years in the nursing profession (approximately):

< 12 months	____
= 12 months	____
12-18 months	____
18-24 months	____
2-3 years	____
3-5 years	____
5-10 years	____
10-15 years	____
> 15 years	____

6) Education: (check highest level attained)

____ Hospital program
____ Nursing diploma (C.E.G.E.P.)
____ Baccalaureate in nursing
____ Baccalaureate in another discipline
specify: _____

____ Masters degree in nursing
____ Masters degree in another discipline
specify: _____

7) Work schedule: (Check)

____ Full time
____ Part time

8) What shifts do you usually work? (Check more than one if appropriate)

____ Days	____ 8 hours/shift
____ Evenings	____ 12 hours/shift
____ Nights	____ 16 hours
____ rotation	____ rotation 8/12 hours

Appendix F

The Relationship between the FCQI Items and Larson's Items

1. Family Care-Q Items Similar to Larson's Items

Family Care-Q items	Larson's items
The nurse informs the family member of support systems available in the hospital, such as pastoral services.	Tells the patient of support systems available, such as self-help groups or patients with similar disease.
The nurse teaches the family member how to provide comfort measures for the patient such as mouth care, skin care, etc.	Teaches the patient how to care for himself/herself whenever possible.
The nurse suggests questions for the family member to ask the doctor in charge.	Suggests questions for the patient to ask his/her doctor.
The nurse is honest with the family member about the patient's condition and treatment.	Is honest with the patient about his medical condition.
The nurse encourages the family member by identifying positive elements related to the patient's condition.	Provides the patient encouragement by identifying positive elements related to the patient's condition and treatment.
The nurse is patient with family members.	Is patient even with "difficult" patients.
The nurse sits down with the family member.	Sits down with the patient.

1. Family Care-Q Items Similar to Larson's Items (con't)

Family Care-Q items	Larson's items
The nurse comforts the family member by using eye contact a soft voice and touch.	Touches the patient when he/she needs comforting.
The nurse listens attentively to the family member.	Listens to the patient.
The nurse involves the family member in the patient's care; for example: in helping to feed, etc.	Involves the patient's family or significant other in their care.
The nurse shows interest in the family member even though a critical phase has passed.	Continues to be interested in the patient even though a crisis or critical phase has passed.
The nurse offers reasonable alternatives to the family member, such as choice of visiting times, length of stay at the patient's bedside, etc.	Offers reasonable alternatives to the patient, such as choice of appointment times, bath times, etc.
The nurse helps the family member to establish realistic expectations about the patient's condition.	Helps the patient establish realistic goals.
The nurse helps the family member clarify his thinking with regard to the patient's disease.	Helps the patient clarify his thinking in regard to his/her disease and treatments.
The nurse invites the family member to ask any questions he might have.	Encourages the patient to ask him/her any questions he/she might have.

1. Family Care-Q Items Similar to Larson's Items (con't)

Family Care-Q items	Larson's items
The nurse gives the opportunity to the family member to express his feelings about the situation.	Allows the patient to express his feelings about his/her disease and treatment fully, and
The nurse treats information about the patient's family confidentially.	treats the information confidentially.
The nurse wears identifiable clothing with a name tag.	Is professional in appearance--wears appropriate identifiable clothing and identification.
The nurse is well organized.	Is well organized.
The nurse is skilled in the technical aspect of the patient's care: such as intravenous, pumps, monitors, etc.	Knows how to give shots, I.V.'s. etc. and how to manage the equipment like I.V.'s, succion machines, etc.
	Gives good physical care to the patient.
The nurse is a calm person.	Is calm.

2. Family Care-Q Items Related to Larson's Items

Family Care-Q items	Larson's items
The nurse responds quickly to the family member's requests.	Gives the patient's medications and treatments on time. Gives a quick response to the patient's call.
The nurse brings a chair to the patient's bedside when the family member visits. The nurse brings coffee to the family member when he is waiting to see the patient.	Volunteers to do "little" things for the patient, e.g., brings a cup of coffee, paper, etc.
The nurse takes the time to talk to the family member when he calls the intensive care unit.	Talks to the patient.
The nurse uses understandable language while talking to family member about the the patient's condition and treatment.	Tells the patient, in understandable language, what is important to know about his/her disease and treatment.
The nurse identifies times when the patient is "stable enough" and suggests to the family member to go rest.	Knows when the patient has "had enough" and acts accordingly, e.g.,rearranges an examination, screens visitors, insures privacy.

2. Family Care-Q Items Related to Larson's Items (con't)

Family Care-Q items	Larson's items
The nurse stays with the family member during his first visit in the intensive care unit.	Anticipates that the "first times" are the hardest and pays special attention to the patient during these times.
The nurse is open to the family member's suggestions regarding the patient's care.	Realizes that the patient knows himself the best and whenever possible includes the patient in planning and management of his/her care.
The nurse seeks additional information about the patient from the family member.	
The nurse is a pleasant and friendly person.	Is pleasant and friendly to the patient's family and significant others.
The nurse explains to the family member the care she gives to the patient.	Introduces himself/herself and tells the patient what he/she does.

3. Family Care-Q Items Extracted from Larson's Items

Family Care-Q items	Larson's items
The nurse comes to talk to the family member when the family member can not go to the patient's bedside.	Is perceptive of the patients needs and plans and acts accordingly, e.g., gives anti-nausea medication when patient is receiving medications which will probably induce nausea.
The nurse provides enough space at the patient's bedside for the family member to be near the patient.	
The nurse reassures the family member that efforts are being made to give the best possible care to the patient.	
The nurse asks the doctor to talk with the family member about the patient's condition.	
The nurse informs the family member when important changes occur in the patient's condition.	

3. Family Care-Q Items Extracted from Larson's Items (con't)

Family Care-Q items	Larson's items
The nurse asks the family member about his most important concerns.	Checks her/his perceptions of the patients with the patient before initiating any action, e.g., if she/he (the nurse) has the feeling that the patient is upset with the treatment plan, has discusses this with the patient before talking about it to the doctor.
The nurse asks the family member his view of the patient's condition.	
The nurse asks the family member about the relationship he with the patient.	
The nurse asks questions to the family member about his present experience in the intensive care unit.	
The nurse offers the family member to sleep in the waiting room.	Realizes that the nights are frequently the most difficult for the patient.
The nurse regards each family member as a unique individual.	Gets to know the patient as an individual person.
The nurse shows sensitivity to the family member's emotional experience.	Is cheerful.

4. The Family Care-Q Items Not Identified in Larson's Instrument

Family Care-Q items
The nurse shares her feelings about the patient's condition with the family member.
The nurse is present when the doctor meets with the family member.
The nurse inquires if the family member has eaten, has slept.
The nurse explains to the family member the purpose of the machines surrounding the patient.
The nurse shares with the family member her knowledge of what patients experience during their stay in the intensive care unit.
The nurse is receptive to others.

5. Larson's Items Not Included in the Family Care-Q Instrument

Larson's items
Frequently approaches the patient first, e.g., offering such things as pain medication, back rub.
Checks on patient frequently.
Encourages the patient to call if he/she has problems.
Helps the patient not feel dumb by giving him/her adequate information.
Provides basic comfort measures, such as appropriate lighting, control of noise, adequate blankets, etc.
Anticipates the patient's and her/his family's shock over her/his diagnosis and plans opportunities for them, individually or as a group, to talk about it.
When with a patient, concentrates only on that one patient.
Checks out with the patient the best time to talk with the patient about changes in his/her condition.
Puts the patient first no matter what else happens.
Asks the patient what name he/she prefers to be called.
Has a consistent approach with the patient.
Makes sure that professional appointment scheduling e.g., X-ray, special procedures, etc. are realistic to the patient's condition and situation.
Makes sure others know how to care for the patient.
Knows when to call the doctor.

Appendix G

FCQI Items Deleted During the Revision of the Sub-Categories.

The nurse regards each family member as a unique individual.
L'infirmière considère chacun des membres de la famille comme une personne unique.

The nurse shows sensitivity to the family member's emotional experience.
L'infirmière fait preuve de sensibilité face aux émotions du membre de la famille.

The nurse seeks additional information about the patient from the family member.
L'infirmière cherche des renseignements additionnels sur le malade auprès du membre de la famille

The nurse offers reasonable alternatives to the family member, such as choice of visiting times, length of stay at the patient's bedside.
L'infirmière donne l'opportunité au membre de la famille de faire certains choix, comme décider du moment et de la durée des visites.

The nurse is receptive to others.
L'infirmière est une personne ouverte aux gens qui l'entourent.

Appendix H

1. The English Version of the Instrument

The Family Care-Q Instrument

EXPRESSIVE NURSE-CARING BEHAVIORS

Personal Characteristics

42. The nurse is skilled in the technical aspects of the patient's care; such as intravenous, pumps, monitors, etc.

44. The nurse is well organized.

45. The nurse wears identifiable clothing with a name tag.

46. The nurse is patient with family members.

48. The nurse is a pleasant and friendly person.

49. The nurse is a calm person.

Demonstration of affective interest

4. The nurse shows interest in the family member even though the critical phase has passed.

7. The nurse shares her feelings about the patient's condition with the family member.

8. The nurse responds quickly to the family member's requests.

20. The nurse is open to the family member's suggestions regarding the patient's care.

22. The nurse takes the time to talk to the family member when he calls the intensive care unit.

37. The nurse informs the family member when important changes occur in the patient's condition.

EXPRESSIVE NURSE-CARING BEHAVIORS

Emotion-Focused Caring Interventions

19. The nurse treats information about the patient's family confidentially.

24. The nurse invites the family member to ask any questions he might have.

25. The nurse encourages the family member by identifying positive elements related to the patient's condition.

26. The nurse comforts the family member by using eye contact, a soft voice and touch.

27. The nurse reassures the family member that efforts are being made to give the best possible care to the patient.

29. The nurse comes to talk to the family member in the waiting room when the family member can not go to the patient's bedside.

30. The nurse listens attentively to the family member.

32. The nurse uses understandable language while talking to the family member about patient's condition and treatment.

43. The nurse shares with the family member her knowledge of what patients experience during their hospitalization in the intensive care unit.

INSTRUMENTAL NURSE-CARING BEHAVIORS

Facilitation of Adaptation to the Environment

3. The nurse stays with the family member during his first visit in the intensive care unit.

9. The nurse brings a chair to the patient's bedside when the family member visits.

10. The nurse brings coffee to the family member while he is waiting to see the patient.

11. The nurse offers the family member to sleep in the waiting room.

12. The nurse is present when the doctor meets with the family member.

15. The nurse provides enough space at the patient's bedside to allow the family member to be near the patient.

18. The nurse involves the family member in the patient's care; for example: in helping to feed, etc.

28. The nurse sits down with the family member.

36. The nurse asks the doctor to talk with the family member about the patient's condition.

Demonstration of Cognitive Interest

1. The nurse asks the family member about his most important concerns.

2. The nurse asks the family member his view of the patient's condition.

5. The nurse asks the family member about the relationship he has with the patient.

6. The nurse asks questions to the family member about his present experience in the intensive care unit.

INSTRUMENTAL NURSE-CARING BEHAVIORS

Demonstration of Cognitive Interest (con't)

13. The nurse inquires if the family member has eaten, has slept.

17. The nurse gives the opportunity to the family member to express his feelings about the situation.

INSTRUMENTAL NURSE-CARING BEHAVIORS

Problem-focused Caring Interventions

23. The nurse helps the family member to establish realistic expectations about the patient's condition.

31. The nurse informs the family member of support systems available in the hospital, such as pastoral services.

33. The nurse teaches the family member how to provide comfort measures for the patient such as mouth care, skin care, etc.

34. The nurse helps the family member clarify his thinking with regard to the patient's disease.

35. The nurse explains to the family member the care she gives to the patient.

38. The nurse explains to the family member the purpose of the machines surrounding the patient.

40. The nurse suggests questions for the family member to ask the doctor in charge.

41. The nurse identifies times when the patient is "stable enough" and suggests to the family member to go rest.

47. The nurse is honest with the family member about the patient's condition and treatment.

2. The French Version of the Instrument

F-COMSOL: Mesure de l'Importance des Comportements de Sollicitude du Personel Infirmier vis-à-vis des Familles aux Soins Intensifs.

COMPORTEMENTS EXPRESSIFS

Traits de personnalité

42. L'infirmière est habile dans les techniques de soins à prodiguer au malade; comme les intraveineuses, pompes, etc.

44. L'infirmière est bien organisée.

45. L'infirmière a une tenue vestimentaire qui permet de la reconnaitre et de savoir son nom.

46. L'infirmière est patiente avec les membres des familles.

48. L'infirmiere est une personne agréable et aimable.

49. L'infirmière est une personne calme.

Démonstration d'un intérêt affectif

4. L'infirmière fait preuve d'intérêt envers le membre de la famille, même si la période critique est terminee.

7. L'infirmière partage ses sentiments avec le membre de la famille sur l'état du malade.

8. L'infirmière donne rapidement suite aux demandes du membre de la famille.

20. L'infirmière est ouverte aux suggestions que fait le membre de la famille sur les soins à donner au malade.

Démonstration d'un intérêt affectif (con't)

22. L'infirmière prend le temps de parler au membre de la famille lorsqu'il appelle à l'unité des soins intensifs.

37. L'infirmière informe le membre de la famille lorsque des changements importants surviennent dans l'état du malade.

Interventions centrées sur les émotions

19. L'infirmière traite l'information obtenue sur la famille du malade de façon confidentielle.

24. L'infirmière invite le membre de la famille à poser les questions qui le préoccupent.

25. L'infirmière encourage le membre de la famille en identifiant les éléments positifs dans l'état de santé du malade.

26. L'infirmiere reconforte le membre de la famille en utilisant un contact visuel, une voix douce et le toucher.

27. L'infirmiere rassure le membre de la famille en lui disant que tous les efforts sont faits afin d'assurer les meilleurs soins au malade.

29. L'infirmière vient parler au membre de la famille lorsqu'il est impossible pour le membre de la famille de se rendre au chevet du malade.

30. L'infirmière écoute attentivement le membre de la famille.

32. L'infirmière utilise un langage compréhensible lorsqu'elle parle de la maladie et du traitement du malade.

43. L'infirmière partage avec le membre de la famille ses connaissances sur ce que vivent les malades a l'unité de soins intensifs.

COMPORTEMENTS INSTRUMENTAUX

Promotion de l'adaptation à l'environnement

3. L'infirmière demeure avec le membre de la famille lors de sa première visite à l'unité des soins intensifs

9. L'infirmière apporte une chaise au chevet du malade lorsque le membre de la famille vient en visite.

10. L'infirmière apporte du café au membre de la famille lorsque celui-ci attend pour rendre visite au malade.

11. L'infirmière offre au membre de la famille à dormir dans la salle d'attente.

12. L'infirmière est présente lorsque le médecin rencontre le membre de la famille.

15. L'infirmière aménage assez d'espace au chevet du malade afin que le membre de la famille puisse être près du malade.

18. L'infirmière fait participer le membre de la famille aux soins à donner au malade; par exemple: aider à le nourrir, etc.

28. L'infirmière s'assied avec le membre de la famille.

36. L'infirmière demande au médecin de parler de l'état du malade au membre de la famille.

Démonstration d'un intérêt cognitif

1. L'infirmière demande au membre de la famille quelles sont ses inquiétudes les plus importantes.

2. L'infirmière demande au membre de la famille ce qu'il pense de l'état du malade.

5. L'infirmière demande au membre de la famille quel type de relation il entretient avec le malade.

Démonstration d'un intérêt cognitif (con't)

6. L'infirmière pose des questions au membre de la famille sur ce qu'il vit à l'unité des soins intensifs.

13. L'infirmière s'informe si le membre de la famille a mangé, a dormi.

17. L'infirmière donne l'opportunité au membre de la famille d'exprimer ce qu'il ressent par rapport a la situation.

Interventions centrées sur le problème

23. L'infirmière aide le membre de la famille à avoir des attentes réalistes par rapport à l'état de santé du malade.

31. L'infirmière indique au membre de la famille les services de soutien disponibles à l'hôpital, comme ceux de la pastorale.

33. L'infirmière enseigne au membre de la famille comment prodiguer au malade certains soins de confort tels: les soins de bouche, massage, etc.

34. L'infirmière aide le membre de la famille a clarifier sa pensée au sujet de la maladie du patient.

35. L'infirmiere explique au membre de la famille les soins qu'elle donne au malade.

38. L'infirmière explique au membre de la famille la fonction des appareils qui se trouvent autour du malade.

40. L'infirmière suggère au membre de la famille des questions à poser au medecin responsable du malade.

41. L'infirmière identifie les moments où le malade est "suffisammment stable" et suggère au membre de la famille d'aller se reposer.

47. L'infirmière est honnête avec le membre de la famille en ce qui concerne l'état de santé du malade.

Appendix I

1. Family Members' Rankings of the Fifty Nurse-Caring Behaviors by Importance

ITEMS		*MEAN RANK
37.	The nurse informs the family member when important changes occur in the patient's condition.	43.67
42.	The nurse is skilled in the technical aspect of the patient's care; such as intravenous, pumps, monitors, etc.	40.80
22.	The nurse takes the time to talk to the family member when he calls the intensive care unit.	38.97
21.	The nurse seeks additional information about the patient from the family member.	36.35
47.	The nurse is honest with the family member about the patient's condition and treatment.	36.22
38.	The nurse explains to the family member the purpose of the machines surrounding the patient.	35.15
23.	The nurse helps the family member to establish realistic expectations about the patient's condition.	34.05
27.	The nurse reassures the family member that efforts are being made to give the best possible care to the patient.	33.90

* calculated with Friedman test procedure and ranging from 1 to 50

1. Family Members' Rankings (con't)

	ITEMS	MEAN RANK
24.	The nurse invites the family member to ask any questions he might have.	33.60
35.	The nurse explains to the family member the care she gives to the patient.	33.42
8.	The nurse responds quickly to the family member's requests.	31.45
1.	The nurse asks the family member about his most important concerns.	31.22
32.	The nurse uses understandable language while talking to the family member about the patient's condition and treatment.	31.17
44.	The nurse is well organized.	31.15
20.	The nurse is open to the family member's suggestions regarding the patient's care.	30.40
19.	The nurse treats information about the patient's family confidentially.	29.95
36.	The nurse asks the doctor to talk with the family member about the patient's condition.	29.32
25.	The nurse encourages the family member by identifying positive elements related to the patient's condition.	28.80

1. Family Members' Rankings (con't)

ITEMS		MEAN RANK
48.	The nurse is a pleasant and friendly person.	28.80
49.	The nurse is a calm person.	28.10
46.	The nurse is patient with family members.	27.47
16.	The nurse shows sensitivity to the family member's emotional experience.	27.35
17.	The nurse gives the opportunity to the family member to express his feelings about the situation.	27.07
29.	The nurse comes to talk to the family member when the family member can not go to the patient's bedside.	25.50
34.	The nurse helps the family member clarify his thinking with regard to the patient's disease.	25.50
4.	The nurse shows interest in the family member even though a critical phase has passed.	25.15
30.	The nurse listens attentively to the family member.	24.75
12.	The nurse is present when the doctor meets with the family member.	24.63

1. Family Members' Rankings (con't)

ITEMS		MEAN RANK
18.	The nurse involves the family member in the patient's care; for example: in helping to feed, etc.	24.40
15.	The nurse provides enough space at the patient's bedside for the family member to be near the patient.	24.05
41.	The nurse identifies times when the patient is "stable enough" and suggests to the family member to go rest.	24.00
7.	The nurse shares her feelings about the patient's condition with the family member.	23.65
40.	The nurse suggests questions for the family member to ask the doctor in charge.	23.30
43.	The nurse shares with the family member her knowledge of what patients experience during their stay in the intensive care unit.	22.27
33.	The nurse teaches the family member how to provide comfort measures for the patient such as mouth care, skin care, etc.	21.45
50.	The nurse is receptive to others.	21.40

1. Family Members' Rankings (con't)

ITEMS		MEAN RANK
3.	The nurse stays with the family member during his first visit in the intensive care unit.	20.65
14.	The nurse regards each family member as a unique individual.	20.25
5.	The nurse asks the family member about the relationship he has with the patient.	19.60
26.	The nurse comforts the family member by using eye contact a soft voice and touch.	18.75
45.	The nurse wears identifiable clothing with a name tag.	18.60
2.	The nurse asks the family member his view of the patient's condition.	18.05
6.	The nurse asks questions to the family member about his present experience in the intensive care unit.	15.50
9.	The nurse brings a chair to the patient's bedside when the family member visits.	15.50
39.	The nurse offers reasonable alternatives to the family member, such as choice of visiting times, length of stay at the patient's bedside, etc.	14.63

1. Family Members' Rankings (con't)

ITEMS		MEAN RANK
11.	The nurse offers the family member to sleep in the waiting room.	14.27
31.	The nurse informs the family member of support systems available in the hospital, such as pastoral services.	13.88
28.	The nurse sits down with the family member.	12.42
13.	The nurse inquires if the family member has eaten, has slept.	10.75
10.	The nurse brings coffee to the family member when he is waiting to see the patient.	3.67

2. Critical Care Nurses' Ranking of the Fifty Nurse-Caring Behaviors by Importance.

	ITEMS	*MEAN RANK
32.	The nurse uses understandable language while talking to the family member about the patient's condition and treatment.	41.89
17.	The nurse gives the opportunity to the family member to express his feelings about the situation.	38.32
37.	The nurse informs the family member when important changes occur in the patient's condition.	37.95
47.	The nurse is honest with the family member about the patient's condition and treatment.	36.00
24.	The nurse invites the family member to ask any questions he might have.	35.75
30.	The nurse listens attentively to the family member.	35.16
35.	The nurse explains to the family member the care she gives to the patient.	35.12
16.	The nurse shows sensitivity to the family member's emotional experience.	33.14
36.	The nurse asks the doctor to talk with the family member about the patient's condition.	33.01

* calculated with Friedman test procedure and ranging from 1 to 50

2. Critical Care Nurses' Ranking (con't)

	ITEMS	MEAN RANK
1.	The nurse asks the family member about his most important concerns.	32.99
22.	The nurse takes the time to talk to the family member when he calls the intensive care unit.	32.97
38.	The nurse explains to the family member the purpose of the machines surrounding the patient.	32.13
12.	The nurse is present when the doctor meets with the family member.	31.86
26.	The nurse comforts the family member by using eye contact a soft voice and touch.	31.22
23.	The nurse helps the family member to establish realistic expectations about the patient's condition.	31.20
19.	The nurse treats information about the patient's family confidentially.	30.03
3.	The nurse stays with the family member during his first visit in the intensive care unit.	29.68
29.	The nurse comes to talk to the family member when the family member can not go to the patient's bedside.	29.45

2. Critical Care Nurses' Ranking (con't)

	ITEMS	MEAN RANK
15.	The nurse provides enough space at the patient's bedside for the family member to be near the patient.	29.42
27.	The nurse reassures the family member that efforts are being made to give the best possible care to the patient.	28.55
34.	The nurse helps the family member clarify his thinking with regard to the patient's disease.	28.05
14.	The nurse regards each family member as a unique individual.	28.01
46.	The nurse is patient with family members.	26.26
50.	The nurse is receptive to others.	25.50
44.	The nurse is well organized.	24.92
25.	The nurse encourages the family member by identifying positive elements related to the patient's condition.	24.55
49.	The nurse is a calm person.	24.46
42.	The nurse is skilled in the technical aspect of the patient's care; such as intravenous, pumps, monitors, etc.	23.96

2. Critical Care Nurses' Ranking (con't)

	ITEMS	MEAN RANK
4.	The nurse shows interest in the family member even though a critical phase has passed.	23.95
18.	The nurse involves the family member in the patient's care; for example: in helping to feed, etc.	23.71
48.	The nurse is a pleasant and friendly person.	23.36
21.	The nurse seeks additional information about the patient from the family member.	22.43
41.	The nurse identifies times when the patient is "stable enough" and suggests to the family member to go rest.	21.97
33.	The nurse teaches the family member how to provide comfort measures for the patient such as mouth care, skin care, etc.	21.74
9.	The nurse brings a chair to the patient's bedside when the family member visits.	21.37
2.	The nurse asks the family member his view of the patient's condition.	20.39

2. Critical Care Nurses' Ranking (con't)

	ITEMS	MEAN RANK
6.	The nurse asks questions to the family member about his present experience in the intensive care unit.	20.37
31.	The nurse informs the family member of support systems available in the hospital, such as pastoral services.	20.24
43.	The nurse shares with the family member her knowledge of what patients experience during their stay in the intensive care unit.	20.17
8.	The nurse responds quickly to the family member's requests.	19.80
13.	The nurse inquires if the family member has eaten, has slept.	18.83
5.	The nurse asks the family member about the relationship he has with the patient.	18.38
20.	The nurse is open to the family member's suggestions regarding the patient's care.	17.87
28.	The nurse sits down with the family member.	17.11
7.	The nurse shares her feelings about the patient's condition with the family member.	15.30

2. Critical Care Nurses' Ranking (con't)

	ITEMS	MEAN RANK
39.	The nurse offers reasonable alternatives to the family member, such as choice of visiting times, length of stay at the patient's bedside, etc.	14.76
40.	The nurse suggests questions for the family member to ask the doctor in charge.	13.79
11.	The nurse offers the family member to sleep in the waiting room.	13.66
45.	The nurse wears identifiable clothing with a name tag.	10.70
10.	The nurse brings coffee to the family member when he is waiting to see the patient.	3.54